APFCP ASSR ASPOA 2023

19th Congress of the Asia Pacific Federation of Coloproctology
13th Congress of the Asian Society of Stoma Rehabiliation
4th Congress of the Asia and South Pacific Ostomy Association

19 - 21 October, Suntec City Convention Centre, Singapore

East Meets West - Furthering Colorectal's Best
where different approaches to care
in different countries and continents are discussed

ABSTRACT BOOK

Organised by Society of Colorectal Surgeons Singapore

Partnering Organisations

APFCP POSTER ABSTRACTS

Abstract ID: P-01

Presenting Author: Kazunari Mado
Co-Authors: Yoko Mado ; Akiko Sugo
Organisation: Mado Clinic

Title:

A Case of Thiersch's Procedure Under Local Anesthesia for a Super-elderly Patient with Complete Rectal Prolapse

Background and Aims:

A woman in her late nineties with many underlying conditions, including chronic heart failure, bronchial asthma, and the myelodysplastic syndrome, presented with a coughing-induced rectal prolapse. Her Barthel Index [a measure of activities of daily living (ADL)], at 35 points, was very low. Manual repositioning was performed several times for the prolapse; however, after seven months, repositioning was no longer possible. A complete rectal prolapse of more than 15 cm was observed in all circumferences. She was unable to sit or excrete independently and became bedridden. Due to concerns regarding hospitalization and surgical safety, the Thiersch's procedure (TP) was performed under local anesthesia to recover the ADL.

Methods:

Following local anesthesia with 10 ml of 1% xylocaine in the right lateral position, four small incisions were made 1 cm outside the subcutaneous anal sphincter in the 5, 2, 11, and 8 o'clock positions; the subcutaneous tissue was then detached. Using curved Pean forceps, two nylon threads were passed through the outer perimeter of the external anal sphincter from the 5 o'clock incision. The threads were ligated so that the anal diameter was about 2 cm. The operation time was 10 minutes.

Results:

Though the ADL recovered 1313from the initial operation; prolapse recurred one and a half years later. Thereafter, a similar operation was performed; however, three months later, she died of senility at home.

Conclusion:

Although TP is an old treatment first reported in 1891 by Carl Thiersch, it remains an important technique. Due to the high recurrence rate associated with TP alone, it is often performed in combination with other procedures. TP can be performed anywhere under local anesthesia with simple surgical instruments. It is considered to be a good alternative in elderly and high-risk patients, in whom highly-invasive treatments and hospitalization are difficult.

Abstract ID: P-03

Presenting Author: Sumito Sato
Co-Authors: Junko Osugi ; Saori Otagawa ; Akiko Fujimori ; Shozo Nishii ; Haruki Okada ; Taku Konno ; Takashi Hamano ; Yasuyuki Kobayashi
Organisation: Seirei Hamamatsu Hospital

Title:
A Study on The Impact of Opaque Stoma Bags on the Subjective Aspects of Ostomates

Background and Aims:
It has been reported that ostomates often experience a change in their body image and a decline in self-esteem in which follows the creation of a stoma, such changes can lead to psychological symptoms such as anxiety and depression. However, objective indicators such as income and social status are often used to evaluate the standard of living of ostomates. There have been studies on how to assess subjective aspects such as happiness and life satisfaction and ways to improve them. In the study, we conducted a questionnaire survey to evaluate the subjective aspects of happiness and life satisfaction among ostomates. We also investigated how opaque stoma bags made of non-woven fabrics could help improve the subjective aspects of stoma holders.

Methods:
We asked ostomates aged 20 years and above who are using transparent stoma bags to complete the questionnaire survey on subjective aspects after using transparent and opaque stoma bags for about 10 days each. The questionnaire was evaluated using The Positive and Negative Affect Schedule (PANAS) on a 6-pointer scale, and analyzed it separately for the negative and positive affect.

Results:
The results of the questionnaire shows that the ostomates experienced a decrease in negative affect and an increase in positive affect while using the opaque pouch. The use of the newly developed opaque stoma pouch with an additional design also showed a further improvement in ostomate physical and emotional distress, with positive feedback from the stoma holders.

Conclusion:
In Asia, about 80% of ostomates use transparent stoma bags, while in contrast, about 80% of ostomates in Europe and the United States use opaque stoma bags. By making transparent stoma bags opaque with non-woven fabrics and designs, we were able to contribute to further improving the physical and mental distress of ostomates.

Abstract ID: P-09

Presenting Author: Claus Blumberg
Co-Authors: -
Organisation: Enddarmzentrum Lübeck

Title:

Laser Haemorrhoidoplasty for Thrombosed Haemorrhoids Grade III – Results After 60 Months of a New Operative Methods

Background and Aims:

The aim of the study is to present a new surgical technique for thrombosed third degree hemorrhoids. It is well known that laser haemorrhoidoplasty (LHP) is a minimal-invasive, low pain surgical procedure for second and third degree hemorrhoids with promising short- and medium-term results. We have done more than 1900 LHP since 2014.

Methods:

73 patients with thrombosed third degree hemorrhoids underwent surgical therapy using laser surgery with a 1470nm, 8 watt diode laser. All patients had previously received conservative therapy. Perioperative clinical and technical data up to 6 weeks and follow-up data up to at least 19 and 58-62 months were prospectively evaluated.

Results:

The average duration of surgery was 6.63 minutes. An average of 3.84 hemorrhoidal nodes were treated. Mean postoperative pain was 2.3/10 (VAS) on the first day and 1.58/10 (VAS) on the second day. Long-term symptom relevance was 100% and patient satisfaction was 93.4%. No complications occurred in any patient. No recurrence could be detected within the first 6 months. 58 (79,5%) patients underwent an examination between 58-62 months after the operation. 4 (6,9%) of this patients had a recurrence after 5 years.

Conclusion:

The treatment of hemorrhoidal disease with the diode laser represents a circular surgical procedure even for complicated hemorrhoids. Laser haemorrhoidoplasty is a safe, low-pain and minimally invasive surgical procedure with long-term good patient acceptance and satisfaction in grade II-III hemorrhoids. It is shown here to be a low-pain surgical procedure for thrombosed grade 3 hemorrhoids with a low complication rate and high patient satisfaction after 60 months.

Abstract ID: P-10

Presenting Author: Claus Blumberg
Co-Authors: -
Organisation: Enddarmzentrum Lübeck

Title:
Laser Treatment of Hemorrhoids of All Degrees In Local Anesthesia

Background and Aims:
The aim of the present study is to present first results of laser haemorrhoidoplasty (LHP) in local anesthesia in out patient treatment. We have done 104 LHP in local anesthesia with the question of the feasibility.

Methods:
104 patients with hemorrhoids degree 3 and 4 underwent LHP with a 1470nm, 8 watt diode laser in local anesthesia. We used Bupivacaine hydrochloride 0.5% to create a cushion under the mucosa for local anesthesia and sedation. After this procedure we did the LHP. The data of all patients were collected and evaluated preoperatively up to 6 weeks postoperatively including proctoscopy. A classification according to the Anesthesia society Association Score (ASA) was performed preoperatively. All patients performed a pain assessment according to the Visualized Analgesic Score (VAS). Furthermore, SF8 quality of life questionnaire was conducted before and 6 weeks postoperatively.

Results:
All operations started and ended under local anesthesia. The mean age was 45.8 years. The ASA grading ranged from 1 to 3, mean 2,3. Both internal hemorrhoids grade III and external hemorrhoids were treated, four with thrombosis and 16 were bleeding hemorrhoids. 2 - 8 nodes were treated in the operation. The operation time was 8.4 min on average laser energy used was on average 484,73 J/patient. Postoperative follow-up including proctoscopy revealed no recurrence of hemorrhoids and no surgery-related complications for up to 6 weeks. The VAS was 3.1 after 0.5 hours: 2.7 after 2 hours; 2.1 after 6 hours; 2 after 24 hours and 0.6 after 7 days on average. The SF 8 questionnaire showed a decrease in scores in all subcategories with an improvement in quality of life 6 weeks postoperatively.

Conclusion:
The study shows that LHP as a circular method can be performed under local anesthesia on an outpatient basis. Under local anesthesia, LHP is a low-pain treatment option with high patient satisfaction for symptomatic hemorrhoids.

Abstract ID: P-11

Presenting Author: Ji Hyeong Song
Co-Authors: -
Organisation: Chungnam National University Sejong Hospital

Title:
The Learning Curve of Laparoscopic Surgery for Rectal Cancer: Risk-adjusted CUSUM Analysis of a Novice Surgeon's Experience

Background and Aims:
Laparoscopic surgery for rectal cancer is challenging for inexperienced surgeons, as it requires a sharp dissection in a narrow pelvis with visual limitations. This study aims to analyze the learning curve and clinical outcomes of laparoscopic surgery for rectal cancer performed by a novice surgeon.

Methods:
A total of 119 patients who underwent laparoscopic surgery for rectal cancer performed by a novice surgeon between June 2010 and December 2019 were retrospectively analyzed. A single hybrid model based on the operative time, open conversion, severe complications and involvement of the resection margin was generated to assess the success of laparoscopic surgery. The learning curve was evaluated using the risk-adjusted cumulative sum (RA-CUSUM) method.

Results:
The learning period was divided into three phases according to the RA-CUSUM (phase 1, 1st–33rd cases; phase 2, 34th–84th cases; and phase 3, 85th–119th cases). Tumor size ($P = 0.004$), distal resection margin ($P = 0.003$), and number of harvested lymph nodes ($P < 0.001$) significantly increased with the learning period. The time to tolerable soft diet became shorter according to the learning period ($P = 0.017$). Advanced T stage ($P = 0.024$) and adjuvant chemotherapy ($P = 0.012$) were more common in phase 3.

Conclusion:
Results of this study suggests that the initial technical competence of laparoscopic surgery for rectal cancer was acquired in the 33rd case (phase 1). Technical mastery was achieved in the 84th case (phase 2). After mastering the technique, the surgeon attempted to challenge more advanced cases; however, the complication rates did not increase.

Abstract ID: P-12

Presenting Author: Tatsushi Shingai
Co-Authors: Yusuke Takahashi ; Mitsunobu Imasato ; Masami Ueda ; Yujiro Nishizawa ; Atsushi Naito ; Toshinori Sueda ; Koji Munakata ; Tsukasa Tanida ; Nobuyasu Hayashi ; Shu Okamura ; Yukako Mokutani ; Makoto Fujii ; Norikatsu Miyoshi ; Hidekazu Takahashi ; Mamoru Uemura ; Hirofumi Yamamoto ; Kohei Murata ; Yuichiro Doki ; Hidetoshi Eguchi
Organisation: Kinki Central Hospital

Title:

Effectiveness of Triclosan-Coated Sutures Compared with Uncoated Sutures in Preventing Surgical Site Infection After Abdominal Wall Closure in Open/Laparoscopic Colorectal Surgery: A Multicenter Prospective Trial in Japan

Background and Aims:

Trails randomized previously have been investigated the efficacy of sutures coated with triclosan for closing the fascia during midline laparotomy to prevent Surgical Site Infections (SSIs). However, the existing evidence did not provided conclusive results. The objective was to assess the effectiveness of triclosan-coated sutures when closing abdominal fascia to prevent postoperative SSIs.

Methods:

This study utilized a prospective multicenter design conducted in 24 Japanese secondary and tertiary care centers. We employed Propensity Score (PS) to match our analysis. Eligible participants were individuals aged 20 years and above who underwent elective Colorectal Cancer (CRC) surgery. From July 2016 to July 2019, a total of 2,207 patients enrolled in either the triclosan-coated sutures group or the uncoated sutures group. The per-protocol population included 2,195 patients. PS matching was performed for 1,579 patients, comprising 926 patients in the coated group and 653 patients in the uncoated group. The choice of triclosan-coated or uncoated sutures for abdominal fascia closure during midline laparotomy was determined based on the assigned group. The primary endpoint was the incidence of SSI, while secondary endpoints includes the length of hospital stay and rates of surgical complications.

Results:

The recorded SSI rates were 4.2% in the triclosan-coated group and 6.74% in the uncoated suture group ($p = 0.028$). No severe adverse events were observed in either groups. Our final logistics regression model identified several variables that influenced the occurrence of SSI. In addition to our study, we conducted a meta-analysis incorporating six phase-III trials and involving 4,797 patients. The results demonstrated a statistically significant advantage of triclosan-coated sutures over uncoated suture material.

Conclusion:

Triclosan-coated sutures exhibits a decrease in SSI incidence followed by elective CRC surgery.

Abstract ID: P-13

Presenting Author: Matthew Irwin
Co-Authors: Turner Catherine ; Atan Sanchez Gabriel ; Morgan Matthew ; Ooi Kevin
Organisation: South Western Sydney Local Health District

Title:

Long-term Outcomes and Patient Experience with Sacral Neuromodulation for Faecal Incontinence: A Multi- Centre, Longitudinal Cohort Study

Background and Aims:

Sacral Neuromodulation (SNM) is an established treatment for Faecal Incontinence (FI). This study analyses patient experience with SNM beyond incontinence and quality of life scores.

Methods:

A cohort analysis of patients with FI experiencing temporary or permanent SNM from 2013-2023 was performed. Incontinence and quality of life was assessed with St Mark's Incontinence Score (SMIS) and Rapid Assessment of Faecal Incontinence Score (RAFIS). Structured patient interviews assessed reservations, regret, likelihood of endorsement, independence in neuromodulator customization and desired education and follow up. Paired test and multivariate analysis was used for quantitative data and Chi-square test for categorical data.

Results:

Seventy-one primarily female (90%) patients aged 52 to 86 years (M = 68) experiencing SNM were studied at median 6 years post procedure. Forty-five (63%) proceeded to permanent SNM which age, sex, BMI, cultural background or insurance status did not predict. Permanent SNM reduced SMIS ($p<0.01$) and severity of incontinence ($p<0.01$). Thirty-nine patients (87%) retained their neuromodulator and mean battery life was 6 years, 95% CI [4.9,7.3]. Fifty-six patients experiencing temporary or permanent SNM were interviewed. Eight (15%) regretted their experience, 50 (89%) recommended SNM and 20 (36%) had reservations about the implant which resolved in all but one patient. Forty-eight (86%) patients deemed a 30-minute consultation pre and post procedure adequate education, and 37 (86%) who received permanent SNM deemed follow up at one and 12 months and on battery depletion adequate. Twenty-one (54%) primarily older patients were dependent for neuromodulator customization ($p=0.02$).

Conclusion:

SNM continues to improve FI scores and quality of life. Reservations usually resolve and most patients experiencing SNM recommends it to others. While adequate patient education and following up is not onerous to achieve, most patients remain dependent for neuromodulator customization.

Abstract ID: P-15

Presenting Author: Shigeki Yamaguchi
Co-Authors: Yuka Kaneko ; Fumi Maeda ; Kurodo Koshino ; Hiroka Kondo ; Tsutomu Kumamoto
Organisation: Tokyo Women's Medical University

Title:
Technical Aspect of Laparoscopic Right Hemicolectomy for D3 Lymph Node Dissection

Background and Aims:
Central Venous Ligation (CVL) with D3 lymph node dissection is a popular technique for curative resection for T3 or more right colon cancer. The aim of this presentation is to demonstrate how to perform D3 right hemicolectomy efficiently and safely.

Methods:
Medial to lateral approach divides the mesentery below the ileocolic pedicle which is the standard technique. After mobilization of ileocolic pedicle along the preduodenal fascia, the origin of the ileocolic vein is confirmed. D3 lymphadenectomy will start from the origin of the ileocolic vein. exposing the superior mesenteric vein (SMV). The advantage of this approach is the stability of SMV. As the pre-SMV area is the main part of the central lymphadenectomy, medial to lateral approach is reasonable and easily accessible to the pre-SMV area. Then, complete mobilization of the right colon is performed medially and laterally. Confirming the central area of lymph node dissection, the SMV is exposed and the accessory right colic vein from the gastrocolic trunk and the right branch of the middle colic artery will be divided. Lastly, the specimen is extracted from umbilical incision and anastomose the ileum and colon.

Results:
22 patients underwent the right colon cancer resection in personal experience since June 2021 to May 2023. Mean age was 69.7 years old, 11 patients were male, and mean BMI was 22.5. Cancer location was cecum: 6, and ascending colon 16. Procedure was ileocolic resection: 15, and right hemicolectomy: 7. Median operative time and blood loss were 159 minutes and 11g. Median postoperative hospital stay was 6.5 day and Clavien-Dindo III complication happened on a patient with paralytic ileus who needed decompression therapy.

Conclusion:
Laparoscopic D3 right hemicolectomy is safe and effective. Precise mobilization keeps good surgical plane and margin is essential. It may cause adequate lymphadenectomy and complete resection of right colon cancer.

Abstract ID: P-17

Presenting Author: Hsin Hsu
Co-Authors: Shu-Huan Huang ; Chun-Kai Liao ; Wen-Sy Tsai ; Jeng-Fu You ; Chien-Yuh Yeh
Organisation: Chang Gung Memorial Hospital

Title:
Comparison of Anastomotic Leakage and Permanent Stoma Rate in Robot-Assisted Versus Laparoscopic Low Anterior Resection: A Propensity Score Matched Study

Background and Aims:
Although some studies show that short-term benefits of robot-assisted Low Anterior Resection (LAR) in mid-to-low rectal cancer, studies focuses on permanent stoma that patients are lacking.

Methods:
This retrospective cohort study includes consecutive non-metastatic mid-to-low rectal cancer patients who underwent either robot-assisted or laparoscopic LAR at a single center between 2016 and 2020. Propensity score matching was performed in a 1:2 ratio with a caliper of 0.05.

Results:
After exclusion and matching, a total of 44 patients who underwent robot-assisted LAR and 88 patients who underwent laparoscopic LAR were included. Long-term overall survival ($p = 0.796$), cancer-free survival ($p = 0.677$), and local (9.1% vs. 6.8%, $p = 0.375$) and distant recurrence rates were comparable between the two groups. However, patients who underwent robot-assisted LAR had significantly shorter postoperative hospital stays (10.8 vs. 16.7 days, $p = 0.001$), lower anastomotic leakage rates (37.5% vs. 11.4%, $p < 0.001$), and fewer grade III Clavien Dindo Surgical Complications (34.1% vs. 4.5%, $p < 0.001$). Moreover, the use of 3D laparoscopy was 100% in the robot-assisted group compared to the laparoscopy group (100% vs. 40.9%, $p < 0.001$), and there was a lower rate of fired staplers ≥ 3 (2.3% vs. 26.1%, $p = 0.001$). Multivariate logistic regression analysis adjusted for other factors revealed a significantly lower odds ratio of anastomotic leakage in patients who underwent robot-assisted LAR compared to laparoscopic LAR (OR: 0.204, $p = 0.002$, 95% CI 0.073-0.568).

Conclusion:
Despite similar long-term survival, local and distant recurrence rates, robot-assisted LAR demonstrated lower anastomotic leakage, grade of surgical complications and permanent stoma rates compared to laparoscopic LAR in mid-to-low rectal cancer patients. These findings suggest that the potential benefits of robot-assisted surgery in this patient population.

Abstract ID: P-18

Presenting Author: Yuka Kaneko
Co-Authors: -
Organisation: Tokyo Women's Medical University

Title:
A case of MSI-High rectal cancer with liver metastasis treated with immune checkpoint inhibitor leading to pathological CR

Background and Aims:
The efficacy of immune checkpoint inhibitors in solid tumors with dMMR has been demonstrated in recent years, but their efficacy in metastatic tumors is not clear. We have a reported case of Lynch syndrome, rectal cancer and multiple liver metastases in which pCR demonstrated in both the primary tumor and the liver metastases with the use of immune checkpoint inhibitor.

Methods:
Case presentation

Results:
The patient is a 23-year-old man. He had bloody stools and underwent colonoscopy at the previous hospital. He was diagnosed with advanced rectal cancer and was referred to our hospital for further examination and treatment. Upon closer examination, multiple lymph node metastases and two liver metastases were found. The rectal cancer was stenosed, and colostomy was performed first. He has a family history of colorectal cancer, Lynch syndrome was suspected and a preoperative biopsy genetic test showed MSI-High. Pembrolizumab was initiated as preoperative treatment; after one dose, the patient's symptoms of bloody stools improved. After 12 cycles of chemotherapy, both the liver metastases and primary tumor were reduced by CT and MRI. Laparoscopic partial hepatectomy was performed and the pathological diagnosis was pCR. One month later, he performed a laparoscopic low anterior resection. The pathological diagnosis showed that the primary tumor was also pCR. The patient has no post-operative complications and is currently recurrence-free.

Conclusion:
Although immune checkpoint inhibitors are highly effective, it is difficult to diagnose cCR through imaging. The possibility of Non-operative management also requires further investigation. We reported a case of pCR in both metastases and primary tumors that was treated with an immune checkpoint inhibitor.

Abstract ID: P-19

Presenting Author: Soomin Nam
Co-Authors: Jae Beom Lee ; Doo Seok Lee ; Do Sun Kim ; Eun Jeong Lee
Organisation: Daehang Hospital

Title:
The Impact of Bowel Preparation on Procedure Time in Patients Undergoing Endoscopic Hemostasis: A Retrospective Study

Background and Aims:
This study aims to assess the impact of bowel preparation on procedure duration when patients are undergoing endoscopic hemostasis for post-polypectomy bleeding.

Methods:
Medical records of 167 patients who underwent endoscopic hemostasis between November 2014 and November 2022 were retrospectively reviewed. Variables, including bowel preparation status, procedure time, hemostasis procedure details, bleeding characteristics, and location were analyzed.

Results:
Among the 167 participants, 98 patients did not undergo bowel preparation, while 69 patients received enemas or oral laxatives for bowel preparation. The group with bowel preparation had a significantly higher proportion of cases with bleeding in the proximal colon compared to the non-bowel preparation group (63.8% vs. 42.9%, p=0.008). However, no significant differences were observed in bleeding severity or hemostasis success rate between the two groups. Procedure duration for patients without bowel preparation was 23.81±16.39 minutes, while it was 27.45±18.01 minutes for the bowel preparation group, with no statistically significant difference (p=0.158). Analysis based on bleeding location showed no significant differences in procedure duration for proximal colon cases (non-bowel preparation: 27.21±16.90 minutes, bowel preparation: 29.14±20.11 minutes, p=0.633), or distal colon cases (non-bowel preparation: 21.25±13.11 minutes, bowel preparation: 24.48±13.41 minutes, p=0.312). Among patients with active bleeding or oozing, the mean procedure duration was 27.73±15.54 minutes for the non-bowel preparation group and 30.18±21.62 minutes for the bowel preparation group, with no statistically significant difference (p=0.514).

Conclusion:
Bowel preparation did not affect the procedure duration of endoscopic hemostasis significantly for post-polypectomy bleeding. Regardless of bleeding location or severity, the presence or absence of bowel preparation did not impact the procedure duration. However, the lack of standardized bowel preparation protocols and individual variations in endoscopists' skills and preferences should be considered as limitations. Therefore, the decision to perform bowel preparation should be based on the preference of the individual endoscopist.

Abstract ID: P-20

Presenting Author: Nguyen Trung Tin
Co-Authors: Vanessa Blanc-Guillemaud ; Joanna Chirol ; Ren Donglin
Organisation: SERVIER

Title:
Choralis: An International Observational Prospective Study Assessing Conservative Treatments in Hemorrhoidal Disease. Results from Asia

Background and Aims:
To Assess The Effectiveness of Conservative Treatments in Acute Phase of Hemorrhoidal Disease (HD).

Methods:
CHORALIS is an international, observational, prospective study, involving patients consulting for hemorrhoids and eligible to conservative treatments. Here we present the pooled results of China and Vietnam. Symptoms and patient global impression of change (PGIC) were assessed at 1 week (V1). Venoactive drugs (VADs) effectiveness on quality of life (HEMO-FISS-QoL) and intensity of symptoms (VAS) were assessed at 4 weeks (V2). Wilcoxon test was used for paired comparisons.

Results:
470 subjects were analyzed (China n=268 and Vietnam n=202): 48,5% female, mean age±SD: 38.8±14.5y, BMI: 21.9±2.8kg/m2. All patients were examined, showing grade 1 in 27.6% of cases, grade 2 in 44.7%, grade 3 in 20.5% and grade 4 in 7.2% (Goligher classification). VADs were the most prescribed treatment (72.8%) of which micronized purified flavonoid fraction (MPFF) in 43.0% and diosmin in 43.9%. Other treatments included topicals (78.5%) and laxatives (17.7%). At V1, a global improvement (PGIC) was reported by 94.9% of patients receiving VADs with 16% of them reported "very much" improvement (MPFF: 16.1%; diosmin:12.8%). All symptoms including bleeding, pain, discomfort, itching and soiling were improved whatever VAD treatment. At V2, 48.3% of patients receiving VADs had no more symptoms (MPFF: 65.5%; diosmin: 34.1%). Pain intensity also decreased from 3.41±2.4 to 0.57±1.3 cm with VADs ($p<0.001$). HEMO-FISS score improved by 46% in patients treated with VADs ($p<0.001$) and 88% were satisfied with their treatment.

Conclusion:
This study provides large-scale data from real-life settings on the effectiveness of conservative treatments in HD. Results from Asia suggest that conservative treatments, particularly VADs including MPFF, is effective in alleviating symptoms and improving QoL in patients with HD.

Abstract ID: P-21

Presenting Author: Fumi Maeda
Co-Authors: Kimitaka Tani ; Kurodo Koshino ; Hiroka Kondo ; Yuka Kaneko ; Tsutomu Kumamoto ; Yoshiko Bamba ; Shimpei Ogawa ; Michio Itabashi ; Shigeki Yamaguchi
Organisation: Tokyo Women's Medical University Hospital

Title:
Three Cases of Laparoscopic Lateral Lymph Node Dissection for Lateral Lymph Node Recurrence of Rectal Cancer

Background and Aims:
Lateral Lymph Node (LLN) metastasis occurs in 16 to 23% of patients with lower rectal cancer. The Japanese guideline recommends Lateral Lymph Node Dissection (LLND) for cT3/T4 lower rectal cancer. However, prophylactic LLND is weak recommendation. LLND is performed in patients with 7mm or more LLN in short diameter in our institution.

Methods:
In the recent 2 years, three patients recurred in LLN, and we performed curative LLND in all of the cases.

Results:
[Case1: 43-year-old man] Laparoscopic APR was performed for lower rectal cancer and histologically pT3N2M0, pRM1, followed by adjuvant CAPOX. Right LLN recurrence was detected 43 months later and laparoscopic right LLND was performed. After 19 months, left LLN metastasis was detected. Laparoscopic left LLND was performed. Operating time (OT) was 247 minutes and blood loss (BL) was 11g. Histologically, 1 LLN metastasis was detected in obturator node. He has no recurrence after 17 months. [Case2: 63-year-old woman] Laparoscopic LAR was performed for mid-rectal cancer. Pathological stage was Stage III, and no adjuvant chemotherapy. LLN recurrence was detected after 60 months. Laparoscopic left LLND was performed: OT 214 minutes and BL 5g. Histologically 1 LLN metastasis was detected in obturator node and she has no recurrence after 5 months. [Case3: 58-year-old-man] The patient underwent laparoscopic ISR for lower rectal cancer and pathological stage was pT3N1bM0 followed by CAPOX adjuvant chemotherapy. The right LLN recurrence was detected 11 months later. Laparoscopic right LLND combined resection of the internal iliac artery and vein was performed: OT 302 minutes and BL 15g. Histologically 1 LLN metastasis was detected in internal iliac node and he has no recurrence after 11 months. The pelvic autonomic nerves were preserved in all patients and no urinary dysfunction was observed.

Conclusion:
Salvage laparoscopic surgery is safe and effective for LLN recurrence of rectal cancer.

Abstract ID: P-22

Presenting author: Sarah Tham
Co-authors: Xuan Gleaves ; Kai Yin Lee ; Cherie Peh ; Chermaine Ang ; Bei En Siew ; Jasmin Koh ; Megan Lee ; Yi Xuan Lim ; Lina Choe ; Jerrald Lau ; Jarrod Tan ; Ker Kan Tan
Organisation: National University Hospital Singapore

Title:

Patient-Perceived Facilitators and Barriers of Using Teleconsultations for Post-Resection CRC Surveillance

Background and Aims:

Telemedicine has been widely implemented to replace face-to-face consults in various healthcare institutions, with potential for use in colorectal cancer (CRC) surveillance. Our quantitative study found that elderly CRC patients are accepting of tele consults but did not view them as replacements for their regular consults. This study aims to qualitatively understand the underlying reasons.

Methods:

16 CRC patients aged 65 and above with at least a year of post-resection surveillance were interviewed on their perceived benefits and challenges of using tele consults in their CRC care.

Results:

Preliminary analyses showed that only 56.25% of participants (9/16) expressed willingness to accept or consider tele consults as a replacement for regular consults. The most commonly mentioned benefits of tele consults were convenience and time savings. About a third (37.5%) of patients expressed lack of technological skills as the biggest barrier to tele consults. Participants also doubted the use of tele-methods for consults that require physical presence (e.g., physical examinations, wound inspections, blood tests). When asked about their ideal system, the most commonly expressed preference was for a hybrid model – intermittent face-to-face consults for physical examinations, with tele consults for conveying or receiving information.

Conclusion:

Overall, elderly patients do not seem to take well to replacing all CRC surveillance consults with tele consults. Considerations can be put into hybrid models, where tele consults replace only consults with no physical check-ins. Fewer face-to-face consults may help to reduce cost and manpower required from healthcare institutions, though more should be done to look into the optimal frequency and interval of both consult types. Cost-effectiveness should also be examined to ensure that in addition to being cost- and manpower-efficient, these models upkeep the standard in health outcomes and satisfaction of care among patients.

Abstract ID: P-25

Presenting Author: Sarah Tham
Co-Authors: Xuan Gleaves ; Kai Yin Lee ; Cherie Peh ; Chermaine Ang ; Bei En Siew ; Jasmin Koh ; Megan Lee ; Yi Xuan Lim ; Lina Choe ; Jerrald Lau ; Jarrod Tan ; Ker Kan Tan
Organisation: National University Hospital Singapore

Title:
Exploring FIT Screening's Suitability As a Screening Modality Over Surveillance Colonoscopy for Post-Polypectomy Patients

Background and Aims:
Post-Polypectomy Surveillance (PPS) plays a key role in Colorectal Cancer (CRC) prevention. However, colonoscopy is invasive and costly. Faecal Immunochemical Test (FIT) may be a viable alternative for surveillance as it is non-invasive, cheap, and easily performed. This study aims to determine if FIT can detect new polyps in post-polypectomy patients and if FIT is suitable against colonoscopy as a more patient-friendly alternative.

Methods:
Patients going for PPS, without any first-degree family history of CRC and colorectal syndromes and not diagnosed with inflammatory bowel disease were recruited for the study. A pair of FIT kits were given and upon completion, sent for lab testing. Following their colonoscopy, patients were asked about their perspectives towards colorectal screening.

Results:
90 patients were recruited in total, of which only 7.14% (n=6) had a history of CRC. The PPV of FIT in detecting polyps was found to be 63.15% and increased to 80% when filtered by larger polyp sizes (≥5mm) (n=14). Wilcoxon-signed rank test showed that the result between FIT and colonoscopy was not statistically different. When asked about their screening preference between colonoscopy and FIT, almost half (44.94%, n=40) preferred FIT testing, while 24.72% (n=22) preferred colonoscopy. Additionally, 73.73% (n=64) were willing to do FIT every year to check for CRC or polyps.

Conclusion:
Our findings affirm that FIT can detect larger polyps, which is also of higher risk and indicative of potential adenocarcinoma. This means that FIT may be beneficial as a non-invasive screening tool for PPS patients by functioning as an early warning as to whether their scheduled colonoscopy should be expedited. However, our study is inconclusive about the suitability of FIT in substituting PPS. Future research should investigate the NPV of FIT in a larger sample to decisively establish if a negative FIT result would suffice in recommending patients to delay their next scheduled scope.

Abstract ID: P-28

Presenting Author: Jennifer Tan Lay See
Co-Authors: Athena Khoo ; Alyssa Ng ; Tan Ker Kan ; Lee Kai Yin ; Jarrod Tan
Organisation: National University Hospital Singapore, Department of General Surgery

Title:
The Role of Body Image On Quality of Life in Colorectal Cancer Patients with Stoma: A Prospective Longitudinal Study

Background and Aims:
Colorectal Cancer (CRC) is one of the top cancers both globally and in Singapore. About 25% of CRC patients will require a stoma. Living with long-term stoma has been reported to negatively impact Quality of Life (QOL) and this may be due to stigma and embarrassment related to having a stoma. The aim of this study is to examine (1) how the QOL of CRC patients with and without stoma differ and (2) how body image moderates the impact of stoma status on QOL.

Methods:
A total of 233 patients are recruited from colorectal outpatient clinics in five hospitals in Singapore. They complete a set of questionnaires 1- and 12 months after their surgery, consisting of the EORTC QLQ-C30 which measures their QOL on the domains of physical, role, cognitive, emotional and social activities as well as the EORTC QLQ-CR29 which measures their body image. Multiple regression was used to analyze how stoma status and body image predicts QOL, controls baseline characteristics.

Results:
At one month, stoma significantly predicted poorer physical, role and emotional functioning while body image predicted poorer functioning for all domains. Adding body image into the model significantly increased the model fit but there was no significant effect modification. At 12-month, stoma only significantly predicted social functioning while body image remained a significant predictor for all QOL domains. Body image was an effect modifier on stoma status for physical functioning, whereby poorer scores were observed for stoma patients with body image issues compared to those who reported less severe body image issues.

Conclusion:
Body image has a longer-term impact on QOL of CRC patients compared to stoma status. Stoma counselling for patients should address this issue and provide resources for patients to come to terms with their new identity. Awareness and education for family and public can also be considered, which will provide a supportive environment for patients.

Abstract ID: P-30

Presenting Author: Tan Ker Kan
Co-Authors: Cherie Peh ; Jerrald Lau ; Bryan Buan ; Ailica Lee ; Kai Yin Lee
Organisation: National University Hospital Singapore

Title:
Quality of Life Among Spouses of Colorectal Cancer Patients: A Systematic Review

Background and Aims:
Spousal caregivers of cancer patients tend to experience poorer Quality of Life (QoL) than non-spouse caregivers and non-caregiver spouses. Given the role that spousal caregivers play in the Colorectal Cancer (CRC) treatment and recovery journey, this systematic review examines the literature to understand which domains of QoL are most impacted, and to consolidate the factors influencing QoL in spouses of CRC patients.

Methods:
A systematic search from inception to November 2022 was performed using MeSH terms for spouses, QoL, and CRC across four scientific databases (PubMed, CINAHL, PsycINFO, Scopus). QoL was defined according to the domains within the EORTC QLQ-C30 instrument. Only studies that measured QoL in spouses of CRC patients were included. Joanna Briggs Institute (JBI) critical appraisal tools were used to appraise the methodological quality of included articles.

Results:
A total of 1980 studies were identified, of which 14 studies met the inclusion criteria. All of the studies had a JBI critical appraisal score of at least 70%. A synthesis of findings revealed that (1) psychological QoL, particularly psychological distress, appears to be the most impacted among spousal caregivers of CRC patients; (2) although the results are mixed, there is consensus that spouses' gender and age influence changes in QoL over time; (3) patients' treatment plans play a key role in influencing spouses' QoL.

Conclusion:
Despite increasing attention on spousal caregiving in CRC, the impact on spouses' QoL is often understated and underestimated. The findings suggest that there is a need to assess and intervene in spouses' psychological recovery to help them alleviate the psychological distress they experience as caregivers. Spouses' gender and age, along with treatment-related factors, should be taken into consideration when formulating targeted support and interventions.

Abstract ID: P-31

Presenting Author: Tan Ker Kan
Co-Authors: Lina Choe ; Jerrald Lau ; Bryan Buan ; Jarrod Tan ; Ailica Lee
Organisation: National University Hospital Singapore

Title:
Does A Simple Behavioral Intervention in spouses of CRC patients Increase FIT Screening Uptake?

Background and Aims:
Spouses of Colorectal Cancer (CRC) patients are an underexplored subpopulation when it comes to screening. Evidence is mixed whether spouses are at increased risk of CRC due to their shared lifestyle factors with patients. However, our prior research has suggested that screening uptake rates among this group are low. The study aimed to evaluate the effectiveness of delivering a brief, structured behavioral intervention to spouses of CRC patients in a colorectal clinical setting in increasing Fecal Immunochemical Test (FIT) uptake within the study period.

Methods:
CRC patients at two study sites (NUH and NTFGH) were recruited into a block randomized, unblinded, parallel trial. Participants randomized into the intervention group received a brief counselling on CRC screening and were provided two FIT kits with a pre-paid return envelope while the control group was informed that FIT kits can be obtained from various collection points free of charge. The primary outcome was CRC screening uptake in both groups, within three months after recruitment.

Results:
Between 13 November 2017 to 31 March 2023, 59 spouses of CRC patients with a median age of 62.37 (range 50-80 years) were randomized to the control (n=30) and intervention groups (n=29). No significant differences in demographic characteristics were observed in the two groups. There was a statistically significant difference ($p<0.001$) in FIT screening uptake between spouses in each group, with 86.21% (n=25) in the intervention group and 40.00% (n=12) in the control group respectively. Effect size was 46.21 which suggests that a short and simple behavioral intervention can effectively improve FIT screening uptake rate amongst spouses of CRC patients.

Conclusion:
This study demonstrated that a brief intervention of education on CRC screening and providing FIT kits to spouses of CRC patients while waiting for their appointment may be useful to increase participation in CRC screening.

Abstract ID: P-32

Presenting Author: Sanjay Kumar Singla
Co-Authors: -
Organisation: Singla Hospital

Title:
Unusual Presentation of Appendicular Malignancy-Appendiceal Entero Vaginal Fistula

Background and Aims:
Appendiceal mucinous adenocarcinoma is rare, usually presenting as acute appendicitis. These tumors show a propensity to invade adjacent organs, skin or retroperitoneum to form fistulae. The report an unusual case of appendiceal mucinous adenocarcinoma presenting as entero vaginal fistula from post hysterectomy vaginal cuff. We could find only one another such case in English medical literature.

Methods:
According to indoor file records of Singla hospital Bhiwani, a 55 year old woman with a history of hysterectomy for benign disease 12 years back, presented with complaint of passage of stools from vagina. Excessive excoriation around vagina suggested it to be entero vaginal fistula. CT scan could not define the part of the gut involved. At laparotomy, part of ileum and appendiceal tip were fused to vaginal cuff. Resection of the fistula revealed appendix tumor infiltrating the gut and vaginal cuff. Considering the size and extent of the tumor spread, a right hemicolectomy, lymph node dissection and wide local excision of vaginal cuff and pelvic peritoneum was done, taking care of Right ureter anatomy.

Results:
Histopathology confirmed the mucin secreting infiltrating adeno carcinoma of the appendix involving local peritoneum. In post operative period patient developed pseudo membranous colitis. She subsequently recovered fully and advised to take chemotherapy.

Conclusion:
Excessive excoriation around vagina from a faecal fistula arouse suspicion of entero vaginal fistula instead of Colon or recto vaginal fistula. Appendiceal tumors can present in unusual manner due to the propensity of mucinous tumors to form fistulae. Right hemicolectomy and local pelvic peritoneal excision is required to treat such extensive appendiceal tumor.

Abstract ID: P-33

Presenting Author: Sanjay Kumar Singla
Co-Authors: -
Organisation: Singla Hospital

Title:
Validation of Our Novel Animal Model Made for Training Surgeons In Management of Benign Anorectal Conditions

Background and Aims:
With the advent of minimal invasive techniques and use of LASERS in treatment of benign anorectal conditions, training is required to master them. An animal model from goat's anal canal and rectum was prepared for training of surgeons in the management of hemorrhoids, fissure and fistula in Ano. Validation of the model for its utility in training surgeons was done.

Methods:
An Eco friendly animal model was created using simple material. The hind gut portion of the goat was fixed in a pumpkin. The pulp was scooped out of the pumpkin to make space for the goat specimen. Sub-mucosal anal cushions were made prominent by injecting dye and fistulae were artificially created for simulation purpose. The model was deployed for training in workshops organized by our hospital. Five point Likert scale was used for validation.

Results:
Goat anal canal anatomy is similar to human anatomy except less developed perineal muscles The participants could appreciate the anal canal anatomy, the different peri anal spaces and sphincters were demonstrated. Trainees could perform mastopexy, intra anal suturing, laser probe insertion in sub mucosal cushions and LIS were carried out too. The use of LASERS in sub mucosal cushions and fistulous tracks in a simulated environment was appreciated by the participants. The use of this model was strongly recommended by the participants and the consultants for future hands-on-workshops, except one delegate in a workshop suggested synthetic model with human anatomy.

Conclusion:
The model was more realistic as compared to synthetic models, for practicing suturing in limited intra anal space, demonstration of peri anal spaces, fistulae and their management.

Abstract ID: P-34

Presenting Author: Jieyoung Lee
Co-Authors: Eunjung Lee ; Jaebum Lee ; Dooseok Lee ; Dosun Kim
Organisation: Daehang Hospital

Title:
Colonoscopy Quality Assessment: Adenoma Detection Rate and Withdrawal Time During Screening Colonoscopy In A Single Hospital in Seoul, South Korea

Background and Aims:
Colonoscopy is used to detect and prevent the development of colorectal cancer at an early stage, aiming to reduce the burden of colorectal cancer treatment and ultimately lower the mortality rate associated with colorectal cancer. In the view of quality management is crucial, adenoma detection and colonoscopy withdrawal time are two important metrics used to evaluate the quality of colonoscopies. The aim of this study is to investigate correlation between these two factors.

Methods:
This is a retrospective study conducted at Daehang Hospital between January and December 2021. Thirteen certified colonoscopists performed a total of 20,042 colonoscopies. Eligible patients satisfied inclusion and exclusion criteria were selected. The cecal Intubation rate, withdrawal time, and characteristics of neoplastic lesions during the screening procedure were collected. Adenoma Detection Rate (ADR) was also analyzed. Exclusion criteria were patients with inflammatory bowel disease, inherited colon cancer syndromes, or those specifically referred for polypectomy. Correlation between ADR and colonoscope withdrawal time was measured by Pearson coefficient of correlation.

Results:
A total of 1,152 colonoscopies were analyzed. Adenomatous polyps were detected in 44.27% of screened subjects. There were large variations among endoscopists in the rates of detection of adenomas (ranging 37.8% to 64.6%) and in withdrawal time of the colonoscope from the cecum to the anus (mean 438.63±101.46 seconds, ranging 357.94±36.0 to 602.38±104.6 seconds). There was strong positive correlation between ADR and withdrawal time ($r=0.935$, $p<0.001$).

Conclusion:
In line with previous studies, we observed higher rates of adenoma detection among endoscopists who had longer mean withdrawal time of the colonoscope.

Abstract ID: P-35

Presenting Author: Sanjay Kumar Singla
Co-Authors: -
Organisation: Singla Hospital

Title:

Parks Revisited But This Time With Technology- As A Versatile Tool for Sphincter Preserving Treatment for Fistula In Ano

Background and Aims:

Based of the sound principle of AG Parks Pathogenesis and treatment of fistula in Ano published in BMJ Feb 16 1961, we treated 57 cases of fistula in Ano but this time using modern technology, to compare the results.

Methods:

Retrospective analysis of indoor records of 57 patients of fistula in Ano treated at Singla hospital Bhiwani, Haryana, India in last 7 months. MRI was done for anatomy of fistula (complex and recurrent fistulae), video-endoscopy was done for supra levator and other complex tracts. Central disease comprising of intersphicteric abscess, overlying internal sphincter distal to dentate line were excised, sparing upper third of the internal sphincter. Distal tracts were LASER ablated or cored out manually or with fixicision device. Opening in external sphincter was closed with PDS from within. Where ever possible this closure was further covered with flap of anal mucosa, anoderm and fibers of internal sphincter. Cases with associated frank abscess were excluded. Methylene blue was injected intra dermal in areas treated below dentate line.

Results:

All fistulae healed except one in a diabetic patient. Healing time for external tracts reduced to two to three weeks as compared to four to six weeks in original study by Parks. Average pain score was 4 after three days which decreased over the next week. No patient required any injectable or opiate for relief of pain. Till date there is no reoccurrence but long term results are awaited. None reported any incontinence to stools.

Conclusion:

Using modern technology for diagnosis and treatment of fistula in ano based on Parks principle, increases accuracy in eradicating the disease thereby preventing reoccurrence and faecal incontinence, decreases wound healing time and pain. Long term results and randomized control trials are required to establish the point.

Abstract ID: P-36

Presenting Author: Chunli Wang
Co-Authors: -
Organisation: Kaohsiung Chang Gung Memorial Hospital

Title:
Higher Postoperative Neutrophil-To-Lymphocyte Ratio Is Related To Poor Prognosis In Stage III Colon Cancer

Background and Aims:
Even though many studies have shown that the Neutrophil-To-Lymphocyte Ratio (NLR) in the blood before surgery has a significant impact on the prognosis of cancer, few studies have focused on the changes in the NLR after surgery. This retrospective study aims to analyze the changes of NLR before and after surgery to further explore the impact of NLR in predicting the prognosis in patients with colon cancer.

Methods:
A total of 2742 patients with stage III colon cancer from Kaohsiung Chang Gung Memorial Hospital between 2001 January and 2022 April were included. The study cohort were divided into 3 groups according to the median values of pre-operative NLR and postoperative NLR (defined as 10-14 weeks after surgery): Group 1(preoperative NLR <= 2.5), group 2(preoperative NLR > 2.5, and postoperative NLR <= 1.5), and group 3 (preoperative NLR > 2.5 and postoperative NLR > 1.5).

Results:
Group 3 (Higher NLR in both preoperative and postoperative studies) has worst overall survival, and Group 1 (Lower NLR in both preoperative and postoperative studies) has best overall survival. In multivariable analysis, NLR group 3, as well as older age, male gender, type of postoperative chemotherapy, chronic kidney disease, pathology T stage, N stage, histologic grade, Carcinoembryonic Antigen (CEA) value, and preoperative albumin values were independently related to poor prognosis.

Conclusion:
Our study revealed that besides preoperative NLR, postoperative NLR value also played an important role in prognosis of patients with colon cancer. The patient with higher preoperative NLR but lower postoperative NLR value has better prognosis similar to the patient with lower preoperative NLR. On the other hand, patients with both lower preoperative NLR and postoperative NLR has the worst prognosis.

Abstract ID: P-37

Presenting Author: Jia Yi Yeo
Co-Authors: Hui Yu Tham ; Joon Lan Chong ; Daniel Jin Keat Lee ; Kok Yang Tan ; Gregory Kang Ee Heng
Organisation: National Healthcare Group (Khoo Teck Puat Hospital)

Title:
Eliminating The Need for A Reoperation – A Discussion of An Alternative Non Maturation Method for End Colostomies Creation

Background and Aims:
End colostomy creation is frequently performed in colorectal surgery. Traditionally, the colon is pulled to the skin surface and the stoma is matured by suturing the colonic edge to the dermal layer of the skin. Early complications of stoma creation include ischemia, necrosis and retraction while late complications includes prolapse and parastomal hernias. These complications are more commonly seen in colostomy creations than ileostomies with incidence as high as 5.9%. (1) The incidence of ischemia and necrosis is also higher after emergency surgery and is associated with proximal vessel ligation, insufficient collateral supply or tension over the mesentery (2). Necrosis beyond the fascia often necessitates operative reintervention.

Methods:
We present an interesting case of a patient who underwent emergency Hartmann procedure for perforated and obstructed sigmoid diverticulitis who subsequently developed superficial stoma necrosis. The stoma was intentionally created by a non-maturation technique, where the stump was exteriorized 5cm beyond the skin surface. The sides of the colon were sutured to the dermis and the colonic edge was left alone. The patient was septic perioperatively and required high inotropic support and intensive care management post procedure.

Results:
On the 3rd post operative day, necrosis of the colonic stump was noted but colonic stump viability was assessed to be adequate after debridement of the necrotic material and through an endoscopy. Over the next few weeks, the mucosa of the stump everted with complete epithelization of the stump. He had no stoma complications on discharge.

Conclusion:
The non-maturation technique reduces the risk of retraction and facilitated the management of stoma necrosis by allowing bedside debridement, thereby avoiding revision surgery for the stoma. Citations: (1): Malik T, Lee MJ, Harikrishnan AB. The incidence of stoma related morbidity - a systematic review of randomized controlled trials. Ann R Coll Surg Engl. 2018 Sep;100(7):501-508. doi: 10.1308/rcsann.2018.0126. Epub 2018 Aug 16. (2): Babakhanlou, R., Larkin, K., Hita, A.G. et al. Stoma-related complications and emergencies. Int J Emerg Med 15, 17 (2022). https://doi.org/10.1186/s12245-022-00421-9.

Abstract ID: P-38

Presenting Author: Young-Min Song
Co-Authors: Ji-Won Park
Organisation: National Cancer Center, Korea

Title:
The Natural Course of Low Anterior Resection Syndrome

Background and Aims:
Low Anterior Resection Syndrome (LARS) is known to occur in 50-90% of patients who undergo Low Anterior Resection (LAR), but its natural course is not well understood. We aimed to determine how LARS changes over time after surgery and to identify risk factors associated with dysfunction.

Methods:
A low anterior resection syndrome score questionnaire was done to patients operated on and followed up for Lt. sided colon cancer from 2016 at the National Cancer Center, Korea. The questionnaire was done four times ; preoperatively, 3-month, 1-year, and 3-year postoperatively. If a stoma was created, the 3-month postoperative questionnaire was replaced with 3-month after stormy repair surgery. Repeated measures ANOVA was used to determine the natural course of LARS. If a questionnaire was missing once in four surveys, multiple imputation was performed to estimate the score value, and cases that were missing more than once were excluded. Risk factor analysis was based on a major LARS score of 30 or more on the point at which LARS scores did not differ based on the determined natural course.

Results:
519 patients were enrolled in the study. The median values for the preoperative, 3-month, 1-year, and 3-year postoperative questionnaires were 2, 15, 11, and 9.4, respectively. Except for the difference between the 1-year and 3-year postoperative questionnaires, the rest showed statistically significant differences. (1-year vs 3-year : $p=0.812$, rest : $p<0.001$) The risk factors for major LARS identified by multivariable analysis based on scores on the 1-year postoperative questionnaire were low rectal cancer (anal verge ≤ 4cm, OR : 6.58 (2.65-16.37)) and radiotherapy. (OR : 2.02 (1.02-4)).

Conclusion:
LARS improves up to one year after surgery and then becomes stable. Low rectal cancer and radiotherapy are the risk factors for major LARS that persist after surgery.

Abstract ID: P-39

Presenting Author: Chienying Wu
Co-Authors: -
Organisation: Kaohsiung Chang Gung Memorial Hospital

Title:

Tegafur–Uracil/Leucovorin Plus Oxaliplatin (TEGAFOX) vs Capecitabine Plus Oxaliplatin (XELOX) As An Alternative Regimen for Total Neoadjuvant Chemotherapy In Locally Advanced Rectal Cancer

Background and Aims:

Several treatments for locally advanced rectal cancer have been recommended in in past decades. However, not many studies have focused on the efficacy between Tegafur–Uracil/Leucovorin Plus Oxaliplatin (TEGAFOX) vs capecitabine Plus oxaliplatin (XELOX). We retrospectively evaluated patients who underwent short course radiotherapy followed by chemotherapy with TEGAFOX and XELOX before surgery. The study aims to compare the tumor response rate, toxicity and patient compliance.

Methods:

The study enrolled 27 patients with locally advance rectal cancer who underwent short course radiotherapy, followed by chemotherapy with TEGAFOX or XELOX before surgery, respectively, between January 2017 and June 2023.

Results:

Tumor response rate was 63.6% in TEGAFOX, versus 12.5% in XELOX(p-value=0.18). The mean of Neoadjuvant rectal score between XELOX and TEGAFOX are 14.1(0-30.07) and 10.0(0.93-14.99) respectively with p-value =0.1197. The incidence of grade ≥ 3 adverse events did not differ between the groups.

Conclusion:

TEGAFOX may consider as an additional total adjuvant chemotherapy option for locally advanced rectal cancer.

Abstract ID: P-41
Presenting Author: Yao Zong Lee
Co-Authors: Joei Simin Wong ; Camillus Wong ; Surendra Mantoo
Organisation: Khoo Teck Puat Hospital

Title:

IDEAA - (I)nteractive 3-(D)imensional (E)ducation Model of The (A)norectal (A)natomy

Background and Aims:

Appropriate and successful surgical intervention for anorectal diseases stems from the ability to first conceptually visualize & appreciate the anatomy of anorectal structures in a three- dimensional context followed by a digital rectal examination and interpretation of physical findings. Unfortunately, existing teaching aids and mannequin models are often unrealistic illustrations of the human anatomy and lack important landmarks that will guide a meaningful digital rectal assessment. We aim to design an interactive 3D pelvic model that will facilitate a more realistic anorectal examination. Our pelvic model will: 1) Display soft tissues in a more idealized and schematic manner. 2) Color-code structures, in particular the anal canal and rectal anatomy. 3)Include crucial anatomical landmarks such as the puborectalis muscle, which is important when assessing a low rectal tumor. 4) Include removable insets, that can illustrate and simulate a)Normal anal canal b) Rectal tumors that surgical trainees can feel, more importantly describe its relation to the anorectal junction.

Methods:

We aim to prototype the intended solution through a close collaboration with professional medical simulator company AuMEd. Together, we digitally designed an assembly of all relevant anatomical organs, including the anus, anal sphincter muscles, anal canal, rectum, prostate, puborectalis, and coccyx. Engineering design was then integrated to ensure a user-friendly assembly experience. Prior to 3D fabrication of the simulator, a prototyping phase was carried out to curate materials which best replicates realistic tactile feedback during a DRE. These materials includes 3D printed material: from Fused Deposition Modeling (FDM) and Polyjet printers. The simulator was then fabricated with the finalized materials.

Results:

Through the use of 3D printing and biomedical engineering technology, this is an inaugural introduction of a 3D pelvic model incorporating critical tactile feedback and important landmarks to facilitate a more meaningful rectal examination.

Conclusion:

Surgical education is a rapidly evolving field. 3D printing could open more opportunities to produce patient specific models for surgery planning and education in the field of colorectal surgery.

Abstract ID: P-42
Presenting Author: Hui Yu Tham
Co-Authors: Jia Yi Yeo ; Yao Zong Lee ; Juefei Feng ; Surendra Mantoo ; Daniel Lee Jin Keat ; Kok Yang Tan ; Gregory Heng Kang Ee
Organisation: National Healthcare Group

Title:

The impact of COVID - A Single institution's Review At How COVID Changed The Landscape of Colorectal Emergencies

Background and Aims:

The impact of COVID-19 pandemic have been astronomical, adversely affecting many socioeconomic aspects, including population health. As healthcare services were stretched, various clinical services were disrupted globally and Singapore is no exception. With more resources being geared towards COVID-19 patients, referrals were delayed and various outpatient services were reduced. Meanwhile, with changes in patients' health-seeking behaviors for non-respiratory tract disease, patients were more tolerant of their symptoms, resulting in delayed presentation of colorectal cancer. This study aims to determine if COVID-19 had an impact on the patients' initial presentation for colorectal cancer.

Methods:

Our institution has maintained a prospective database for all colorectal cancer surgery since 2016. A retrospective analysis was performed, looking at patient's baseline demographics, tum our characteristics, tum our-related complications and nature of surgery. The data was compared between the pre-pandemic period (January 2018 – December 2019) and the pandemic period (January 2020 – March 2022).

Results:

538 patients were retrospectively identified involving 265 patients in the pre-pandemic period and 273 patients in the pandemic period. At baseline, the median age of both groups of patients were similar, 66 (IQR 59-73 years) in the pre-pandemic group and 67 (IQR 60-73 years) in the pandemic group. There were significantly more patients who presented with tum our obstruction in the post pandemic period (13.2% vs 20.5%, p=0.024). There were no significant differences observed in tumor characteristics, overall tumor-related complications, extent and stage of colorectal cancer. Patients with initial presentation of metastatic colorectal cancer were similar in the pre-pandemic and the pandemic phase (13.4% vs 16%, p=0.388).

Conclusion:

Through the pandemic, there was an increase in patients presenting with intestinal obstruction secondary to colorectal cancer. This is due to changes in health-seeking behaviors and patients' perceptions of symptoms, resulting in delayed presentation. While amenable to emergency surgery, previous studies have demonstrated that these patients are at increased risks for stoma creation and stoma related complications, thus potentially affecting their quality of life.

Abstract ID: P-46
Presenting Author: Kurodo Koshino
Co-Authors: Ryosuke Nakagawa ; Fumi Maeda ; Hiroka Kondo ; Tsutomu Kumamoto ; Kimitaka Tani ; Yoshiko Bamba ; Yuka Kaneko ; Shimpei Ogawa ; Shigeki Yamaguchi
Organisation: Tokyo Women's Medical University

Title:
Endoscopic Technique For The Treatment of Anastomotic Fistula Post Colorectal Surgery Using PGA Sheets And Fibrin Glue: A Case Report

Background and Aims:
To investigate the efficacy of PGA sheets and fibrin glue in the treatment of anastomotic fistula.

Methods:
The patient had rectal cancer and tail gut cyst. We performed robotic surgery. A fistula near the anastomosis was treated with PGA sheets and fibrin glue on colonoscopy.

Results:
It was closed after several procedures and he is currently under outpatient follow-up.

Conclusion:
We have experienced a case of anastomotic fistula post-colorectal surgery and repaired it using PGA sheets and fibrin glue in endoscopy.

Abstract ID: P-47
Presenting Author: Kirsten Pacana
Co-Authors: -
Organisation: Quirino Memorial Medical Center

Title:

The Outcomes of Routine Use of Preoperative Oral and Mechanical Bowel Preparation in Reducing Anastomotic Complications in Patients Undergoing Elective Colorectal Surgery in Quirino Memorial Medical Center

Background and Aims:

Contemporary evidences have challenged the previously controversial use of Oral and Mechanical Bowel Preparation (OMBP) for colorectal resection and anastomosis. This stimulated the investigators to review outcomes that will impact the postoperative treatment course, since Anastomotic Leaks (AL) can be very detrimental to completion of cancer treatment.

Methods:

The study utilizes retrospective chart reviews of patients. Data of all 362 patients who underwent elective colon and rectal resections and/or anastomoses were collected. The investigators utilized frequency count for nominal and categorical variables and Mean ± Standard Deviation used for ratio and interval variables. The investigators used Frequency and Percentage distribution to determine the clinicodemographic profile, general characteristics, and outcomes of these patients.

Results:

Twenty patients (5.52%) developed an anastomotic leak, 11 of which were males (57.9%) compared to 8 females (45%). Majority of patients who had an AL were in the 46-55 years old (39.8%). Patient age, body mass index, associated co-morbidities, history of smoking and drinking were seen to have no significant difference between the two groups. There was a significant difference between incidence of anastomotic leak and preoperative oral bowel preparation (p .000 < .05). Cases of anastomotic leak were more common in male patients. Most had normal body mass index. There was only one patient under the combined OMBP group who had an anastomotic leak.

Conclusion:

Data analysis from the study suggests the use of combined mechanical bowel preparation, where there was a significant decrease in anastomotic leak.

Abstract ID: P-48
Presenting Author: Vanessa Yik
Co-Authors: Chee Hoe Koo ; Bai Xue ; Emile Tan
Organisation: Duke-NUS Medical School

Title:
Using Heart Rate Variability To Develop A Predictive Model for Post-Operative Cardiovascular Complications: A Pilot Study

Background and Aims:
Heart Rate Variability (HRV) is a dynamic reflection of heart rhythm regulation by various physiological inputs, and deviations have been found to correlate with short- and long-term clinical outcomes in patients with cardiovascular diseases or under physiological stresses. Perioperative cardiovascular complications (CVC) occur in up to 5% of adult patients undergoing non-cardiac surgery and are associated with significantly increased mortality. We aimed to develop a model predictive of post-operative CVC using HRV parameters, to allow for early risk prediction to aid post-operative clinical decision-making.

Methods:
Adult patients admitted to the High Dependency Unit (HD) post major elective abdominal surgery at our hospital were recruited and followed through the perioperative period, with ECG monitoring for HRV derivation at three time points – pre-operative, immediately post-operative, and post-operative day 1. The primary composite outcome was defined as CVC within 7 days post-operatively. Candidate HRV parameters (at $p \leq 0.2$) were identified using univariate logistic regression analysis and subsequently included as candidate predictors in a multivariable logistic regression analysis incorporating a stepwise selection algorithm. The predictive capability of the model was assessed using Receiver Operating Characteristic (ROC) analysis with area under the ROC curve (AUC) as a measure of overall predictive accuracy. Statistically optimal cut-off points were identified using Youden's J-statistic.

Results:
In our pilot study, a total of 89 patients were included in the analysis, with 8 experiencing the primary outcome of CVC. Using stepwise multivariable logistic regression, we found that three HRV parameters (sdHR, Total Power and DFA Alpha 1), when measured immediately post-operatively and composited with patient age, provide the basis for a predictive model with AUC of 0.980 (95% CI: 0.953, 1.00). The negative predictive value is 1.00 at a statistically optimal predicted probability cut-off point of 0.16.

Conclusion:
Our model holds potential for accelerating clinical decision-making and aiding in patient triaging post-operatively, using easily acquired HRV parameters derived from immediate post-operative ECG monitoring routinely done in the post-anesthesia care unit. Patients assessed to have a low risk profile of post-operative CVC may be suitable for management in the general ward after major elective surgery, avoiding unnecessary HD admissions and eventually reducing HD usage. As this is a pilot study, further verification is needed. A larger cohort study is currently underway to validate our preliminary results.

Abstract ID: P-49
Presenting Author: Madeline Chee
Co-Authors: Isaac Seow
Organisation: Singapore General Hospital

Title:

Comparison of Karydakis Versus Bascom Versus Dufourmentel Flap in The Management of Pilonidal Sinus Disease

Background and Aims:

Numerous methods have been described for reconstruction post-excision of pilonidal disease. This study aims to evaluate the outcomes of Karydakis, Bascom and Dufourmentel rhomboid flap closure after surgery for pilonidal disease.

Methods:

The records of all the patients who underwent pilonidal sinus excision between December 2018 and December 2022 were reviewed. Inclusion criteria included all patients who underwent surgery for pilonidal disease. Perioperative complications and recurrence rates were reviewed.

Results:

73 patients underwent pilonidal sinus surgery during the study period, of which 44 patients met the inclusion criteria and were included in this study. of these, 17 patients underwent Karydakis procedure, 16 Bascom flap and 11 Dufourmentel flap. Mean follow-up was 5.1 ± 4.5 (1-18) months. Length of stay was slightly longer in those who underwent Dufourmentel flap as compared to those who underwent Karydakis or Bascom flap (2.0 vs 1.4 vs 1.0 days, p=0.002). Those who underwent Dufourmentel flap had shorter average time to wound healing (6.1 weeks vs 10.8 vs 13.9 weeks, p=0.206), lower rate of complications (9.1% vs 47.1% vs 56.3%, p=0.061) and significantly lower rates of wound dehiscence as compared to Karydakis or Bascom flap (9.1% vs 35.5% vs 56.3%, p=0.043).

Conclusion:

Patients who underwent Dufourmental flap had significantly lower rates of wound dehiscence and hence this may be a superior option in the closure of defects post-pilonidal excision. Dufourmentel flap was also superior compared to the other techniques in terms of shorter time to complete healing and lower rate of complications albeit slightly longer hospital stay. Further prospective studies with a larger sample size and a standardized protocol for reporting complications or complete wound healing are needed to validate our findings.

Abstract ID: P-50
Presenting Author: Lakshman R
Co-Authors: Delphina Boon-Xue Yeo ; Lee Chun Fan ; Mihir Ghandi ; Hannah Chi ; Jasmine Ladlad ; Nathanelle Khoo ; Cheryl Hui-Min Tan ; Darius Kang-Lie Aw ; Cheryl Xi-Zi Chong ; Sharmini S Sivarajah ; Leonard Ming-Li Ho ; Jia-Lin Ng ; Winson Jianhong Tan ; Fung-Joon Foo ; Shawn Kok ; Frederick Hong-Xiang Koh
Organisation: Sengkang General Hospital

Title:

Novel Critical Review of Prognostic Scoring Scales – NELA and POSSUM – For Emergency Colorectal Major Surgeries

Background and Aims:

Existing risk stratification models such as the National Emergency Laparotomy Audit (NELA) and Physiologic and Operative Severity Score (POSSUM) are designed to assist in prediction of outcomes in Emergency Surgery (ES). However, these scores have yet to be tested in colorectal-specific emergency surgeries which may have high morbidity and mortality rates. Sarcopenia, which is the loss of muscle mass and function, often with age, has been increasingly related to post-operative recovery and outcomes. We aim to evaluate NELA and POSSUM as prognostic scoring systems specifically for emergency colorectal surgeries. We also want to merge Sarcopenia with NELA & POSSUM to create a new predictive model to see if the risk prediction capability improves.

Methods:

165 patients who underwent major emergency colorectal surgeries from May 2019 to August 2022 in a single institution in Singapore were included. Peri-operative ASA, NELA and POSSUM scores were calculated and compared with short-term surgical outcomes, such as morbidity, 30-day mortality and Length of Stay (LOS). We used the Skeletal Muscle Index (SMI) as a pre-operative measure of sarcopenia.

Results:

Analysis of receiver operating characteristic (ROC) curves demonstrated that NELA was a better predictor of both mortality (0.86 vs 0.79) and LOS (0.83 vs 0.75) when compared to POSSUM. The AUC was largely similar when SMI was combined with NELA and POSSUM. As predictors of 30-day mortality, NELA+SMI had an AUC of 0.82 vs 0.86 for NELA alone and POSSUM+SMI had an AUC of 0.82 vs 0.79 for POSSUM alone.

Conclusion:

This review of prognostic scoring systems in a novel subgroup of patients showed that NELA risk stratification model is useful predictor of 30-day mortality and duration of hospitalization after major emergency colorectal surgeries. The impact of emergency surgery may have surpassed the effects of SMI to predict for short-term surgical outcomes.

Abstract ID: P-51
Presenting Author: Jingting Wu
Co-Authors: Isaac Seow-En ; Ivan En-Howe Tan ; Yun Zhao ; Aaron Seah ; Ian Wee ; Yvonne Ng ;
Emile Tan
Organisation: Singapore General Hospital

Title:

Transanal Total Mesorectal Excision with Delayed Coloanal Anastomosis (Tatme-dcaa) Versus Laparoscopic Total Mesorectal Excision (LTME) And Robotic Total Mesorectal Excision (RTME) For Low Rectal Cancer: A Propensity Score-matched Analysis of Short-term Outcomes, Bowel Function, and Cost

Background and Aims:

Total Mesorectal Excision (TME) with Delayed Coloanal Anastomosis (DCAA) is surgical option for low rectal cancer, replacing conventional Immediate Coloanal Anastomosis (ICAA) with bowel diversion. This study aimed to assess the outcomes of transanal TME (TaTME) with DCAA versus laparoscopic TME (LTME) with ICAA versus robotic TME (RTME) with ICAA.

Methods:

This was a retrospective propensity score-matched analysis of patients who underwent elective TaTME-DCAA between November 2021 to June 2022. Patients were propensity-score matched in a ratio of 1:3 to patients who underwent LTME-ICAA and RTME-ICAA from January 2019 to December 2020. Outcome measures were histopathological results, postoperative morbidity, function, and inpatient costs.

Results:

12 patients in the TaTME-DCAA group were compared with 36 patients in the LTME-ICAA and RTME-ICAA groups each following propensity score matching. Histopathological results and postoperative morbidity rates were statistically similar. Overall stoma-related complication rates in the ICAA groups were 11%. Median total length of hospital stays for TME plus stoma reversal surgery was similar across all techniques (10 versus 10 versus 9 days; P = 0.532). Despite a significantly shorter duration of follow-up, bowel function after TaTME-DCAA was comparable to that of LTME-ICAA and RTME-ICAA. Overall median inpatient costs of TaTME-DCAA were comparable to LTME-ICAA and significantly cheaper than RTME-ICAA ($31,087 versus $29,927 versus $36,750; P = 0.002).

Conclusion:

TaTME with DCAA is a feasible and safe technique compared to other minimally invasive methods of TME, while avoiding bowel diversion and stoma-related complications, as well as comparing favorably in terms of overall hospitalization costs.

Abstract ID: P-52
Presenting Author: Shao Nan Khor
Co-Authors: Isaac Seow-En ; Yun Zhao ; Yvonne Ying-Ru Ng ; Emile Kwong-Wei Tan
Organisation: Singapore General Hospital

Title:

Real-Time Artificial Intelligence-Assisted Colonoscopy And The Effect of Endoscopist Experience On Polyp Detection Rates At A Tertiary Referral Center

Background and Aims:

Real-time Artificial Intelligence-assisted Colonoscopy (AIC) can potentially influence the future of gastrointestinal endoscopy. We aimed to evaluate the use of AIC versus Standard Colonoscopy (SC) at a tertiary high-volume referral center.

Methods:

Data was analyzed retrospectively from patients who underwent elective colonoscopy at Singapore General Hospital, from 1 August 2022 to 31 October 2022. Colonoscopies performed for previous polyp or cancer surveillance were excluded from the study. The Medtronic GI genius AI system was used. The primary study outcome was Polyp Detection Rate (PDR) and Adenoma Detection Rate (ADR). Subgroup analysis was performed to assess the differences in polyp detection by endoscopist experience level (> 3 years versus ≤ 3 years).

Results:

Over the 3-month study duration, 859 patients with complete colonoscopies performed by nine accredited endoscopists were included in the analysis, with 430 who underwent SC and 429 who underwent AIC. Both groups were statistically similar in terms of age, gender, and indication for colonoscopy. The median ADR was 34.2% (range 24.6% to 57.3%). Overall detection rates of diminutive polyps (≤ 5mm), sessile polyps, as well as polyps with adenomatous or serrated histology were found to be significantly higher for AIC compared to SC. For SC, the PDR amongst junior versus senior endoscopists was comparable, at 47.9% versus 45.6%, as well as ADR, at 36.1% versus 36.8%. With real-time AI enhancement, the PDR and ADR for junior endoscopists increased considerably over their senior counterparts, with PDR 69.5% versus 44.9%, and ADR 50.0% versus 37.7%. Amongst senior endoscopists, AIC did not result in any statistical improvement of PDR and ADR compared to SC.

Conclusion:

AIC significantly increases PDR and ADR compared to SC, particularly for detection of diminutive and sessile polyps. This benefit was only observed amongst endoscopists with 3 or fewer years of specialist experience.

Abstract ID: P-53
Presenting Author: Jae Kyun Ju
Co-Authors: -
Organisation: Chonnam National University Hospital

Title:

A Comparative Study Between Transanal And Transabdominal Approaches in Treatment of Complete Rectal Prolapse

Background and Aims:

There is a wide variety of surgical methods to treat rectal prolapse; however, to date, no clear agreement exists regarding the most effective surgical method. This study was designed to compare the results according to the surgical approach for complete rectal prolapse in women.

Methods:

This study was conducted from March 2016 to February 2021 on female patients with rectal prolapse who underwent surgery. First, all patients were classified into mucosal and full layer groups to confirm the difference in results between the two groups, and only full layer prolapse patients were divided into transanal and abdominal approaches to compare parameters and functional outcomes in each group.

Results:

A total of 180 patients were included, with an average age of 71.7 years and 102 complete prolapses. The full layer group was found to have more abdominal access, longer operating time, and higher recurrence rates compared to the mucosal layer group. ($p<0.001$) When targeting only the full layer patients, there were 65 patients with the transanal and 37 with the abdominal (laparoscopic) approaches. The abdominal approach group had a longer operating time and hospital stay ($p<0.001$, respectively) and lower recurrence rate than the transanal group (transanal vs. abdominal, 38% vs. 10.8%, $p=0.003$), while the Wexner constipation and incontinence scores showed improved results in both groups.

Conclusion:

Although operating time and hospitalization period were shorter in the transanal group, laparoscopic abdominal surgery is a procedure that can reduce the recurrent rate for complete rectal prolapse.

Abstract ID: P-54
Presenting Author: Thanat Tantinam
Co-Authors: Thawatchai Phoonkaew ; Tawadchai Treeratanawikran ; Pattiya Kamoncharoen ; Ekawit Srimaneerak ; Metpiya Siripoonsap
Organisation: Phatthalung Hospital

Title:
Comparative Analysis of Outpatient and Inpatient Bowel Preparations for Colonoscopy: Evaluating Quality Outcomes and Identifying Contributing Factors

Background and Aims:
Inadequate inpatient bowel preparation is common, reducing visualization and potentially missing precancerous lesions in colonoscopy. Outpatient and inpatient bowel preparation comparisons and identifying factors for suboptimal results are imperative for successful colonoscopies. Understanding these factors can help improve the overall quality of colonoscopy procedures and patient outcomes.

Methods:
A retrospective analysis was conducted using well-collected colonoscopy reports and records of a single surgeon at a provincial hospital in Thailand. Data from patients aged 18 or older who underwent colonoscopies between July 2021 and June 2023 were collected. Various parameters were analyzed, including demographic information, underlying diseases, bowel preparation methods and medication, and quality indicators. The Boston Bowel Preparation Scale (BBPS) was used to assess the preparation quality.

Results:
A total of 219 patients were included in the analysis, with 178 (81.3%) receiving outpatient bowel preparation and 41 (18.7%) receiving inpatient. The two groups differed significantly in terms of age, body mass index, underlying diseases, hemoglobin levels, symptoms, indications for colonoscopy, and choice of bowel preparation medication. Notably, the outpatient group demonstrated a significantly higher quality of bowel preparation compared to the inpatient group, with only 4.5% of cases being inadequate compared to 22% in the inpatient group ($p < .001$). In the inpatient group, factors such as admission to a private room and the choice of bowel preparation medication were associated with a higher likelihood of inadequate bowel preparation.

Conclusion:
Outpatient bowel preparation yielded superior outcomes compared to inpatient bowel preparation. Factors such as private room admission and medication choice played a role in the quality of inpatient bowel preparation. Nursing interventions and selecting appropriate medications may help improve the effectiveness of inpatient bowel preparation. Further research, including randomized clinical trials, is needed to understand the contributing factors better and optimize bowel preparation outcomes.

Abstract ID: P-55
Presenting Author: Wong Seng Hong Ryan
Co-Authors: W.L. Loh ; S Tan ; M. S. Ngooi ; Z. K. Ong ; S. S. Ngoi
Organisation: Singapore General Hospital

Title:

Retroflexed Endoscopic Monopolar Coagulation For The Treatment of Internal Hemorrhoids: A Single Surgeon's Experience of An Initial Hundred Cases.

Background and Aims:

Various non-surgical options are available for the treatment of hemorrhoids, including rubber-band ligation, sclerotherapy, coagulation and electrocautery. We aim to present a novel endoscopic technique and our initial experience of a hundred cases.

Methods:

Patients who presented with symptoms and signs indicating Grade II-III hemorrhoids were counselled before the procedure. Patients who were assessed to require an examination of their colon in view of age and other symptoms underwent a full colonoscopy prior to the endoscopic treatment of their hemorrhoids. The colonoscope is retroflexed and a 360 degree examination of the anal canal is performed. The vascular pedicles of the hemorrhoids are identified above the dentate line, grasped with a hot biopsy forceps introduced via the working channel of the endoscope and electro coagulated with monopolar diathermy. Post-procedure, patients were routinely prescribed non-steroidal anti-inflammatory drugs, antibiotics and laxatives.

Results:

Our initial hundred patients consisted of 65 (65%) females, with a mean age of 50.3 ± 12.9 years. 45 (45%) of patients had Grade II haemorrhoids while the rest had Grade III haemorrhoids. The rate of complications was low, with only 5 (5%) cases post-operative bleeding, and 4 (4%) cases of pain, all of which were treated conservatively. The recurrence rate was 6%, at a median follow-up time of 36 months (range 6-76 months).

Conclusion:

This novel endoscopic technique for the treatment of haemorrhoids offers an acceptable complication and recurrence rate, is easily learnt, and can be conveniently performed in the same setting as a colonoscopic examination.

Abstract ID: P-56
Presenting Author: Alberto Paulino III
Co-Authors: Jan Edward P. Albano ; Marilou N. Agno ; Amihan A. Banaag ; Tito Apollo A. Quitoriano ; Nilo C. Delos Santos
Organisation: Philippine Society of Colon and Rectal Surgeons

Title:
The Diagnostic Accuracy of Pre-Operative Neutrophil-Lymphocyte Ratio (NLR) in Adult and Pediatric Patients in Predicting Complicated Appendicitis

Background and Aims:
Complicated Appendicitis (CA) correlates with a higher risk of postoperative morbidity, total length of hospital stay and significant financial burden to patients. Failure to promptly identify complicated cases from uncomplicated may lead to delay in surgery and consequent catastrophic intraabdominal abscess formation, perforation, peritonitis and surgical site infection. CA is an outcome of inflammation and bacterial overgrowth, thus, economical inflammatory markers such as Neutrophil- Lymphocyte Ratio (NLR) may be used as a diagnostic tool thereby possibly avoiding expensive imaging, such as CT scans which may have limited availability and significant radiation risks. To determine the diagnostic accuracy of pre-operative levels of NLR in predicting complicated appendicitis in adult and pediatric patients.

Methods:
The study employed a cross-sectional design of 279 appendicitis (140 adult and 139 pediatric patients) to determine the diagnostic value of pre-operative NLR in detecting complicated appendicitis. Data were collected by medical chart review. Receiver Operating Characteristic (ROC) curve was created for NLR and the optimal cutoff points were determined. Using the optimal cutoff points, the following diagnostic indices were calculated: accuracy, sensitivity, specificity, positive predictive value, negative predictive value, and likelihood ratios.

Results:
The NRL diagnostic values are adult:≥6.74 and pediatric:≥6.36 in predicting CA. It has an accuracy of adult=85.11% and pediatric=97.83%, sensitivity of adult=84.51% and pediatric=98.53%, and a specificity of adult=95.71% and pediatric=97.14%. A Positive Predictive Value (PPV) of adult=85.71% and pediatric=97.1% and Negative Predictive Value (NPV) of adult=84.51% and pediatric=98.55% were gathered. Likelihood Ratio+ (LR+) was adult=5.92 and pediatric=34.49 and Likelihood Ratio– (LR-) was adult=0.18 and pediatric=0.02.

Conclusion:
NLR is a useful diagnostic tool with significant accuracy in predicting complicated appendicitis in adult and pediatric patients.

Abstract ID: P-57
Presenting Author: Prasad Palanisamy
Co-Authors: Yvonne Ng ; Isaac Seow-En ; Aik Yong, Chok ; Terence Lee ; Emile Tan
Organisation: Singapore General Hospital

Title:

Surgical And Short-term Oncological Safety of Total Neoadjuvant Therapy in High-risk Locally Advanced Rectal Cancer

Background and Aims:

Management for Locally Advanced Rectal Cancer (LARC) conventionally comprises Long-Course Chemoradiotherapy (LCCRT), Total Mesolectal Excision (TME), and adjuvant chemotherapy. However, the RAPIDO study results published in 2021 showed that Total Neoadjuvant Therapy (TNT) led to better oncological outcomes without increased toxicity in LARC. The aim of this study is to review and compare the surgical and short-term oncological outcomes of patients with high-risk LARC who underwent TNT verses LCCRT before TME.

Methods:

All patients with high-risk LARC who underwent either TNT or LCRT before TME between 2021 to 2022 in our institution were reviewed and followed up on.

Results:

Thirty-five patients (66%) had TNT as per RAPIDO whilst 18 underwent LCCRT. Median follow-up was 16 months (5-25). of the patients who had TNT, median age was 65 years old (44-79), thirty-four (97%) had clinical stage 3 LARC and median height FAV was 5cm (0.5-14). Nine (26%) required a dose delay/reduction due to treatment toxicity. Seven (50%) showed resolution of previously enlarged lateral nodes. Three (9%) had pathological complete response. Postoperative major morbidity was 23%, of which 4 patients required a reoperation. Six (17%) patients had disease-related treatment failure, with two having disease progression during TNT, two developed local recurrence, and two developed distal disease following surgery. Median duration to surgery was significantly shorter in the TNT group (36 days versus 74 days) ($p<0.001$). There were no other significant differences in outcomes.

Conclusion:

TNT is clinically safe in high-risk LARC patients with no significant difference to surgical and short-term oncological outcomes compared to conventional LCCRT.

Abstract ID: P-58
Presenting Author: Prasad Palanisamy
Co-Authors: Yvonne Ng ; Koon Yaw, Tan ; Zhao Yun ; Isaac Seow-En ; Aik Yong Chok ; Emile Tan
Organisation: Singapore General Hospital

Title:
Efficacy of Traditional Chinese Medicine Acupuncture in Fecal Incontinence: A Randomized Controlled Trial

Background and Aims:
Fecal incontinence has a devastating impact on quality of life and imposes a substantial socioeconomic burden. Best medical therapy improves mild symptoms, with minimal impact on moderate to severe symptoms. Surgical management for incontinence carries a degree of morbidity resulting in low uptake and acceptability. Whilst acupuncture is common practice in Singapore for numerous medical conditions, its role in fecal incontinence is relatively novel. In our local context, acupuncture is accessible, inexpensive, and potentially well-accepted as a treatment strategy. The aim of this study is to determine the effectiveness of Traditional Chinese Medicine acupuncture, compared to best medical therapy in the treatment of fecal incontinence.

Methods:
This study is a prospective single center randomized controlled trial. Patients with >2 episodes of fecal incontinence/week, or St Mark's incontinence score of >5 were recruited. Patients were randomized into anorectal biofeedback therapy which included 3 sessions over 10 weeks, or 30 sessions of acupuncture over 10 weeks. Main outcome measures that were assessed included number of incontinence episodes, St. Mark's score and Fecal Incontinence Quality of Life scale at baseline and 5-, 10- and 15-weeks following treatment.

Results:
Eighty-five patients were randomized into best medical therapy (n=46) or acupuncture (n=39). Demographics and baseline clinical characteristics were not different ($p>0.05$). Overall median incontinence episodes were reduced in both, with the acupuncture arm reporting significantly fewer at week 15 ($p < 0.001$). Acupuncture also alleviated incontinence symptoms and improved quality of life, with improvement in lifestyle, coping, depression and embarrassment at week 15 ($p<0.05$). Whilst the St Mark's score was significantly reduced in both arms at week 15 ($p < 0.001$), the acupuncture arm's score was significantly lower ($p=0.002$).

Conclusion:
Acupuncture is clinically effective and improves quality of life in patients with fecal incontinence.

Abstract ID: P-59
Presenting Author: Ee Wen Lim
Co-Authors: Ying Ching Tan ; Jin Yao Teo ; Jinlin Lin ; Isaac Seow En
Organisation: Singapore General Hospital

Title:

Evaluating The Surgical Trainee Ergonomic Experience During Minimally Invasive Abdominal Surgery (ESTEEMA study)

Background and Aims:

Minimally invasive Abdominal Surgery (MAS) has clear benefits to patients but exerts a physical cost to the surgical team. Surgical trainees spend years assisting laparoscopy and other minimally invasive surgeries, increasing the risk of sustaining workplace injuries. The aim of this study was to identify areas of physical discomfort for assistants of MAS, suggestions for ergonomic improvements, and subsequently to assess these measures to improve ergonomics and reassess physical discomfort levels.

Methods:

This prospective questionnaire-based cohort study was conducted amongst general surgery residents from three general hospitals in Singapore. Residents assisting major minimally invasive gastrointestinal, hepatopancreatobiliary, or colorectal surgery were invited to complete anonymous online survey forms immediately after surgery. The Phase 1 survey assessed physical discomfort scores for each body part, risk factors for physical discomfort and suggestions for ergonomic improvement. Intraoperative measures to improve assistant ergonomics were administered and evaluated in Phase 2. As no identifiable patient data was collected, our study did not require SingHealth Institutional Review Board approval.

Results:

During Phase 1 (October 2021 to April 2022), physical discomfort was reported in at least one body part in 82.6% (n=38) of resident respondents. Over a third of respondents reported severe discomfort in at least one body part (n=17, 37.0%). Extremes of height, training seniority (Year 4 or 5), longer surgical duration (> 4 hours) and operative complexity were found to be significant risk factors for greater physical discomfort. In Phase 2 (October 2022 to February 2023), the overall rate of physical symptoms and severe discomfort improved to 81.3% (n=52) and 34.4% (n=22) respectively. Resident seniority and operative complexity ceased to be significant risk factors for physical discomfort. The ergonomic measure most found useful was having separate television monitors for the primary surgeon and assistants (n=46, 71.9%), followed by intraoperative feedback on television monitor angle or position (n=43, 67.2%). Close to 20% of survey respondents felt that preoperative surgeon education on ergonomics was likely to improve physical discomfort.

Conclusion:

Physical discomfort is prevalent amongst surgical trainees who assist MAS surgery. Knowledge of ergonomic risk factors and mitigating measures can improve trainees' well-being and potentially prolong career longevity.

Abstract ID: P-62
Presenting Author: Mei Jing Ho
Co-Authors: -
Organisation: Nepean Hospital

Title:
Small Bowel Obstruction Secondary To A Primary Internal Hernia

Background and Aims:
To present a rare case of small bowel obstruction due to primary internal hernia

Methods:
We describe a case of a 46-year-old female who presented with several months history of self-limited abdominal pain, which acutely worsened on the day of presentation. There was no history of previous abdominal surgery. CT imaging revealed dilated mid small bowel loops with a transition point in the region of the left adnexa, although no clear cause was identified. The patient was initially managed conservatively with placement of nasogastric tube for gastric decompression and intravenous fluid hydration. However, serial abdominal examinations revealed increasing abdominal tenderness and distension. As such, she underwent an exploratory laparoscopy.

Results:
A loop of small bowel appeared to have herniated through a peritoneal defect on the pelvic wall. After reducing the incarcerated small bowel, the peritoneal defect was closed primarily with interrupted sutures. The segment of bowel was found to be viable for which no resection was required.

Conclusion:
Primary internal hernias are extremely rare but contributes up to 5.8% of intestinal obstruction. If left untreated, it carries a high mortality rate due to the risk of strangulation. Nevertheless, preoperative diagnosis remains a challenge due to its rarity and non-specific manifestation. A high index of clinical suspicion is necessary in adults presenting with acute intestinal obstruction and no previous history of surgery.

Abstract ID: P-64
Presenting Author: Jing Wen Ong
Co-Authors: Gregory Heng ; Hwei Yee Lee ; Kok Yang Tan ; Daniel Lee
Organisation: Khoo Teck Puat Hospital

Title:
Colonic Wall Abscesses

Background and Aims:
To present a rare case of small bowel obstruction due to primary internal hernia

Methods:
We present a case of a previously healthy 39-year-old female with abdominal pain. Computed Tomography scan of the abdomen and colonoscopy showed a large 3 x 5cm polypoidal mass in the distal ascending colon with biopsy showing inflammatory infiltrates. Despite conservative management with antibiotic treatment, inflammatory markers were persistently elevated. Hence, decision was made for a laparoscopic right hemicolectomy. Histologic examination showed ulceration and inflamed granulation tissue in the mucosa and submucosa with no evidence of malignancy, as well as focal invaginations of large bowel mucosa into the submucosa, suggestive of early diverticulum.

Results:
Colonic wall abscesses can present as diagnostic challenges with features mimicking malignant lesions. This case serves to highlight the consideration of mucosal and submucosal abscesses as a differential diagnosis in the assessment of colonic masses, especially in young or immunocompromised patients. Potential causes of colonic abscesses include inflammatory bowel disease, foreign bodies, or diverticulitis such as in the case of our patient.

Conclusion:
Surgical treatment can be considered in cases of large symptomatic masses, failure of conservative management with antibiotic or when the diagnosis is unclear. Our patient recovered well post-operatively with no further episodes of abdominal pain and resolution of raised inflammatory markers.

Abstract ID: P-65
Presenting Author: Wai Kiu Chan
Co-Authors: Aloysius Tan ; Kwang Yeong How ; Kar Yong Wong
Organisation: Tan Tock Seng Hospital

Title:

Advancing Colectomy Techniques: A Comparative Analysis of Intracorporeal vs. Extracorporeal Anastomosis for Enhanced Patient Recovery

Background and Aims:

This study aimed to compare clinical outcomes between intracorporeal anastomosis (ICA) and extracorporeal anastomosis (ECA) in colectomy patients, focusing on ileus rate, length of hospital stay, and patient outcomes.

Methods:

Data from a prospectively maintained database of elective colectomy patients between 2021 and June 2023 were retrospectively analyzed. Patients who underwent emergency colectomy, open surgery, conversion to open, or had anastomotic leaks were excluded. Demographic details, operation time, blood loss, pathology of tumors, days to first flatus passage, days to regular diet resumption, days to bowel movement, length of hospital stay, ileus rate, and postoperative complications were extracted. Descriptive statistics were used to summarize patient characteristics and outcomes. For comparison between both groups, t-tests/Mann-Whitney tests were used for continuous variables and chi-square tests for categorical variables respectively.

Results:

Among 33 patients who underwent ICA and 113 patients who underwent ECA, both groups were similar in gender, age, and ASA score. The ECA group had more patients with stage III disease. No significant differences were found in operation time and blood loss. ICA patients achieved a significantly shorter time to resume a regular diet compared to ECA patients (3.34 days vs. 4.79 days, p=0.013). Though ICA patients tended to pass flatus earlier, the difference was not statistically significant (2.06 days vs. 2.28 days, p=0.161). ICA patients showed a trend towards shorter hospital stays (median 4 days vs. 6 days), but it was not statistically significant (p=0.225). No significant differences were observed in postoperative complications between the groups.

Conclusion:

Intracorporeal anastomosis (ICA) in colectomy patients demonstrated faster time to diet resumption and a potential trend towards shorter hospital stays compared to extracorporeal anastomosis (ECA). These findings suggest that ICA may offer advantages in early postoperative recovery, but further research with larger cohorts is needed to validate these results.

Abstract ID: P-66
Presenting Author: Isaac Seow-En
Co-Authors: Emile Tan
Organisation: Singapore General Hospital

Title:

Combined Colectomy and Liver Mastectomy with Natural Orifice Specimen Extraction For Laparoscopic Colorectal Cancer Surgery

Background and Aims:

Natural Orifice Specimen Extraction (NOSE) via the anus or vagina is an alternative to conventional transabdominal specimen extraction in laparoscopic colorectal cancer surgery. NOSE has been shown to be safe and effective, resulting in decreased postoperative pain, analgesia use, and improved recovery, without oncological compromise. We aimed to demonstrate the feasibility of NOSE for combined colectomy with liver mastectomy.

Methods:

From July 2022 to July 2023, all cases of laparoscopic colorectal cancer resection with synchronous liver mastectomy with NOSE were included in the study. All patients underwent preoperative magnetic resonance imaging of the liver in addition to conventional colorectal cancer staging. A multidisciplinary team meeting was conducted for all patients prior to surgery.

Results:

Over the 12-month duration, three consecutive patients (one male, two females) underwent combined resection with NOSE. Mean age and BMI were 78.7 (range 75-81) years and 20.4 (range 19.5-21.9) kg/m2 respectively. Patient A underwent anterior resection for sigmoid cancer, Patient B underwent D3 right hemicolectomy for caeca cancer, and Patient C underwent subtotal colectomy for synchronous caeca and descending colon cancer. All patients underwent liver mastectomy at the same sitting. Patient A had trans anal NOSE while Patients B and C underwent transvaginal NOSE. Mean operative time and blood loss was 405 (range 330-535) minutes and 283 (range 50-500) ml respectively. All patients recovered gastrointestinal function within the first two postoperative days. All patients were fit for discharge on postoperative day 3. There were no postoperative complications in this series. The average maximum colonic tumor diameter was 2.7 (range 1.3-3.8 cm) on histopathologic examination. All colon and liver margins were clear. Mean duration of follow-up was 6.7 (2-12) months.

Conclusion:

Combined colectomy and liver mastectomy with NOSE for colorectal cancer is feasible and safe in highly selected patients, resulting in good postoperative outcomes.

Abstract ID: P-67
Presenting Author: Nathanelle Khoo
Co-Authors: Isabel Soh ; Shawn Kok ; Darius Aw ; Cheryl Chong ; Sharmini S Sivarjah ; Leonard Ho ; Jia-Lin Ng ; Dawn Kwek ; Mark Tan ; Winson Tan ; Fung-Joon Foo ; Frederick Koh
Organisation: Sengkang General Hospital

Title:
The Application of Three-dimensional (3D) Printing For The Surgical Management of Complex Pelvic Tumors and Fistula-in-Ano -- A Review of Literature And A Single-center Experience

Background and Aims:
Complex pelvic tumors and fistula-in-Ano have challenging anatomical pathologies that can hinder successful surgical outcomes. Three-dimensional (3D) printed anatomical models overcome these problems, while serving as tools for medical and patient education. 3D printed surgical instruments can also improve the accuracy and outcome of surgical treatments. This study aims to review existing literature on the application of 3D printing in colorectal surgery, with a special focus on pelvic tumors and fistula-in-Ano. A brief discussion of our initial experience in utilizing 3D printed models in Sengkang General Hospital (SKH) is also included.

Methods:
A literature review was conducted using MEDLINE/PubMed to identify Randomized Controlled Trials (RCTs), retrospective studies, technical and case reports. Five 3D-printed anatomical models were manufactured by Johnson & Johnson and Singapore General Hospital for colorectal surgeons in SKH.

Results:
A total of 10 articles were identified, revealing the utility of 3D printing for improving current and future surgical management of complex pelvic tumors and fistula-in-ano through improved pre-operative planning, patient education, medical education and possibly viable personalized surgical instruments. In addition, our initial experience exemplified the usefulness of 3D printed anatomical models for enhancing pre-operative planning and patient education.

Conclusion:
Existing literature and our single-center study highlight the role of 3D printing to improve the management of complex pelvic tumors and fistula-in-Ano. Larger and more well-designed studies looking into operative and financial outcomes, as well as, patients' and surgeons' experiences may be required to further justify its clinical utility and fidelity.

Abstract ID: P-68
Presenting Author: Hui Lionel Raphael Chen
Co-Authors: B. Tay ; S.H. Tan ; S. Zhou ; K.W.E. Tan ; B.H.I. Tan
Organisation: Singapore General Hospital

Title:

Epidemiological Trends and Outcomes of Early-Onset Colorectal Cancer (EOCRC) in Singapore

Background and Aims:

The incidence of Early-Onset Colorectal Cancer (EOCRC) among people aged less than 50 years has been rising in Western countries. It is associated with advanced stage tumors at diagnosis. Our study evaluates the trends and outcomes of EOCRC in Singapore.

Methods:

CRCs diagnosed at age 20 and above from 1968 to 2019 were identified from the Singapore Cancer Registry. EOCRC, Average-Onset CRC (AOCRC) and Late-Onset CRC (LOCRC) were defined as age of diagnosis from 20 - 49, 50 - 64 and ≥ 65 years respectively. Temporal trends of incidence rates were modelled with Join point Regression. Birth cohort models were fitted with an age-period-cohort analysis tool. Survival analysis was performed with Cox-proportional hazards model.

Results:

53044 CRCs were included with 32880 (62%) colon and 20164 (38%) rectal cancers. 6183 (11.7%) EOCRCs were diagnosed. Age specific incidence rate (ASR) of EOCRC rose from 5 in 1968 to 9 per 100,000 in 1996 at 2.1% annually and rose to 10 per 100,000 in 2019 at 0.64% annually. The ASR for AOCRC rose at 3% annually from 1968 and plateaued from 1987 while the ASR for LOCRC rose at 4.1% from 1968 to 1989 and 1.3% annually from 1989 to 2003 but decreased from 2003 onwards at 1% annually. Compared to the 1950 – 1954 birth reference cohort, the 1980 – 1984 birth cohort had a higher incidence rate ratio of 1.36 (95% CI 1.07 – 1.73) for rectal cancer. There was a higher proportion of stage 3 EOCRC (37.4%) compared to LOCRC (32.4%) ($p < 0.001$). EOCRC also had better cancer-specific survival compared to LOCRC (HR 0.73, 95% CI 0.68 - 0.79, $p < 0.001$) after adjusting for covariates.

Conclusion:

The rise in EOCRC incidence in Singapore highlights the need for further research to diagnose EOCRC earlier and reduce cancer-related morbidity and mortality.

Abstract ID: P-69
Presenting Author: Shi Wei Ang
Co-Authors: Jacqueline Liew ; Vanessa Malishree Dharmaratnam ; Fung Joon Foo ; Leonard Ming Li Ho ; Jia Lin Ng ; Winson Jian Hong Tan ; Cheryl Xi Zi Chong ; Darius Kang Lie Aw ; Sharmini Su Sivarajah ; Shawn Kok ; Syed Aftab ; Esther Chean ; Frederick Hong Xiang Koh
Organisation: National University of Singapore

Title:

Diagnostic Performances of Various Radiological Modalities in the Detection of Sarcopenia in an Asian population: A Systematic Review

Background and Aims:

This systematic review aimed to compare the diagnostic performances of ultrasonography, Computed Tomography (CT), Magnetic Resonance Imaging (MRI) and Bioelectrical Impedance Analysis (BIA) in the detection of sarcopenia in Asian population.

Methods:

A systematic search of PubMed and Embase was conducted for studies analyzing the diagnostic performance of ultrasonography, CT, MRI and BIA in detecting sarcopenia in Asians. Quality assessment was performed using the Newcastle-Ottawa scale.

Results:

Findings of 21598 patients were pooled across twenty five studies and examined. Analysis of ROC results demonstrated that ultrasound had a pooled mean AUC = 0.71, with mean sensitivities and specificities were 81.1% and 73.1% respectively) for detecting sarcopenia in Asian populations. CT had a pooled mean AUC = 0.745, with mean sensitivity of 64.5% and mean specificity of 93.0%. MRI had AUC = 0.833 sensitivity and specificity of 67.0% and 66.0% respectively . BIA had a pooled mean AUC = 0.885, with mean sensitivity of 83.7% and mean specificity of 85.3 %.

Conclusion:

Various modalities can be used to diagnose sarcopenia and the choice of modality should be individualized to patients and their clinical scenario. Although BIA and DXA are currently the diagnostic modalities recommended by AWGS and EWGSOP, ultrasound imaging may potentially be a valuable diagnostic tool for the early and accurate detection of sarcopenia in Asians. In specific group of patients, CT and MRI diagnosis of sarcopenia are justified. Hence, future research can focus on standardizing and validating cut-off values and protocols for all modalities in Asian populations.

Abstract ID: P-71
Presenting Author: Shuhei Ota
Co-Authors: -
Organisation: Yao Tokushukai General Hospital

Title:

Introduction and Short-Term Outcomes of the Overlapped Anastomosis Technique for Intracorporeal Anastomosis During Robotic Right Colectomy in Our Facility

Background and Aims:

In robotic right colectomy, Intracorporeal Anastomosis (IA) offers benefits in terms of postoperative recovery, incision length, and postoperative hospital stay compared to extracorporeal anastomosis. Overlapped anastomosis is widely adopted, and we also have performed the overlapped anastomosis technique for IA during robotic right colectomy. In this study, we aimed to evaluate the short-term outcomes of our technique.

Methods:

We report the short-term outcomes of four cases of robotic right colectomy with intracorporeal anastomosis performed between December 2022 and July 2023. In the first two cases, the anastomosis was performed using a linear stapler, and the entry holes were closed with barbed sutures (technique A). In the latter two cases, a linear stapler with reinforced bioabsorbable material was used for the anastomosis, and the entry hole was also closed with a linear stapler with reinforced bioabsorbable material (technique B).

Results:

The first two cases were ileocecal resections, and the latter two cases consisted of one ileocecal resection and one right hemicolectomy. The median operative time and console time were 288 minutes and 191 minutes, respectively. The median anastomosis time for Technique A was 31.2 minutes, while the median anastomosis time for Technique B was 11.4 minutes. The median length of postoperative hospital stay was 18.5 days. There were no instances of anastomotic leakage; however, two cases experienced postoperative complications such as pneumonia and intestinal ischemia, which resulted in prolonged hospitalization.

Conclusion:

The overlapped anastomosis technique for intracorporeal anastomosis during robotic right colectomy appears to be safe and feasible. The method of using a linear stapler with a reinforced bioabsorbable material for anastomosis is simple and suggested a reduction in anastomosis time.

Abstract ID: P-72
Presenting Author: Matthew Wei
Co-Authors: Josephine YeungKe ; CaoJustin Yeung
Organisation: Western Health

Title:

Artificial Intelligence Derived Body Composition in Rectal Cancer Patients Undergoing Neoadjuvant Therapy

Background and Aims:

The treatment landscape of Locally Advanced Rectal Cancer (LARC) is moving towards total neoadjuvant therapy and potential organ preservation. of particular interest are predictors of Pathologic Complete Response (pCR) to guide selection for a watch and wait approach, or identify those who would benefit from surgery due to poor response to NAT or a higher risk of disease relapse. There are currently no clinically actionable biomarkers to predict NAT response, however the effect of body composition on LARC response to neoadjuvant therapy is an emerging contender. The primary aim of the study was to determine if any variables in body composition can be a predictor of tumor response to neoadjuvant therapy in patients with LARC, in particular complete pathological response.

Methods:

269 rectal cancer patients from 2012-2023 who underwent neoadjuvant therapy followed by surgery were identified from the ACCORD (the Australian Comprehensive Cancer Outcomes and Research Database) cancer registry. Histological outcomes were correlated with patient body composition. This was determined using a validated in-house pre-trained AI model via computed tomography images of the entire Lumbar 3 level to produce a volumetric measurement of visceral fat, subcutaneous fat and skeletal muscle.

Results:

19% of patients achieved pCR on histology. There was no significant difference in gender or age in patients who achieved pCR compared to those who did not. pCR patients had higher visceral abdominal fat volume. There was no significant differences found between groups in terms of subcutaneous fat volume or skeletal muscle volume.

Conclusion:

Visceral fat has traditionally been a negative prognostic factor for colorectal cancer outcomes overall. However, some studies have noticed a negative correlation with mesorecta fat volumes (a component of visceral fat) and N stage of rectal cancers, as well as a higher pCR rates as demonstrated in this study. This could be due to a buffer effect of the fat compartment against local invasion of the tumor, or local release some immune cytokines from visceral adipose tissue that may affect tumor response to neoadjuvant therapy.

Abstract ID: P-73
Presenting Author: Edmund Tan
Co-Authors: Yao Zong Lee ; Juefei Feng
Organisation: Khoo Teck Puat Hospital

Title:

Using McEvedy's Incision To Drain The Preperitoneal Extension of Anorectal Abscess: Two Case Reports and Technical Considerations

Background and Aims:

Anorectal abscesses are common perianal infections frequently encountered in clinical practice. While most cases respond well to prompt surgical intervention, some instances exhibit atypical progression. We aim to present a comprehensive review of anorectal abscesses with preperitoneal extension (space of Retzius), including their clinical characteristics, diagnostic challenges, and our management strategies.

Methods:

We present 2 cases of spreading anorectal abscess into the preperitoneal space. The difference abscess configuration within the preperitoneal space requires a tailored approach with technical considerations to achieve both good surgical drainage and aims to preserve the abdominal wall integrity to prevent long-term complications such as abdominal wall hernia.

Results:

Both cases had perianal incisions made for the drainage of ischiorectal abscesses. Additional McEvedy incisions were made over lower abdomen at the lateral edge of rectus muscle for drainage of the preperitoneal abscess. The McEvedy technique allows access to the preperitoneal space via linea semilunaris, with minimal disturbance of abdominal musculature and fascia. Both cases achieved good clearance of the preperitoneal abscess. One patient underwent secondary closure of the bilateral linea semilunaris and skin. The other patient's wounds were left to heal by secondary intention with regular negative pressure dressings in view of high anesthesia risks.

Conclusion:

McEvedy's approach provides adequate drainage of the anorectal abscess with preperitoneal extension while preserving abdominal wall integrity.

Abstract ID: P-74
Presenting Author: Hongyun Xu
Co-Authors: Jasmine Chang Hui Er ; Emily Yun Zhao ; Joella Xiaohong Ang ; Kwong-Wei Emile Tan ; Isaac Seow-En
Organisation: Singapore General Hospital

Title:
Transvaginal Versus Transabdominal Specimen Extraction in Laparoscopic Surgery: A Systematic Review and Meta-Analysis

Background and Aims:
Natural Orifice Extraction Surgery (NOSES) has increasingly been used for the retrieval of specimens in surgery. While there have been several reviews comparing NOSES and non-NOSES surgery, none have focused solely on transvaginal NOSES. This study aims to compare the outcomes of NOSES via the transvaginal (TV) route versus transabdominal (TA) extraction for all specimens in laparoscopic surgery for women. Primary outcomes are Post-Operative Day 1 (POD1) pain and Length of Stay (LOS). Secondary outcomes are the use of rescue analgesia, post-operative complication rate and cosmetic outcome.

Methods:
Electronic database searches of PubMed, Embase and CENTRAL was performed from inception up till March 2023. Studies that compared adult patients who underwent laparoscopic surgery with TV NOSES versus TA extraction were included. We excluded patients who underwent trans colonic or transrectal NOSES. Data analysis was performed using R (version 4.3.1). Weighted Mean Differences (WMD) and Odds Ratio (OR) were estimated for continuous and dichotomous outcomes respectively.

Results:
A total of 13 studies comprising 1094 patients were included in the final analysis, of which 2 were randomized controlled trials, and 11 were retrospective cohort studies. 583 patients had specimens removed transabdominally while 511 had specimens removed transvaginal. Patients who underwent TV NOSES showed significantly reduced POD1 pain assessed by visual analogue scale (MD 1.08, 95% CI: 0.49, 1.68) and reduced LOS (MD 1.18 days, 95% CI: 0.14, 2.22). There was also significantly reduced use of rescue analgesia, lower post-operative complication rate, and increased cosmetic score compared to the TA group.

Conclusion:
TV NOSES shows improved postoperative outcomes with decreased morbidity, representing a good and viable option compared to TA extraction of specimens and should be explored as a surgical technique of choice where possible.

Abstract ID: P-75
Presenting Author: Michelle Khoo
Co-Authors: Frederick Hong-Xiang Koh ; Fung Joon Foo ; Sharmini Su Sivarajah ; Leonard Ming-Li Ho ; Darius Kang-Lie Aw ; Cheryl Xi-Zi, Chong ; Winson Jianhong Tan
Organisation: Sengkang General Hospital

Title:
Colonic Stenting – Is The Bridge To Surgery Worth Its Cost? A Single Asian Institution Experience with Cost-effectiveness Analysis

Background and Aims:
In patients presenting with acute left-sided colonic obstruction, stenting is recommended as a valid alternative to emergency surgery with the aim of converting an emergency operation to a semi-elective one. Despite its benefits, colonic stenting remains controversial.

Methods:
We decided to perform a novel cost-effective analysis from our institution's experience to address this controversy. Endoscopic, surgical and financial details in all patients who presented with acute colonic obstruction and underwent stenting in our institution between 2019 to 2022 were prospectively collected. We excluded patients who eventually declined surgery in favour of expectant management. Outcomes were defined as technical and clinical success and successful surgical resection. Financial cost of stenting was compared with expected cost if stenting were not performed to evaluate its cost-effectiveness.

Results:
A total of 40 patients were included with 29 undergoing definitive resection. Most common pathology causing obstruction was primary colon cancer (n=27,93%), all of which were cT3 and above. Endoscopic stenting had high technical (90%) and clinical (83%) success rates, with low rates of complications such as perforation (n=2,7%) and migration (0,0%). As a bridge to surgery, median procedure time was 226 minutes and surgical outcomes also showed a low rate of postoperative complications (n=3,11%) such as anastomotic leakage (0,0%), intraabdominal abscesses (2,7%), and 30-day postoperative mortality (0,0%).Expected cumulative costs of management with colonic stenting was US$32,900 while expected cost with emergent surgery, including eventual stoma reversal, was US$40,700 (healthcare cost savings of US$7,800 per person), the difference mainly due to the avoidance of upfront emergent surgery. The incremental cost-effectiveness ratio was 0.81, favoring colonic stenting over that of upfront emergent surgery.

Conclusion:
Colonic stenting as a bridge to surgery is a safe, clinically and cost-effective means to treat acute colonic obstruction with high success rates and low complication rates.

Abstract ID: P-76
Presenting Author: Nathanelle Khoo
Co-Authors: Shipin Zhang ; Jason MW Chua ; Dilys Hoh ; Xi-Xiao Huang ; Jinghan Hong ; Joselyn LJ Tan ; Megha Bisht ; Crystal SM Low ; Benjamin YJ Chua ; Chak-Ming Leung ; Shawn SX Kok ; Winson JH Tan ; Jia-Lin Ng ; Sharmini S Sivarajah ; Leonard ML Ho ; Darius Aw ; Cheryl XZ Chong ; Esther Chean ; Khasthuri G ; Muhammad Haziq ; Wei-Tian Chua ; Iain Tan ; Fung-Joon Foo ; Bin-Tean The ; Frederick H Koh
Organisation: Sengkang General Hospital

Title:
The Physical and Muscular Impact of Sarcopenia On Patients Undergoing Curative Colorectal Surgery Prevalence, Outcomes with Evaluation of Muscle Biology

Background and Aims:
Despite sarcopenia being recognized as an independent risk factor for negative outcomes, the prevalence of sarcopenia in colorectal cancer patients is not well-reported. In addition, most of our molecular understanding of sarcopenia arises from animal studies, which insufficiently recapitulate the multiorgan, multifactorial process in humans. The objective of this study is to assess the incidence of sarcopenia and muscular histology between sarcopenic and non-sarcopenic patients.

Methods:
A prospective cohort study was conducted in Sengkang General Hospital in Singapore between September 2020 to March 2022. All patients requiring elective curative colorectal cancer surgeries were included. Clinical data and rectus abdominis muscle biopsy was collected. Sarcopenia statuses were evaluated using the Asian Workgroup for Sarcopenia 2019 diagnostic criteria. Patients were categorized into three groups: individuals without sarcopenia, with sarcopenia, and with severe sarcopenia. Feret's analysis was performed on muscle biopsies. The primary outcomes were the prevalence of sarcopenia and the correlation with clinical outcomes with histological Feret's score.

Results:
Incidence of sarcopenia was 35.4% in the 130 patients recruited. Sarcopenic patients were older (71.5 vs 63.9, P<0.001). The sarcopenic group had 1.35 (95% CI: -1.75 to -0.95, P<0.001) times less appendicular skeletal mass, 5.09 (95% CI: -8.00 to -2.17, P=0.001) times less handgrip strength and 0.19 (95% CI: -0.28 to -0.90, P<0.001) times less gait speed than the non-sarcopenic group. Perioperative outcomes were similar, although sarcopenic patients trended to having more open surgeries (19.6% vs 6.0%, P=0.057). In the severely sarcopenic group, there was a significant negative correlation of minimum Feret's diameter with time to flatus in female patients (r=-0.746, P=0.033).

Conclusion:
The prevalence of sarcopenia in patients with colorectal cancer is higher than the general population. Severely sarcopenic patients displayed a markedly reduced minimum Feret's diameter compared to non-sarcopenic patients, and this correlated well with markers of post-operative gastrointestinal recovery.

Abstract ID: P-77
Presenting Author: Biquan Liu
Co-Authors: Aloysius Ming Ngan Tan ; Kwang Yeong How ; Kar Yong Wong
Organisation: Tan Tock Seng Hospital

Title:

Beyond the Cutting Edge: Minimally Invasive Surgery for Multivisceral T4b Rectal Cancer - A Retrospective Analysis

Background and Aims:

Multivisceral T4b rectal cancer, with its direct invasion into adjacent organs, has long posed challenges traditionally addressed by open surgery. However, minimally invasive surgery (MIS) has potential advantages in reducing surgical trauma and improving postoperative outcomes. Despite this, the safety and feasibility of MIS for multivisceral T4b rectal cancer remain a matter of debate. This study aims to evaluate the outcomes of MIS in a cohort of patients with this condition.

Methods:

A retrospective analysis was conducted using data from a prospectively maintained database of patients who underwent MIS for multivisceral resection of rectal cancer between 2016 and 2022. The study analyzed patient demographics, operative time, blood loss, hospital stay, postoperative complications, resection margins, and recurrence. Categorical variables were compared using Chi-square or Fisher's exact test, while continuous variables were analyzed using the independent t-test or Mann-Whitney U test, with statistical significance set at $p < 0.05$.

Results:

The study comprised of 30 patients, with 60% underwent robotic surgery and 40% laparoscopic surgery. The conversion rate to open surgery was 15%. Multivisceral resections included partial vaginectomy, total hysterectomy with bilateral oophorectomy, resection of seminal vesicles, bladder sparing prostatectomy, cystoprostatectomy, and ureterectomy. Median blood loss was 300mls (50-1800mls). In 85% of cases, R0 resection status was achieved. Serious complications, such as urethral injury and vesicourethral junction leak following bladder sparing prostatectomy, were reported in two cases. The median follow-up period was 36 months, and the 3-year overall survival and disease-free survival rates in the MIS group were 75.6% and 80.2%, respectively.

Conclusion:

The findings from this retrospective analysis suggest that both laparoscopic and robotic approaches for multivisceral T4b rectal cancer are safe and feasible. MIS offers a potential alternative to traditional open surgery for these complex cases, with acceptable rates of R0 resection and manageable complications.

Abstract ID: P-78
Presenting Author: Mei Jing Ho
Co-Authors: Faisal Syed
Organisation: Nepean Hospital

Title:

Colo-colonic Intussusception Secondary To Metastatic Burkitt Lymphoma with Concurrent Malignant Small Bowel Mesh Adhesion

Background and Aims:

We Present An Unusual Case of A Colo-Colonic Intussusception Secondary To Metastatic Burkitt Lymphoma Which Was Complicated By A Malignant Small Bowel Adhesion To The Prosthetic Mesh

Methods:

We report a case of a 28-year-old female who presented with right upper quadrant abdominal pain 5 days after a miscarriage and subsequent dilation, curettage and removal of retained products of conception. There were no obstructive symptoms. 18 months prior to her presentation, she has had a series of abdominal surgical interventions, including laparoscopic appendicectomy, followed by Endoscopic Retrograde Cholangiopancreatography (ERCP) and laparoscopic cholecystectomy due to gallstone pancreatitis with distal common bile duct stone identified on Magnetic Retrograde Cholangiopancreatography (MRCP). However, she had recurrent episodes of cholangitis requiring multiple ERCPs and biliary stenting for a benign CBD stricture with her last ERCP occurring 3 months prior to this presentation. Furthermore, she had a laparoscopic repair of an umbilical incisional hernia 5 months prior. CT imaging revealed colo-colonic intussusception with a soft tissue mass in proximity to the splenic flexure. A laparotomy was performed.

Results:

There was a large polypoid colonic mass of the mid-transverse colon and a segment of proximal ileum densely adherent to the mesh from her previous incisional hernia. A right hemicolectomy and anastomosis was performed, including a small bowel resection and anastomosis. Histopathology confirmed a diagnosis of Burkitt lymphoma.

Conclusion:

Intussusception is a relatively rare surgical pathology in adults, with majority of the cases secondary to a pathological or neoplastic process. The definitive approach to intussusception is surgery, particularly once a malignant lesion has been identified as a potential lead point. Whilst endoscopic reduction can be attempted if no such lesion has been identified, ultimately surgical resection may be required.

Abstract ID: P-79
Presenting Author: Jong-Sung Ahn
Co-Authors: Seung-Bum Ryoo ; Min Jung Kim ; Ji Won Park ; Seung-Yong Jeong ; Kyu Joo Park
Organisation: Seoul National University Hospital

Title:
Analysis of Safety And Efficacy of Flexible Articulated Instrument (ArtiSential®) In Laparoscopic Surgery For Rectal Cancer

Background and Aims:
Laparoscopic surgery for rectal cancer is widely recognized as a safe and feasible procedure. However, it presents some challenges due to the limited range of motion and lack of joint action during dissection in the deep and narrow pelvis, leading to a steep learning curve. To address these limitations, hand-held multi-articulated instruments have been developed. This study aims to assess the safety and effectiveness of a flexible articulated instrument, ArtiSential® (Livsmed Co, Korea), in reducing the operation time during laparoscopic rectal cancer surgery.

Methods:
We conducted a retrospective review of 211 patients who underwent laparoscopic low or ultralow anterior resection for primary mid to low rectal cancer (tumor distance, AV≤10cm) performed by a single surgeon between 2012 and 2022. The initial 30 cases were excluded to account for the learning curve, as were cases involving simultaneous resection of other organs. This left a total of 87 patients (mean age, 61.49±11.17 years, with a male to female ratio of 55:32). These patients were divided into two groups based on the use or non-use of ArtiSential® and were analyzed in terms of clinical characteristics, surgical procedures, pathological findings, postoperative complications, and survival outcomes.

Results:
There were 26 patients in the use group and 61 patients in the no use group. There were no differences in the age, sex, BMI, underlying comorbidities, preoperative CEA, tumor distance from AV between the two groups. Clinical T category was not different, but clinical lymph node positive was significantly higher in the use group (80.8 vs 54.1%, p=0.019). Preoperative Neoadjuvant Chemoradiotherapy (nCRT) was received significantly more in the use group (65.4 vs 32.8%, p=0.011). Low anterior resection was predominant in both groups (80.8 vs 91.8%, p=0.157), and diverting stoma was made significantly more in the use group because of nCRT (69.2 vs 39.3%, p=0.011). Operation time was significantly shorter in the use group (148.08±49.72 vs 188.13±57.86, p=0.003) (Table1). Estimated blood loss and intraoperative transfusion were not different. The pathologic stages, T category, N category, harvested lymph nodes were also not different between the two groups. The TME quality was complete in most of the patients (100.0 vs 98.4%, p>0.999) and positive circumferential resection margin (≤1mm) was not different (4.0 vs 16.4%, p=0.164). Postoperative complications were not different (23.1 vs 34.4%, p=0.295) and anastomosis leakage was also not different (3.8 vs 1.6%, p=0.511). Length of hospital stay were not different (7.28 ± 6.73 vs 10.00 ± 11.75, p=0.176). 2-year recurrence free survival rate (92.3 vs 87.2%, p=0.930) and overall survival rate (100.0 vs 92.6%, p=0.471) were not different between the two groups.

Conclusion:
The use of the flexible articulated instrument (ArtiSential®) can reduce operation time without impairing surgical qualities or oncologic outcomes. Also, laparoscopic surgery for rectal cancer can be performed more safely and effectively with the flexible articulated instrument.

Abstract ID: P-80
Presenting Author: Jong-Sung Ahn
Co-Authors: Kyu Joo Park ; Seung-Bum Ryoo ; Min Jung Kim ; Ji Won Park ; Seung-Yong Jeong
Organisation: Seoul National University Hospital, Department of Surgery

Title:
Analysis of FOBT Screening Method For Early Detection of Colorectal Cancer

Background and Aims:
The incidence of colorectal cancer is increasing worldwide, and several countries have started to adopt earlier screening routines as their national healthcare policies. Due to its efficient and economical nature, FOBT is widely the standard method of screening for colorectal cancer. Therefore, in this study we aim to see whether FOBT helps with the early detection of cancer.

Methods:
We retrospectively reviewed colorectal cancer patients who have undergone colorectal cancer surgery between April 2021 and September 2022. We have narrowed down to 317 patients, who have received FOBT as colorectal cancer screening, and have not received preoperative chemotherapy or radiotherapy. As statistical analysis, Pearson correlation coefficient was used to see the correlation between the number of times the patient undertook FOBT, and the final tumor stage of the patient from the postoperative pathology report.

Results:
A total of 317 patients were analyzed. 209 patients were male, and 131 were female. The median number of FOBT performed was 2 (IQR, 2-8). Clinical T stage (r=-0.094, p=0.243) and N stage(r=-0.100, p=0.218) showed negative correlation with the number of FOBT performed but were not statistically significant. Pathological T stage (r=0.018, p=0.749) showed positive correlation, while N stage (r=-0.036, p=0.528), and M stage (r=-0.040, p=0.477) showed negative correlation, but all without statistical significance. Finally, tumor staging according to AJCC 8th guidelines showed negative correlation (r=-0.017, p=0.763), but with no statistical significance.

Conclusion:
Performing FOBT multiple times as screening does not relate to early detection of colorectal cancer. For early diagnosis of colorectal cancer, other screening methods should be considered. Frequent use of colonoscopy as standard screening method should be explored as an alternate method.

Abstract ID: P-81
Presenting Author: Saania Peeroo
Co-Authors: Samuel Penfold ; Blake Roschach ; Thang Chien Nguyen ; William Teoh
Organisation: Monash Health

Title:

Outcomes Following Intrasphincteric Injection Botulinum Toxin For Treatment of Anal Fissures

Background and Aims:

Intrasphincteric injection of botulinum toxin is an alternative treatment for anal fissures which may present less risk of faecal incontinence than more invasive procedures such as sphincterotomy. The aim is to compare cure and complication rates between these two treatments.

Methods:

We conducted a retrospective audit of patients who underwent treatment of anal fissures with intrasphincteric botulinum toxin or lateral internal sphincterotomy from 2016 to 2020 at the Monash Health Colorectal Surgery Unit, excluding those who had previously had either procedure.

Results:

51 patients received intrasphincteric botulinum toxin and 40 patients received lateral internal sphincterotomy. Most patients in the botulinum group had a total dose of either 80 units (53%; n = 27) or 100 units (37%; n = 19), and had the dose administered bilaterally at the 3 o'clock and 9 o'clock positions (n=41; 80%). 31 patients in the botulinum group (61%) had complete resolution of symptoms, with a mean time to cure of 2 months, compared to 36 patients (90%) in the sphincterotomy group with a mean time to cure of 1.5 months. In most cases, post-operative incontinence was transient, although 1 patient in the botulinum group had persistent incontinence of flatus, and 2 patients in the sphincterotomy group had persistent faecal incontinence.

Conclusion:

Intrasphincteric botulinum injection is an effective, less invasive alternative to sphincterotomy for the treatment of anal fissures, with incontinence usually temporary when it occurs. Further research is needed to optimize the dose and location of injection and guide future recommendations.

APFCP VIDEO ABSTRACTS

Abstract ID: V-01
Presenting Author: Ho Seung Kim
Co-Authors: Hyeonkyeong Kim ; Soon Sup Chung ; Ryung-Ah Lee ; Kwang Ho Kim ; Gyoung Tae Noh
Organisation: Ewha Womans University College of Medicine

Title:
Laparoscopic Intracorporeal Functional End-to-end Anastomosis For Proximal Transverse Colon Cancer

Background and Aims:
In recent years, intracorporeal anastomosis has emerged as a promising approach for faster postoperative recovery. Several techniques for intracorporeal anastomosis are available, among which side-to-side isoperistaltic anastomosis has been traditionally favored in right hemicolectomy. However, achieving sufficient distal margin with this technique remains challenging due to ergonomic challenges posed by the insertion of linear stapler through the left upper abdomen without splenic flexure mobilization.

Methods:
In recent years, intracorporeal anastomosis has emerged as a promising approach for faster postoperative recovery. Several techniques for intracorporeal anastomosis are available, among which side-to-side isoperistaltic anastomosis has been traditionally favored in right hemicolectomy. However, achieving sufficient distal margin with this technique remains challenging due to ergonomic challenges posed by the insertion of linear stapler through the left upper abdomen without splenic flexure mobilization.

Results:
Both surgeries were completed without any complications. In the case of ascending colon cancer, intracorporeal side-to-side isoperistaltic anastomosis achieved a secure and proper distal resection margin. However, in the case of proximal transverse colon cancer, the length of the distal margin obtained with the conventional technique was deemed insufficient due to the limitations imposed by using a linear stapler through the left upper abdomen without splenic flexure mobilization. By contrast, the functional end-to-end anastomosis, which employs a stapler inserted through the left lower abdomen, was able to achieve a proper distal resection margin without splenic flexure mobilization.

Conclusion:
The intracorporeal functional end-to-end anastomosis might provide the advantage over side-to-side isoperistaltic anastomosis for patients with proximal transverse colon cancer in terms of the distal resection margin. Further research is needed to compare the two intracorporeal anastomosis techniques in a larger patient cohort.

Abstract ID: V-04
Presenting Author: Dmitrii Dolgunov
Co-Authors: Ian Tan Jse Wei ; Jing Yu Ng ; Ker Kan Tan
Organisation: National University Hospital Singapore

Title:

Successful Endoscopic Submucosal Dissection (ESD) For Large Lower Rectal Lesion In Case of Portal Hypertension With Rectal Varices

Background and Aims:

Endoscopic Submucosal Dissection (ESD) is a treatment option for large rectal lesions. However, ESD might be challenging in case of rectal varices. We are presenting a complex case of successful Endoscopic Submucosal Dissection (ESD) for large rectal lesion in patient with portal hypertension with rectal varices. Post ESD site closure performed with endoloop and clips method successfully.

Methods:

ESD performed under sedation (midazolam and fentanyl) in endoscopy unit settings with use of therapeutic endoscope (Fujifilm, EG 760 R). Submucosal injection with gelofusine mixed with indigo carmine and adrenaline 1:10 000 solution. Mucosal incision with needle type knife (Flush knife, Fujifilm). Creation of submucosal pocket with insulated tip knife (IT NANO knife, Olympus). Hemostasis for varices/veins with coagrasper (Olympus). Closure of post ESD defect with endoloop (detachable snare device, Olympus) and resolution clips (Boston Scientific).

Results:

We achieved R0 resection for large 7*6 cm rectal lesion which shows high grade dysplasia. Patient recovered well and discharge next day without any complications and no per rectal bleeding occurred during recovery, no additional surgery required.

Conclusion:

Endoscopic submucosal dissection for lower rectal lesions with rectal varices could be performed successfully, however intermittent bleeding occurs during procedure and careful hemostasis is required. In addition, complete closure of post ESD site might be necessary to prevent potential risk of delayed bleeding. ESD might be considered as alternative treatment method for lower rectal lesions with rectal varices.

Abstract ID: V-05
Presenting Author: Dmitrii Dolgunov
Co-Authors: Katsuro Ichimasa ; Jing Yu Ng ; Ian Tan Jse Wei ; Ker Kan Tan
Organisation: National University Hospital Singapore

Title:
Successful Endoscopic Submucosal Dissection (ESD) for Squamous Anal Intraepithelial Neoplasia (AIN-2)

Background and Aims:
Anal Intraepithelial Neoplasia (AIN) is a precancerous condition for squamous anal carcinoma. Traditional treatment for anal carcinoma is chemoradiation and surgery. There are surgical modalities available for AIN. ESD is alternative for local excision of AIN lesion with some publications mostly from Japan on successful endoscopic management and surveillance. In this presentation we share our experience of AIN -2 managed endoscopically with ESD.

Methods:
As anal area sensitive local anaesthetic is used with sedation which patient tolerated well during procedure. Patient was discharged next day after ESD without any complications. Uneventful recovery with no anal pain and minimal PR bleeding stains resolved spontaneously in outpatient settings. Procedure was performed under sedation with midazolam and fentanyl with therapeutic endoscope (Fujifilm, EG 760 R)and additional injection of total 5 MLS 1% lignocaine solution at anal site of lesion. Submucosal injection with gelofusine/indigo carmine. Mucosal markings for lesion demarcation with LCI view. Mucosal incision with needle type knife (Dual J knife, Olympus) in both end-on and retroflex view. Creation submucosal pocket in endoscopic retroflexion. 2 clips with attached floss for traction during opening pocket performed and opening pocket with insulated tip knife (IT NANO knife, Olympus). Irrigation with 1l distilled water for post ESD site to prevent cells implantation.

Results:
The lesion was removed macroscopically completely with assessment of margins at post ESD site with LCI/BLI view and macroscopically on specimen. On pathological examination we achieved negative vertical margin of 1mm and negative anal margin of 2mm, oral margin at 6mm, lateral margin 4mm with only one area at lateral margin with LGD close to diathermy site. Surveillance colonoscopy in 8 weeks post procedure shows normal scarring with granulations on biopsies. Patient recovered well without any complications.

Conclusion:
It is still debatable optimal treatment choice for AIN. In our opinion, ESD might be used as first choice rather than surgery. As endoscopic assessment and LCI facilitates demarcation of the lesion borders and resection under direct visualization, which might be challenging during open surgery as lesion not palpable with digital rectal examination and not obvious flat elevated patch, also will require general anesthesia. Chemoradiation might not be necessary for early mucosal lesion. So that endoscopic submucosal dissection might be considered. Complete block resection and early surveillance is recommended.

Abstract ID: V-06
Presenting Author: Dmitrii Dolgunov
Co-Authors: Ian Tan Jse Wei ; Jing Yu Ng ; Ker Kan Tan
Organisation: National University Hospital Singapore

Title:
Approaches To Complex Caecal Endoscopic Submucosal Dissection (ESD) - 3 Different Strategies

Background and Aims:
Caecal endoscopic submucosal dissection (ESD) remains technically challenging and time consuming procedure. Stabilization of colonoscope is more challenging at proximal colon especially with colonic redundancy and peristalsis and movements during patient breathing. Also caecal wall is thinner compared to other segments of colon so that risk of diathermy injury and perforation is higher. However, if endoscopic treatment for large caecal lesions is unsuccessful major surgery/right hemicolectomy might be required. So it is important to have several options to approach difficult caecal ESD cases to achieve successful endoscopic resection. I present 3 technically different strategies to perform complex caecal ESD.

Methods:
3 different examples of caecal ESD strategies. 1) Pocket Creation Method (PCM-ESD) is first choice and preferable method, where submucosal pocket under lesion created with needle type knife and subsequent opening pocket with insulated tip knife performed. 2) Conventional ESD with insulated tip knife. In a situation where creation of pocket is difficult due to fibrosis and adherence of lesion to muscular fold different strategy might be considered. Instead of pocket creation, conventional ESD applied by using insulated tip knife to dissect and release angle of gravity site of lesion with subsequent movements and dissection in antigravity direction upwards in left to right manner. This approach still facilitates block dissection. 3) Salvage hybrid ESD. In a situation of successful pocket creation but difficult opening stage due to location and severe fibrosis conversion to salvage hybrid procedure with snare completion is acceptable and still able achieve block resection.

Results:
All 3 procedures completed successfully and lesions removed block with R0 resection. Largest caecal lesion up to 6*5cm in size shows low grade dysplasia features, while caecal lesion with fibrosis and conversion to hybrid procedure shows high grade dysplasia with negative vertical margin. Curative excision achieved in all 3 different approaches. Uneventful recovery with 1 night observation without any complications. No additional colectomy required for these patients.

Conclusion:
Various approaches and strategies might be considered during complex caecal endoscopic submucosal dissections to facilitate achievement of en block R0 resection and to minimize need of colectomy/major surgery.

Abstract ID: V-08
Presenting Author: Ankur Gogoi Cheleng
Co-Authors: Pankaj Kumar ; Ankur Gogoi Cheleng
Organisation: All India Institute of Medical Sciences

Title:

Laparoscopic Management of Intestinal Malrotation in Adults

Background and Aims:

To help familiarize general surgeons with the condition, to not misdiagnose malrotation in adults and manage it with ease and to discuss the role of Laparoscopic Ladd's procedure in the management of malrotation of the gut in adults.

Methods:

We describe two cases of malrotation of the gut in adults, diagnosed and managed successfully using laparoscopic Ladd's procedure at AIIMS, Bhubaneswar, India. Both cases have been performed between 2017 and 2022.

Results:

The two cases were successfully managed by minimally invasive Ladd's band procedure. Postoperatively enteral feeding was started on Day-02 and the patients were discharged by Day-05. On follow-up, the patients were doing well.

Conclusion:

Our results suggest that laparoscopic Ladd's procedure is a viable option and can be performed safely in adult patients. There should be a high degree of suspicion among general surgeons to rule out intestinal malrotation in cases of chronic and recurrent intestinal obstruction in adults.

Abstract ID: V-09
Presenting Author: Punnawat Chandrachamnong
Co-Authors: -
Organisation: Vajira Hospital

Title:

Treatment Outcomes of Radiofrequency Ablation Using Rafaelo Technique For Internal Hemorrhoids

Background and Aims:

Hemorrhoidal disease significantly affects the quality of life, and while hemorrhoidectomy is the standard treatment for grades 3-4 internal hemorrhoids, its painful nature presents a drawback. The Rafaelo technique, a non-excisional procedure utilizing Radiofrequency Ablation (RFA), offers a promising alternative. This study aims to explores the postoperative outcomes associated with this innovative technique.

Methods:

We conducted a single-center study performed by a single surgeon from January to December 2022. The surgical procedures were performed using a combination of intravenous sedation and perianal anesthesia.

Results:

40 patients underwent the Rafaelo technique, with a mean age of 49.7 +/- 15.1 years. Among them, 24 (60%) were male, and 16 (40%) were female. 13 patients (32.5%) had grade 2 hemorrhoids, while 27 patients (67.5%) had grade 3 hemorrhoids. The mean energy applied was 1378 +/- 435 J for grade 2 and 2418 +/- 599 J for grade 3 hemorrhoids. The visual analog scale (VAS) scores were consistently low within the first 24 hours after surgery (VAS 1.1 +/- 1.4 at 4 hours, 1.18 +/- 1.54 at 8 hours, and 0.58 +/- 1.04 at 12 hours). 97.5% of the patients were able to be discharged on the first day and 85% resumed their daily activities after discharge. Additionally, there were 3 postoperative complications: 2 cases of thrombosed external hemorrhoids and 1 case of postoperative anal edema. However, all complications were successfully treated conservatively. Symptom severity score significantly decreased from 4.15 +/- 1.69 preoperatively to 1.03 +/- 1.37 at 2 weeks and 0.00 at 3 months. There were no cases of recurrence within the 6-month postoperative period.

Conclusion:

The Rafaelo technique has demonstrated remarkable safety and effectiveness in treating grade 2-3 internal hemorrhoids. Notably, it minimizes postoperative pain and yields favorable outcomes at 6 months.

Abstract ID: V-10
Presenting Author: Aditya Bachu
Co-Authors: -
Organisation: All India Institute of Medical Sciences

Title:

Fistulectomy with Primary Sphincteroplasty (FIPS): Outcomes and Video Demonstration of Surgical Technique For Fistula-in-Ano

Background and Aims:

To provide a comprehensive overview of the operative technique of Fistulectomy with Primary Sphincteroplasty (FIPS) in patients with high-type fistula-in-Ano and analyze the outcomes.

Methods:

Patients with high-type fistula-in-Ano of cryptoglandular origin are selected and undergo the FIPS procedure. Key steps and techniques of the FIPS procedure are demonstrated utilizing intraoperative videos. Outcomes such as perioperative complications, hospital stay, pain, incontinence and quality of life are assessed.

Results:

A total of 28 patients underwent the FIPS procedure during the study period. Postoperatively, a mean duration of 2 days of hospital stay was needed. Immediate postoperative pain score was at 6.67+-0.95. The mean pain score in the first week was 5.7+-0.81. The mean pain score in the first month was 3.94+-0.67. 2 patients had minor incontinence at the 6-month follow-up. The fistula healing rate was observed to be 85%.

Conclusion:

This video demonstrates the step-by-step approach to performing the procedure and highlights its potential benefits in terms of fistula healing, continence and recurrence rates. A comprehensive understanding of this technique is provided, and potential benefits are highlighted. FIPS has shown one of the best healing rates and acceptable risk of incontinence. However, postoperative pain was a significant issue. Anatomical knowledge is important when choosing patients for FIPS. However, further evidence is needed to support the results.

Abstract ID: V-12
Presenting Author: Arcanjo De Jesus Sequeira Nunes
Co-Authors: Ke Zhang ; Zijian Deng ; Hai Hu ; Jin Yan ; Yuanyi Rui ; Bo Yi ; Yangchun Zheng
Organisation: Sichuan Cancer Hospital & Institute

Title:

Laparoscopic Left Hemicolectomy of Descending Colon Carcinoma with Superior Rectal Artery (SRA) Preservation and Natural Orifice Specimen Extraction (NOSE): A Standard Operating Procedure with A Video

Background and Aims:

Laparoscopy-assisted radical resection of colorectal cancer and Natural Orifice Specimen Extraction surgery (NOSES) are widely used worldwide. However, due to the low incidence of descending colon cancer, some problems remain in the application of laparoscopic and NOSES techniques in left hemicolectomy Herein, we introduce the technical procedure of laparoscopic left hemicolectomy with Superior Rectal Artery (SRA) preservation and NOSE.

Methods:

A retrospective analysis was performed on 39 patients who underwent laparoscopic left hemicolectomy with SRA preservation and NOSE in a single institution from November 2017 to May 2021. The patients' general information, preoperative data and short-term postoperative results were analyzed.

Results:

All operations were completed smoothly with an average operation duration of 227.17 ± 65.51 min, intraoperative bleeding of 91.05 ± 66.71 ml, time to ambulation of 11.97±2.15 h, time to exhaust of 20.20 ± 10.08 h, time to liquid diet of 2.48±0.72 days and average postoperative stay of 7.66 ± 1.89 days. 2 patients developed temporary intestinal obstruction, and 1 patient developed pulmonary infection. 1 patient developed a chyle fistula. 1 patient developed an intestinal infection. All of them recovered well after active supportive treatment and were discharged successfully.

Conclusion:

Laparoscopic left hemicolectomy with SRA preservation and NOSE is safe and feasible, can achieve satisfactory short-term results, and is worthy of further clinical investigation.

Abstract ID: V-13
Presenting Author: Sanjay Kumar Singla
Co-Authors: -
Organisation: Singla Hospital

Title:

MIS in PNS Why, Where and How

Background and Aims:

There is significant morbidity and recurrence of PNS after traditional invasive surgical techniques. Minimally invasive surgery demonstrates efficacy in eliminating factors driving the disease process (pits, hair), reduces the morbidity, reoccurrence is comparable to traditional surgery. MIS Video being presented to show why, where and how MIS in PNS reduces morbidity of these patients.

Methods:

The reduced healing time (2-3 weeks) and very less pain leads to prompt return to work with good aesthetic result. Recurrence rates are 5% or so and are comparable to flaps.

Results:

The reduced healing time (2-3 weeks) and very less pain leads to prompt return to work with good aesthetic result. Recurrence rates are 5% or so and are comparable to flaps.

Conclusion:

Under vision clearance of the sinus ensures complete debridement. Primary and reoccurred cases of pilonidal disease can be managed with endoscopic means except non healing mid line wounds larger than one cm in size. Some atypical cases of pedunculated granulomas and large perianal sinus may need flaps. As there is no excision and flattening of the natal cleft, there are concerns regarding long-term recurrence with this technique.

Abstract ID: V-15
Presenting Author: Ng Jia Lin
Co-Authors: Delphina Yeo ; Darius Aw ; Frederick Koh ; Fung Joon Foo
Organisation: Sengkang General Hospital

Title:

Endoscopic-assisted Laparoscopic Anterior Resection of Intussuscepting Primary Colonic Liposarcoma

Background and Aims:

Liposarcomas are uncommon malignant mesenchymal tumors arising in the extremities and sometimes in the retroperitoneum.

Methods:

We discuss a case of a rare sigmoid colon liposarcoma in a lady who presented with constipation and tenesmus.

Results:

In the case of a large liposarcoma, it is difficult to maneuver the mass without the risk of serosal tears. As we make an attempt in minimally-invasive surgery for this patient, we decided that it would be useful to utilize endoscopy to help reduce the mass and attempt to resect the mass laparoscopically without extensive serosal tears.

Conclusion:

A hybrid endoscopic-laparoscopic high anterior resection can help to manipulate the large tumor and avoid a low anastomosis, thereby reducing the risk of an anastomotic leak when compared to a higher anastomosis.

Abstract ID: V-16
Presenting Author: Wong Seng Hong Ryan
Co-Authors: Wei-Liang Loh ; Shaun Tan ; Ming Soen Ngooi ; Zhongren Konrad Ong ; Sing Shang Ngoi
Organisation: Singapore General Hospital

Title:
Retroflexed Endoscopic Monopolar Coagulation For The Treatment of Internal Hemorrhoids: A Single Surgeon's Experience of An Initial Hundred Cases

Background and Aims:
Various non-surgical options are available for the treatment of hemorrhoids, including rubber-band ligation, sclerotherapy, coagulation and electrocautery. We aim to present a novel endoscopic technique and our initial experience of a hundred cases.

Methods:
Patients who presented with symptoms and signs indicating Grade II-III hemorrhoids were counselled before the procedure. Patients who were assessed to require an examination of their colon in view of age and other symptoms underwent a full colonoscopy prior to the endoscopic treatment of their hemorrhoids. The colonoscope is retroflexed and a 360 degree examination of the anal canal is performed. The vascular pedicles of the hemorrhoids are identified above the dentate line, grasped with a hot biopsy forceps introduced via the working channel of the endoscope and electro coagulated with monopolar diathermy. Post-procedure, patients were routinely prescribed non-steroidal anti-inflammatory drugs, antibiotics and laxatives.

Results:
Our initial hundred patients consisted of 65 (65%) females, with a mean age of 50.3 ± 12.9 years. 45 (45%) of patients had Grade II hemorrhoids while the rest had Grade III hemorrhoids. The rate of complications was low, with only 5 (5%) cases post-operative bleeding, and 4 (4%) cases of pain, all of which were treated conservatively. The recurrence rate was 6%, at a median follow-up time of 36 months (range 6-76 months).

Conclusion:
This novel endoscopic technique for the treatment of hemorrhoids offers an acceptable complication and recurrence rate, is easily learnt, and can be conveniently performed in the same setting as a colonoscopic examination.

Abstract ID: V-17
Presenting Author: Supakool Jearanai
Co-Authors: -
Organisation: King Chulalongkorn Memorial Hospital

Title:

Mastering The Art of Sacrectomy: Unfolding A Methodical Approach To Total Sacrectomy

Background and Aims:

Total sacrectomy is a complex surgical procedure. This procedure carries a high risk of morbidity and mortality, primarily due to the potential for exsanguination. Additionally, performing this procedure requires a high level of technical expertise. While various techniques for sacrectomy have been reported, complications continue to be documented. To present a methodical approach to total sacrectomy, particularly focusing on the utilization of a modified technique for isolating the iliac vessels. This approach was implemented successfully in a patient presenting with a sacrococcygeal mass that extended into the lower part of the S1 bone and involved the Sacroiliac joint. By providing a comprehensive and detailed description of this approach, our aim is to advance knowledge and understanding in managing complex cases, ultimately leading to optimized patient outcomes and a reduction in the occurrence of complications.

Methods:

A 45-year-old male with buttock pain radiating to both thighs underwent a total sacrectomy. After a thorough pre-operative examination and MRI, we initiated the procedure in a supine position, performing sigmoid colon and rectal mobilization. We isolated the iliac vessels and protected the lumbosacral nerve trunk, proceeding with the anterior osteotomy above the S1 nerve root. After repositioning the patient, a posterior osteotomy was performed on the body of S1 and laterally to the SI joint. The tumor was safely and completely removed. For reconstruction, mesorectal fat was used for pelvic inlet closure, and bilateral gluteus maximus flaps for wound closure.

Results:

The procedure was successfully executed without perioperative complications. Pathological analysis revealed chordomas, with all specimen margins free from the tumor. The patient was discharged home on the 7th postoperative day.

Conclusion:

Our systematic approach to total sacrectomy illustrates how careful planning and execution can mitigate complications and result in successful outcomes for patients with sacrococcygeal masses. A key component of our strategy involves the diligent isolation of the external iliac veins. This measure not only aids in reducing intraoperative bleeding from potential pelvic vein lacerations, significantly minimizing the risk of perioperative complications.

Abstract ID: V-18
Presenting Author: Shao Nan Khor
Co-Authors: Kelvin Kaiwen Li ; Emile Tan ; Isaac Seow-En
Organisation: Singapore General Hospital

Title:

Laparoscopic Sigmoid Colectomy With Trans Anal Natural Orifice Specimen Extraction For Sigmoid Volvulus

Background and Aims:

Natural Orifice Specimen Extraction (NOSE) is an alternative to transabdominal specimen retrieval in laparoscopic colorectal surgery. The reduced wound size with NOSE decreases postoperative pain, allows quicker recovery and provides better cosmesis. A specimen size cutoff for NOSE in colorectal surgery is recommended by international consensus guidelines to achieve successful extraction. Natural orifice specimen extraction is commonly used in colorectal cancer surgery. Laparoscopic sigmoidectomy for uncomplicated sigmoid volvulus has been proposed as an ideal condition for trans anal NOSE because there is no physical mass and only close colonic dissection is required, thus ensuring the ease of specimen retrieval.

Methods:

We present a detailed step-by-step approach to elective laparoscopic sigmoidectomy with trans anal NOSE in a 66-year-old woman (body mass index 18.0 kg/m2) with recurrent sigmoid volvulus. Mechanical bowel preparation was administered. A 12-mm trans umbilical camera port was used, with 12-mm and 5-mm right-sided ports. The patient was discharged within 24 h of surgery.

Results:

While the previous technical description involves exteriorization of the proximal colon via the anus to secure the circular stapler anvil, we advocate a simple intracorporeal alternative of securing the colonic anvil in NOSE surgery for volvulus. This modification allows more proximal sigmoid dissection which decreases post-anastomosis bowel redundancy. This may decrease the risk of recurrent volvulus after sigmoid resection reported in other series.

Conclusion:

Considering its simplicity and potential benefits, the NOSE procedure should be considered for cases of sigmoid colectomy for uncomplicated volvulus. Good bowel preparation is mandatory for this procedure to minimize the risk of luminal content spillage.

Abstract ID: V-19
Presenting Author: Nathanelle Khoo
Co-Authors: Rebekah Lee ; Darius Aw ; Cheryl Chong ; Sharmini Sivarajah ; Leonard Ho ; Ng Jia Lin ; Cheryl Tan ; Jasmine Ladlad ; Mark Tan ; Shawn Kok ; Winson Tan ; Foo Fung Joon ; Frederick Koh
Organisation: Sengkang General Hospital

Title:
Three-dimensional (3D) Printed Models: Utility In Complex Perianal Fistula Surgery

Background and Aims:
Complex perianal fistulas pose a challenging anatomical problem. Surgical treatment of such fistulas requires good spatial orientation and the ability to interpret 2-Dimensional (2D) imaging in terms of 3-Dimensional (3D) pathology. 3D printed models of perianal fistulas improve visualization of anatomical details, particularly of deep internal structures. They can be used as pre-operative planning adjuncts and intra-operative reference guides. This study aims to describe the usage of 3D printed models in perianal fistula surgery in a single center in Singapore.

Methods:
MRI was performed on a 3.0T scanner and translated to digital imaging and communications in medicine (DICOM) format. This was uploaded to a proprietary software suite, then segmented and designed by biomedical engineers with input from clinicians. The model was printed using a combination of fused deposition modelling and stereolithography 3D printing techniques.

Results:
5 patients had 3D printed models of their complex perianal fistulas created. An example of 1 model and its use intra-operatively is shown. The models used different colors for different structures and could be disassembled into separate parts.

Conclusion:
3D printed models are useful tools in visualizing complex perianal fistula anatomy and enhancing surgical treatment and may become standard adjuncts in helping surgeons better understand individual patient pathology.

Abstract ID: V-20
Presenting Author: Hui Yu Tham
Co-Authors: Yao Zong Lee ; Juefei Feng ; Gregory Heng Kang Ee ; Surendra Mantoo ; Kok Yang Tan ; Daniel Lee Jin Keat
Organisation: National Healthcare Group

Title:
Comparing Intraoperative Differences In TME Dissection Post RAPIDO Vs Traditional Long Course Chemort

Background and Aims:
Management of locally advanced rectal cancer requires a multimodal approach – traditionally involving long course chemotherapy and radiotherapy (NACRT) followed by surgical resection with Total Mesorectal Excision (TME) with a view for adjuvant chemotherapy. In recent years, there has been a gradual shift towards Total Neoadjuvant Therapy (TNT) following promising short-term outcomes previously published in landmark trials – RAPIDO and PRODIGE-23. While many quantitative studies have been performed to further assess and compare longer term outcomes between TNT and NACRT, very few qualitative studies were conducted to evaluate the impact of neoadjuvant treatment on TME dissection during surgery. Hence, we seek to compare and discuss the intraoperative differences observed in TME dissection between two patients who had separately underwent TNT and NACRT.

Methods:
2 patients (Patient R, Patient K) were identified for comparison of intraoperative TME dissection. While performed within the same center, surgeries were conducted by 2 different colorectal specialists. Videos of the surgeries were recorded to facilitate subsequent comparison.

Results:
At baseline, both patients had similar clinical staging on pre-treatment MRI – cT3N1. Post treatment MRI demonstrated significant regression in tumor bulk in patient R who underwent TNT. The time interval between surgery and radiotherapy was 126 days in patient R and 51 days in patient K. TME dissection planes were better appreciated in patient R who had underwent TNT as compared to patient K who underwent NACRT.

Conclusion:
Intraoperative surgical planes during the TME phase were observed to be more well defined in our patient who had underwent RAPIDO compared to TNT. With a longer interval between radiotherapy and surgery, surrounding tissue fibrosis and inflammation were reduced in our patient who had underwent TNT. This enabled improved ease of firing the distal transection stapler for subsequent colorectal anastomosis. Nonetheless, a proper qualitative assessment and review involving more patients is required.

Abstract ID: V-23
Presenting Author: Sanjay Singla
Co-Authors: Kushal Mital
Organisation: Singla Hospital

Title:

Video Vignette-polidocanol Foam Sclerotherapy In The Treatment of Hemorrhoidal Disease.

Background and Aims:

Hemorrhoid disease is very common. Surgical operation both conventional and stapler hemorrhoidopexy has many and serious side effects. Proctoscopic injection sclerotherapy is quiet effective in treating hemorrhoids of various grades. Its safety and efficacy depends upon right selection of cases and right technique of application. Video of a patient with grade 2 bleeding hemorrhoids is being presented to show the right technique of sclerotherapy.

Methods:

Polidocanol 3% (2 to 4 ml) foam was created by Tessari Method. Pre procedural digital rectal examination was done to rule out any palpable disease and access the prostatic bulge into the anterior wall of the rectum. Use of self illuminated proctoscope with fiber optic light source has been emphasized. In left lateral position apex of the 3'O clock position hemorrhoid was injected first with 21 gauge spinal needle, so that any ooze from first prick does not obscure the vision while injecting other hemorrhoids. Appearance of Striation sign as a landmark for well sited injection into sub mucosa is well demonstrated. Any ooze can be controlled by cotton ball pressure. Check proctoscopy done.

Results:

Foam sclerotherapy is almost painless, low cost ambulatory and safe technique to treat hemorrhoids of various grades with a success rate of more than 90 % as per the literature. Ill sited injection can lead to complication, specially urological complication while injecting anterior hemorrhoids. Very occasionally sever inflammation and sepsis can cause life threatening complications.

Conclusion:

Proctoscopic injection sclerotherapy using modern sclerosants and thin bore needle is a quite safe and effective procedure to control bleeding from grade I and grade II hemorrhoids. Newer sclerosing agents and techniques are successful in treating grade III and grade IV hemorrhoids. We feel that right choice of patient and right technique is the actual trick of the trade.

ASSR POSTER ABSTRACTS

Abstract ID: ASSR-O-02
Presenting Author: Yoshiko Miki
Co-Authors: -
Organisation: St. Catherine University

Title:

Suggestions for a Stoma Care/ Caring Practice Model: Aiming for Holistic Care

Background and Aims:

To propose a practice model for stoma care or by extracting the caring attitude recognized in the backstage of stoma care practice.

Methods:

A literature review was carried out based on Gill's Conceptual Blending. The target literature was books whose titles include the terms stoma care or stoma rehabilitation, which were chosen as leading texts. The publication years were limited to 1970 to 2020. We extracted practices of stoma care that can be interpreted as caring. A stoma care or caring practice model was created by synthesizing consciously practiced stoma care and caring practice as Backstage Cognition.

Results:

Before 2000, we accepted statements that recommended holistic care based on stoma rehabilitation. Since 2000, books have focused on two aspects: one is diagnosing ostomy complications, and the other is knowledge of how to change the ostomy appliance and peri-ostomy skin care. People turned their attention to the knowledge and technique of local care practices. Caring existed in situations where ostomy appliances were exchanged, selection, and daily life were considered. From these, we can understand a caring attitude is necessary that considers the following 5 points: (1) pay attention to pain, (2) provide the care wholeheartedly, (3) allow the expression of emotions and understand the person's story, (4) notice the concerns of the moment, and (5) think together when providing the care. A practice model was created by synthesizing the conscious knowledge and techniques of stoma care and behind-the-scenes cognitive caring practices.

Conclusion:

Since the year 2000, there has been a growing recognition that ostomy care is care that emphasizes local care knowledge and techniques. Recognition concern caring was behind the scenes. By raising awareness of caring, it becomes possible to practice stoma care/caring that emphasizes holistic care. In addition, it was suggested that it leads to the mutual growth of the carer and the person being care for.

Abstract ID: ASSR-P-01
Presenting Author: Chia-Chi Fan
Co-Authors: -
Organisation: Cathay General Hospital

Title:

Nursing Experience of Patients With Irritant Dermatitis Caused By Biliary Nelaton Tube Drainage

Background and Aims:

An 80-year-old female patient with a Nelaton tube drainage was hospitalized due to CBD stones. During the intensive care unit, the patient developed abdominal distension and edema of the limbs. She gained 5 kg of weight, resulting Nelaton tube retraction and wound leakage leading to irritant dermatitis.

Methods:

Step 1: Assessment. Use SACSTM classified is L2-TV. Step 2: Management Nelaton tube retraction. Use stoma baseplate with nylon sutures line system. Step 3: Improve peristomal dermatitis. Apply silver ion dressing on the edge of the stoma to protect the dermatitis wound.

Results:

The SACSTM Classification Evaluation Scale was used to evaluate the skin damage around the stoma again. L1-TV, during which the base was replaced every 3-4 days and the degree of skin damage was checked. The pain index decreased from 8 points to 2 points. Observe the patient's daily defecation smoothly. The patient said that there was no discomfort after using the stoma baseplate with nylon sutures line system and the pain is relieved, so the patient can sleep well. The irritant dermatitis and leakage around the wound is significantly improved.

Conclusion:

Seek professional caregivers (advanced nurses), conduct assessment again to find out the related factors of leakage, integrate the medical care team to reach a consensus. Introduce a soft convex base and cooperate with the ostomy to replace the video teaching so that the care can be standardized.

Abstract ID: ASSR-P-04
Presenting Author: Yu Chin Hsu
Co-Authors: -
Organisation: Sijhih Cathay General Hospital

Title:

Nursing Experience of Ovarian Mucinous Cystadenoma Complicated with Colon Adhesion Cause Rupture Received Ileostomy: A Case Study

Background and Aims:

The case was a 40-year-old unmarried woman who underwent right side salpingo-oophorectomy, repaired due to adhesion and rupture of the sigmoid colon, and loop ileostomy on March 10, 2022. Then she was admitted to the intensive care unit. The patient expressed fear that she would not be able to take care of the stoma by herself, also worried about the smell on her body and the strange eyes of others, that she would not be able to return to the workplace. On March 15th, she received a consultation with a Wound Ostomy and Continence Nurse (WOCN).

Methods:

Through evaluation and discussion, the WOCN selected the easy-to-operate and cut-free moldable convex pouching system. The product is suitable for watery feces such as ileostomy or urostomy, and can prevent postoperative leakage, and can extend the wearing time.

Results:

During the hospitalization, the patient practiced stoma care with her younger sister. Under the guidance of special personnel, she had more confidence in returning home and returning to her original lifestyle. She could have more specific plans for returning to the workplace and was discharged on March 23.

Conclusion:

The study found that the incidence of skin damage next to the ileostomy is highly and is the most common complication after ostomy surgery, usually caused by leakage or inappropriate protective skin. For patients with ileostomy, it is recommended to use moldable convex pouching system protective skin, which is easy to operate and comfortable; clinically, there are many kinds of ostomy appliances, and moldable convex pouching system are one of them, and the price is slightly higher. How to use it correctly and reduce errors is very important.

Abstract ID: ASSR-P-07
Presenting Author: Khairul Bahri
Co-Authors: Muhammad Fadli ; Hardeza Anggara ; Rifa Qidya Ardi ; Eko Susanto
Organisation: Wound Ostomy Continence (Enterostomal Therapy) Nurse

Title:

Peristomal Skin Complication in Ileostomy and Colostomy Patients: What We Need to Know from Scoring System Peristomal Skin Condition

Background and Aims:

The most common skin disorders found after ostomy surgery are peristomal skin complications (PSCs). They have a significant impact on a patient's quality of life and lead to greater healthcare costs. Assessment of peristomal skin is critical for early detection and therapy of these complications in order to improve patient comfort and prevent more serious difficulties. This case study aimed to determine the measure on assessment, diagnosis and care indications for peristomal skin condition using peristomal skin assessment.

Methods:

A case study was conducted, evaluation assessment, diagnosis and care in adult patient with ileostomy / colostomy. The analysis case study was performed use peristomal skin assessment SACS 2.0, DET and ABCD.

Results:

The result of this scoring system for peristomal skin conditions used SACS 2.0, DET, and ABCD to make it easier to identify problems with peristomal skin complications, place skin complications in the abdomen area, and facilitate treatment in ileostomy and colostomy patients.

Conclusion:

Peristomal skin complications are common among individuals with an ostomy but can be effectively managed and prevented with proper assessment of peristomal skin condition and care. Regular evaluation of the peristomal skin, prompt intervention, and patient education are essential components of successful management. By addressing these complications comprehensively, healthcare providers can help improve the overall well-being and comfort of ostomy patients.

Abstract ID: ASSR-P-08
Presenting Author: Eviyanti Nurmalasari
Co-Authors: Widasari Sri Gitarja ; Munasirah ; Kana Fajar ; Khairul Bahri
Organisation: Wocare Indonesia

Title:
Development of Stoma Care Link for Indonesian Ostomates: A Pilot Study

Background and Aims:
Person living with stoma are at risk of physiology and psychology problems, and most are not receiving social support. It is crucial to increase ostomates's access to stoma nurse who involved to educate and support patients. Online services may be efficient tools for rehabilitation and re-empowerment among Ostomates.

Methods:
We conducted a pilot study of Stoma Care Link, a pilot e-consultations services for Indonesian Ostomate, designed to offer an online consultation with stoma nurse. The features of this link services include a private e-consultation with the nearest stoma nurse, a link to buy stoma appliance items, and care group to communicate and discuss with other Ostomates.

Results:
Participants were 20 Ostomates who participated in the first test in the focus group discussions. They provided feedback regarding the ease of accessing Stoma Care Link until being able to communicate with the stoma nurse. Results showed that 85% of participants could access the Link independently. In the focus group discussion, an Ostomates expressed satisfaction with the Link, including ease and free access and feeling close to the stoma nurse.

Conclusion:
In general, ostomates liked the stoma care link that this link could help them closer to stoma nurse. This stoma care link is a simple in its integrated approach so as helps ostomates navigate smoothly.

ASSR ORAL ABSTRACTS

Abstract ID: ASSR-P-02
Presenting Author: Deepika C A
Co-Authors: Rahul R Bhat ; Yogesh Kumar ; Raghavendra K
Organisation: Kasturba Medical College

Title:

Partial Diversion Stoma – An Effective Approach for Managing High Output Stoma And Limiting Nutritional Morbidity

Background and Aims:

Diversion stomas are helpful in preventing anastomotic break down, but small bowel stomas are known for high output resulting in fluid loss and electrolyte imbalances. In this study we utilized the Bishop Koop and Santulli stoma for adult patients to prevent high output, provide nutrition through faster re-establishment of enteral feeds and early restoration of continuity of gastrointestinal tract.

Methods:

In this report, we present 6 adult patients who were operated for small bowel disease under emergency setting and stomas were fashioned. Bishop Koop and Santulli stomas were formerly used by pediatric surgeons, and we used the same in adults in view of hostile abdomen, sepsis, disrupted physiology with high possibility of leak if primary anastomosis was attempted. Serial monitoring of stoma output, nutritional status, and the timing of initiation of enteral feeding were noted.

Results:

Among the six patients, four patients had linear and significant decrease in the stoma output over the period of 3 weeks and tolerated early enteral feeds. One patient developed minor leak after stoma closure and settled with supportive measure. One patient died due to myocardial infarction.

Conclusion:

We found both Bishop Koop and Santulli stoma beneficial in adult patients in addition to reduction of morbidity associated with high output stoma, they were amenable for assessment through contrast study and enteroscopies. Therapeutically we have used the distal loop for early feeding. We also noticed that the stoma behaves as "partial continuity stoma" thus reducing the dependency on total parenteral nutrition hence reducing the financial burden especially in resource poor establishment.

Abstract ID: ASSR-P-03
Presenting Author: Tessa Daly ; David Bird ; Russell Hodgson ; David Bird
Co-Authors: Rahul R Bhat ; Yogesh Kumar ; Raghavendra K
Organisation: Northern Hospital

Title:

Unique Surgical Approach To Management of Caecal Dieulafoy Lesion, A Rare Cause Of Life-threatening Intestinal Bleeding

Background and Aims:

Colonic dieulafoy lesions are rare and can be a cause of life-threatening bleeding. We present our unique approach to localize colonic bleeding in the setting of negative radiological and endoscopic localization.

Methods:

A 51-year-old male presented with four days of hematochezia with no abdominal pain. Examination revealed normal vital signs and a soft abdomen and frank blood on rectal examination. He became hypotensive with multiple further bleeds reaching a hemoglobin of 57g/L (baseline 150) within 24 hours but responded well to transfusions. Two computed tomography angiographies and a red blood cell nuclear scan were unable to identify a source over five days of continued intermittent bleeding and transfusions totaling 14units of packed cells. Emergency gastroscopy and colonoscopy demonstrated pan-diverticular disease with fresh blood in distal ileum and caecum and large clots throughout entire colon with no obvious bleeding site. Capsule endoscopy was also negative.

Results:

The patient underwent diagnostic laparotomy. The entire small and large bowel was visually and palpably normal. A colonoscope was used to examine the entire gastrointestinal tract via the oral and anal route. The colon was the likely source of bleeding, however the dilemma was what to resect without resorting to significant resection of healthy bowel in a young patient. The transverse colon was stapled and the proximal end was matured as an end stoma with the idea that bleeding from the stoma or anus would localize the bleeding point. The patient bled 800 milliliters on post-operative day six from the stoma and underwent a right hemicolectomy with ileo-colic anastomosis. Specimen evaluation demonstrated a caecal dieulafoy lesion with an adherent clot. His subsequent recovery was unremarkable and he was discharged home.

Conclusion:

Surgery for refractory life-threatening hematochezia should be individualized and the source can be localized prior to resection to avoid unnecessary resection of healthy bowel.

Abstract ID: ASSR-O-03
Presenting Author: Shingo Tsujinaka
Co-Authors: Tomoya Miura ; Yoshihiro Sato ; Yoh Kitamura ; Kentaro Sawada ; Atsushi Mitamura ; Hiroto Sakurai ; Noriko Kondo ; Kazuhiro Takami ; Kuniharu Yamamoto ; Toru, Nakano ; Yu Katayose ; Chikashi Shibata
Organisation: Tohoku Medical and Pharmaceutical University

Title:
Stoma Creation and Management In The Era of Robotic Colorectal Surgery: An Update

Background and Aims:
The use of robotic system in colorectal surgery has been increasing worldwide, and the working ports are placed according to the anatomy-based guidelines provided by manufacturers. Since it is generally accepted that preoperative stoma site marking decreases stoma-related complications, surgeons may try to match the preoperatively marked site and the port site. However, the actual stoma location may be deviated from the original marking, or the stoma may not be properly constructed following the recommendations (e.g., without splitting rectus abdominis muscle). This review aimed to elucidate current concepts and issues in stoma creation and its management.

Methods:
An English literature search was performed on MEDLINE/ Pubmed database from the inception to June 2023. Keywords use in the search terms were robotic, robotic colorectal surgery, colostomy, ileostomy, stoma care and stoma management.

Results:
Several reports have shown that ISR or APR could be successfully performed using single-port platform through the preoperatively marked stoma site. A case report showed that robotic approach can facilitate creating end colostomy through extraperitoneal route. In a recent study, the distance of less than 6 cm between the marked stoma site and the umbilicus was identified as an independent risk factor of stoma leakage after laparoscopic or robotic rectal cancer surgery. However, there was no publication that directly compared the postoperative outcome regarding stoma complications or stoma care between laparoscopic and robotic surgery. Most of the observational studies have focused on the frequency of stoma formation in lower rectal cancer surgery.

Conclusion:
There were number of reports describing novel surgical techniques, whereas specific issues in stoma care have scarcely been reported. Further studies with larger cohorts and long-term results are needed to evaluate the new concepts on stoma creation and modernized stoma care in the era of robotic colorectal surgery.

Abstract ID: ASSR-P-05
Presenting Author: Haruaki Sasaki
Co-Authors: -
Organisation: Showa University Fujigaoka Hospital

Title:
Clinical Study of Erectile Dysfunction After Major Pelvic Surgery

Background and Aims:
Japan's population is rapidly aging, and the incidence of cancer is rising along with it. On the other hand, advances in medical care have led to an increase in the number of early-stage cancer cases and an increase in the number of surgical cases, making it necessary to improve the quality of life.

Methods:
In this study, we report a clinical review of EDs after major pelvic surgery in our department.

Results:
29 patients with ED after major pelvic surgery (colorectal cancer, bladder cancer, prostate cancer) were included in this retrospective study. All patients were sexually active before surgery. Age ranged from 41 to 78 years (median 58 years), with 15 cases of colorectal cancer, 1 case of bladder cancer and 13 cases of prostate cancer. Age per disease was 41-78 years (median 56 years) for colon cancer, 58 years for bladder cancer, and 58-78 years (median 66 years) for prostate cancer. PDE5-Is were effective in 7 of 12 patients with colon cancer and 7 of 13 patients with prostate cancer. Vacuum Constriction Deice (VCD) was requested in 1 patient and was effective. No patient requested PGE1 self-injection or penile prosthesis.

Conclusion:
In Japan, many patients wanted PDE5-Is, but very few wanted VCD, PGE1 self-injection or prostheses. It was considered necessary to educate patients.

Abstract ID: ASSR-O-04
Presenting Author: Endang Murwaningsih
Co-Authors: Indah Indreani Sari
Organisation: NCC Dharmais Hospital

Title:

Evidence-based Nursing Interventions For Recovery From Postoperative Ileus Using Chewing Gum

Background and Aims:

Postoperative ileus is one of the most prevalent and troublesome problems after any elective or emergency laparotomy. Gum chewing has emerged as a new and simple modality for decreasing postoperative ileus. The aim of this study was apply Evidence-Based nursing Interventions to evaluate the efficacy of postoperative gum-chewing in reducing postoperative ileus in terms of passage of flatus and total length of hospital stay.

Methods:

A total of 20 patients who had undergone abdominal surgery for Ileus resection at NCC Dharmais hospital between June - July 2023. Patients were assigned to chew sugar-free gum for 30 minutes starting from the first postoperative morning then every 8 hours until the first passage of flatus. Bowel sounds, passage of flatus and total length of hospital stay were noted. Outcome measures such as passage of flatus and total length of hospital stay in patients undergoing reversal of ileostomy.

Results:

20 respondents showed average age was 46.05 years, 60.0% male, 65.0% diagnosis cancer in stage II. Chewing gum was statistically significant in reducing time to first flatus postoperative care (median 29,80 with a standard deviation of 5.493). The variable time of first defecation was 55.30 with a standard deviation of 5.449. The length of a hospital stay was also significantly shorter (median 3.0 (range 1.0-8.8).

Conclusion:

Chewing gum was shown to have a positive effect on the time to first postoperative flatus and defecation. This inexpensive and noninvasive intervention may be recommended to decrease the time to resolution of postsurgical ileus who have undergone open abdominal surgery for ileus resection.

Abstract ID: ASSR-P-06
Presenting Author: Atsuko Maekawa
Co-Authors: Kazue Yoshida ; Ikumi Honda ; Shigeru Nakai ; Daijo Inaguma ; Hiroki Matsubara ; Yukihiro Kamiya ; Yoshihiko Enomoto ; Yasuhiro Ito
Organisation: Yokkaichi Nursing and Medical Care University

Title:
Visualization of Intestinal Peristalsis After Low Anterior Resection By Handy Electroenterometer For Continence Care

Background and Aims:
Many patients undergo Low Anterior Resection (LAR) due to rectal cancer or carcinoids. There is a temporary stoma management period, but it closes in 3 to 6 months and return to discharge from the anus. LAR is said that a permanent stoma to be unnecessary, and although patients have high expectations for it, fecal incontinence is frequent and the impact on their lives is an issue. The aim of this study was evaluate the long-term improvement in fecal continence.

Methods:
We measured bowel potential in male who had LAR 7 years ago, using a handy electroenterometer. The consistency of bowel potential waveform data is confirmed by a time plot. The data were analyzed by Fast Fourier Transformation (FFT) and color-scale display.

Results:
We collected and analyzed bowel potential data including lunch and drink events in a day. He had 13 times soft stool since 6 am, using diapers all day long after temporary stoma closed. Bowel potential shows large and small multi-modal waveforms during data taking and color scale also shows greenish. We judged that the large number of greens was the result of a high power value. The Meyer wave is elevated before eating a meal, so that the sympathetic nerve is dominant.

Conclusion:
The visualization of bowel potential rhythms leads to the elucidation of individual recovery patterns. Visualization of peristalsis and the awareness of bowel movements may provide a predictive basis for Continence care and change the intervention for abnormal bowel movements. COI: No conflicts of interest to disclose, this research was supported by JSPS KAKENHI, Grant No. 22H03278.

Abstract ID: ASSR-O-05
Presenting Author: Pipit Lestari
Co-Authors: Widasari Sri Gitarja
Organisation: Wocare Centre Bogor

Title:

Utilizing Social Media for Enhancing the Quality of Life of Ostomates: A Case Study of "Bisik Ostomate" YouTube Podcast in Indonesia

Background and Aims:

People with stoma or ostomate experience long-term changes in their life. Complication might occur within the lifespan of ostomate. Therefore, support from professionals and peer are significant to help ostomate achieving good quality of life. Social media has become a prominent platform of information exchange and awareness raising, which might benefit ostomate, particularly in country like Indonesia which has limited number of stoma nurse. Analyze the opportunities of social media, specifically YouTube podcast to support ostomate living with stoma in Indonesia.

Methods:

Evaluation of" Bisik Ostomate" Podcast on YouTube, a quality improvement podcast, featured sharing experience regarding living with stoma (self-care, stoma management, life adaptation after stoma construction) by ostomates; and education by health professional. This podcast was part of quality-of-life improvement program aimed to rise awareness and educate people related to stoma. A content analysis of user engagement through comment posted on Bisik Ostomate video was carried out. Only comment from ostomate or ostomate carer were analyzed.

Results:

25 videos were analyzed. There were four major theme found, namely YouTube podcast 1) Provide insightful information relevant to ostomates' lives, 2) Provide encouragement and support, 3) Promote connections with ostomy support groups, and 4) Rise concerns related to stoma management.

Conclusion:

This study highlight the potential of collaborative efforts between ostomate communities and healthcare professionals in creating valuable social media content that can improve the quality of life for individuals living with stoma. Therefore, more health professional-stoma group collaborative education through social media platform can be encouraged for additional support of ostomate.

Abstract ID: ASSR-O-06
Presenting Author: Kana Fajar
Co-Authors: Muhammad Fadli ; Khairul Bahri ; Hardeza Anggara ; Tommi Abbas
Organisation: Wocare Indonesia

Title:

The Npwt and Parcel Dressing Application On Abdominal Wound With Fistula

Background and Aims:

Managing Enterocutaneous Fistula (ECF) in Open Abdomen (OA) therapy is a complex challenge associated with a high mortality rate. Fluid containment strategy for fistula is a crucial component in the non-surgical management of fistula. Handling patients with enterocutaneous fistula involves combining modified ostomy pouching (parcel dressing) and Negative Pressure Wound Therapy (NPWT), focusing on maintaining fluid and electrolyte balance, intestinal rest, nutritional support, medical treatment, protecting the surrounding skin, and containing fistula output. This case study illustrates efforts to contain fistula output, provide comfort, facilitate wound healing, and protect the peri wound skin.

Methods:

This study presents the case of Mr. N, a 46-year-old patient with enterocutaneous fistula and an open abdomen managed in a homecare setting. The utilization of modified plastic bag, hydrocolloid, and double tape we called as parcel dressing combined with negative pressure, was implemented 3 day changes dressing until for the patient's healing. The patient had a history of enterocutaneous fistula with an output of >200 cc/24 hours, purulent discharge with active fecal production, strong odor, and 70% slough.

Results:

The results demonstrate an improvement in granulation processes, odor reduction, decreased discharge, reduced infection, and a care duration of 2.5-3 months until wound closure.

Conclusion:

The management of NPWT and parcel dressing for enterocutaneous fistula effectively enhances granulation, reduces exudate, decreases bacterial presence, accelerates wound healing, and adeptly contains fistula output. This approach provides comfort, facilitates wound healing, and safeguards the surrounding skin.