COLORECTAL SURGERY
(7TH MALAYSIAN COLORECTAL CONFERENCE)

6TH & 7TH MARCH 2009

SHANGRI-LA HOTEL
KUALA LUMPUR

SOUVENIR PROGRAMME & PROGRAMME BOOK

Malaysian Society of Colorectal Surgeons
Fast track surgery has certainly gained the imagination of international colorectal surgeons and not the least medical administrators with their potential financial gains in decreased length of stay with minimal or no increase in hospital costs usually associated with the advent of newer more expensive technologies such as laparoscopic surgery or colonic stenting. Our own prospective trials in laparoscopic rectal surgery since the early 1990’s demonstrated a length of stay of 10 days for open versus 5 days for laparoscopic, however, in a prospective RCT when clinical pathways were introduced the length of stay dropped to 2 days for the laparoscopic group compared with 5 days for the open group. Thus both laparoscopic and open groups dropped their length of stays by 50% when a fast track type clinical pathway was introduced. Disappointingly, when the trial completed the length of stay have started to drop away to 3 – 4 days without a clinical pathway in situ. Geographical differences in practice also see improvements in widely different ranges of length of stay with similar temporal trials in Australasia (Zargar-Shoshtari et al DCR 2008) demonstrating a 2 day benefit with Fast Track from 6.5 to 4 days and in Asia (Tan et al, Asian J Surg 2005) from 12. to 10.4 days.

The confusion now relates as to whether Fast Track is really a predefined “new treatment” or the gradual evolution of colorectal surgery particularly since the advent of minimally invasive technology. There are 17 published aspects to Fast Track surgery with most studies using a variety of combination in strategies with a range of 4 – 12 in most controlled trials and a mean of 9 variables. This relative confusion has also lead to changes of names in strategies from Fast Track to Enhanced Recovery, Multimodal Rehabilitation and Clinical Colorectal Care Pathways.

Many aspects such as no bowel preparation, same day admissions, epidural pain control, no drains, no nasogastric tubes and early feeding all predate the Fast Track movement. Perhaps the most exciting development in the Fast Track movement is the research into the fluid requirements (Restrictive vs Liberal) and the carbohydrate loading and insulin resistance data.

Whatever the definition of Fast Track there is little doubt that the majority of colorectal patients can tolerate early resumption of fluid and solid diet and do better the earlier they are mobilized and without the need for bowel preparation. This phenomena requires close collaboration between surgeons and anesthetists but more importantly an informed and motivated patient and their postoperative nurse driven care to reach the targets of Fast Track protocols. Length of stay primary outcomes needs to be balanced with readmission rates. 2nd day discharges have more than 20% readmissions however a more realistic 3 – 4 day goal after colorectal surgery this rate drops to 10% (Anderson et al BJS 2007). If morbidity rates do drop as suggested by a pooled analysis by Wind et al (BJS 2006) then Fast Track will become mandatory practice irrespective of length of stay and readmission rates. Some caution needs to be placed in the restrictive fluid aspect of Fast Track with some data suggesting an increase in morbidity may be associated with restriction (Kehlet at al BR J Anaesth 2008).

IMPORTANCE OF STOMA SITING

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Stoma site selection should be priority during preoperative visit. Marking the site allows the abdomen to be assessed in a lying, sitting and standing position. Such assessment allows the determination of the optimal site. This planning can help reduce postoperative problems such as leakage, fitting challenges, need for expensive custom pouches, skin irritation, pain and clothing concerns. Poor placement can cause undue hardship and impact psychological and emotional health. Good placement enhances the likelihood of patient independence in stoma care and resumption of normal activities.
MANAGEMENT OF STOMAL / PERISTOMAL WOUNDS OR COMPLICATIONS

Frances Shit Kam-Yee
Nurse Specialist – Stoma Therapy, Department of Surgery, Prince of Wales Hospital, Shatin, Hong Kong

The presence of stomal/peristomal wounds or complications can be a very frustrating and disheartening experience to the patient and family because it represents a major catastrophe. For the nurse, too, it may be a difficult experience. Caring for patient with stomal complications requires astute assessment skills, competent technical skills, and knowledge of equipment alternatives and preventive measures. In this lecture, information of different types of stomal / peristomal wounds and complications will be discussed; and techniques in managing difficult scenarios will be explained.
Patients undergoing stoma formation will face major surgery, loss of bodily function, a distortion of body image and changes in personal hygiene. Such patients will have to make major psychological adaptation and physical changes following stoma surgery.

Patient’s concerns creation on an ostomy surgery includes: ability to lead a ‘normal’ live, have a satisfying sexual relationship, participate socially, employment, relationship with family members, odour, paying for the appliance. Some ostomy patients may experience psychological disorders such as disturbance in body image, low self esteem, denial, phantom rectum, psychosocial problems and psychosexual problem. Therefore the emotional and psychological aspect of care were integrated in the nursing standard care plan in the pre-operative teaching and counselling and post-operative follow up. Pre operatively, enterostomal therapy nurse (ET) nurse participate in teaching, counselling and stoma site selection. The main objective of pre operative teaching is to ensure patient and family members understand the rational of the surgery, the planned procedure, and the creation of an ostomy. The second objective of counselling is to facilitate in adapting life with a stoma, studies reported patients’ benefit from pre-op explanation & counseling can accept stoma & well rehabilitated. Post-operative ET nurse continue in emotional support, instruction in stoma management, helping in selection of appliances, application and changing of pouch, advice in dietary and fluid adjustment and planning discharge to ensure that patient and family members able to cope as well as master the skill. Research indicate that, patients satisfaction with healthcare received, development of therapeutic relationship with ET nurse and mastering of self care in changing the appliances are the key components in adjusting to living with a stoma and improve quality of life post operatively. Therefore teaching, counseling and compassionate and good support is crucial in psychological adjustment and rehabilitation for ostomy patients.
The mainstay of treatment for patients who have rectal cancer has been curative surgical resection, with emphasis on complete tumor removal to minimize the risk of relapse and maintenance of quality of life. Recent advances in preoperative evaluation, neoadjuvant chemoradiotherapy (CRT) and operative technique enabled multimodality treatment in rectal cancer patients.

The role of CRT in locally advanced rectal cancer has been established, i.e. reduced local recurrence and prolonged survival. Recently, the newer cytotoxic agent, such as oxaliplatin and irinotecan which are now essential for the treatment of metastatic disease, were introduced to the preoperative CRT. In addition, targeted agents including bevacizumab and cetuximab were also studied.

Total mesorectal excision (TME) and preoperative radiotherapy or CRT is a standard treatment for advanced (T3 or more and/or N1 or more) rectal cancer. For the local control, extended lateral pelvic lymph node dissection (LLND) has been debated about additional benefit. However, according to the recent report, the routine LLND is not warranted in patients who have no clinical evidence of suspicious lateral lymph nodes.

During the past 15 years, there has been increasing enthusiasm for the use of laparoscopic technique in the operative treatment of patients with colorectal disease. The benefit of laparoscopic-assisted colectomy for colon cancer is well established, with supporting evidence from several prospective clinical trials. However, the equivalent applicability of laparoscopic techniques for the treatment of rectal cancer remains unclear. According to the recent Cochrane collaboration, laparoscopic surgery for cancer of the upper rectum is feasible, but more randomized trials need to be conducted to assess long term outcomes.

Currently, robotic colorectal surgery has gradually been performed more with the help of the technological advantages of the Da Vinci system. In the era robotic TME, by using the magnified optics and precise instrumentation, enhanced tissue retraction and dissection can be performed to achieve a successful mobilization of the rectum. However, it was required for the randomized controlled study to prove the superiority of robotic surgery with long term results.

Multimodality treatment for rectal cancer is not static. Treatment continues to change and improve. For the optimal management and outcomes in rectal cancer, more systematic randomized controlled studies on multimodality treatment should be required.
SURGICAL MANAGEMENT OF IATROGENIC SPHINCTER INJURIES
Parvez Sheikh
India

INTRODUCTION
Iatrogenic injury of the anal sphincter is not so common, however when it does occur it can be a major catastrophe for the patient as well as the concerned surgeon.

SURGICAL ASPECTS
Iatrogenic injuries can be divided into 2 groups- surgical & obstetrics.

Surgical – High fistula in ano, haemorrhoidectomy, sphincterotomy for anal fissure, total proctocolectomy & very low anterior resections can cause anal sphincter injury

Obstetrics – Obstetric trauma constitutes the large bulk of injuries seen by gynaecologists

ASSESSMENT OF SPHINCTER INJURY
Clinical examination of the sphincter can never replace any investigation.

Endoanal USG – This is the single most useful investigation in determining the integrity of the sphincters. 3-D USG gives even better results

MRI – Endoanal MRI is a better tool than MRI to assess the anal sphincters & may be a useful alternative to endoanal USG

Manometry – It is more useful when combined with an endoanal USG or an endoanal MRI

TREATMENT
Non-surgical treatment with bulking agents, anti-diarrheals & sphincter exercises & stimulation can be tried with patients who have a minor degree of incontinence.

Primary Surgery – If the sphincter division is diagnosed intra-operatively, then the best results are obtained by primary suturing. If not done primary, then delayed primary or an early secondary reconstruction of the sphincter should be done

Secondary Local Reconstruction – Most can be repaired by local repair of the sphincters. The operative treatment essentially consists of exposing the sphincter stumps, mobilizing them adequately & approximating them together preferably by double breasting it.

Muscle Transposition – Graciloplasty / Gluteus muscle repair is done for more diffuse sphincter injury. These muscles need to be trained by stimulation.

Artificial Sphincter – A perfect artificial sphincter is still elusive. Many versions of the sphincter have been introduced, but none have provided satisfactory results.

Sacral Nerve Stimulation – This can prove to be very useful in minor degrees of incontinence where the division of the sphincter has been partial or after an attempted sphincter repair.
ACCREDITATION OF STOMAL THERAPY NURSE CLINIC BY HONG KONG HOSPITAL AUTHORITY (HA)

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The development of HA nurse clinics have demonstrated nurses’ commitment the in provision of quality client care. To ensure professional accountability, to enhance service quality, and to formally recognize the contribution of nurse clinics, accreditation mechanism of HA nurse clinics has been developed by Hong Kong Nursing Services Development Subcommittee and endorsed by COC(N). The Stomal Therapy Nurse Clinic in Prince of Wales Hospital, HK has successfully passed all the eligibility and performance criteria of the accreditation in 2008. In this lecture, the comprehensive management guideline, referral system, system of documentation and outcome measurement of our Stomal Therapy Clinic will be discussed.
PELVIC EXENTERATION: HOW I DO IT

Michael J Solomon

Department of Colorectal Surgery & Surgical Outcome Research Centre (SOuRCe), University of Sydney, Australia

A clear resection margin (R0 stage) is predictive of survival for patients with local recurrence. Achieving an R0 stage is technically more difficult due to the proximity of the recurrence to the boney pelvis. This paper describes in detail the methods for detailed pre-operative assessment of the resectability of recurrent using MRI scans and the meticulous planning and multi-disciplined surgical approach to exenteration surgery.

Better imaging techniques available today, a multidisciplinary surgical approach and improved surgical technique have changed the definition of resectability. Patients previously considered unresectable due to ischium or ileum bone involvement are now considered resectable by functional preserving composite resection of the pelvis, that is, resection of an anatomical boney component of the pelvis. Magnetic resonance imaging (MRI) of the pelvis allows accurate and individual assessment of the tumour and planning of the surgical approach particularly with assessment of the lateral pelvic side wall and bone involvement. Examples of MRI scanning and the planning of individual cases will be discussed in detail.

A lateral dissection technique will be described anatomically and operatively. The technique that enables one to get lateral from the level of the internal iliac vessels and into a fresh tissue plane will be described pictorially and in detail. This allows exposure and resection of involved ischium and ileum, piriformis and obturator muscles, from the femoral nerve to obturator nerves to the lumbosacral trunk and sacral trunks down the origin of the sciatic nerve at the greater sciatic notch. At this level exposure and resection can include, via access from the pelvis alone in supine or combined with a prone completion, the ischial spine, sacrospinous and sacrotuberous ligaments and the sacral vertebra up to and occasionally partially involving S1.

This multidisciplinary approach and careful and thorough preoperative radiological assessment as well as the complexity of this procedure can involve any combination of procedures. Extensive preoperative assessment and operative planning can be predictive of the number of specialties and type of resection that may be required and hopefully determine the probability of a clear resection margin (R0 is the holy grail of exenteration surgery).

- Austin K, Solomon MJ. Young J. Quality of life after pelvic exenteration for recurrent and locally advanced rectal cancer. Dis Colon Rectum (submitted)
Natural orifice transluminal endoscopic surgery (NOTES) refers to the method of accessing the abdominal cavity through a natural orifice under endoscopic visualization. Furthermore, it is the newest technique emerging in the field of surgery. Work on animal models has been progressing for many years, and has now culminated in the successful endoscopic surgery in human subjects. Most NOTES researchers have favored transgastric and transvaginal approaches to abdominal access.

In our institute, we first performed NOTES (transcolonic cholecystectomy) in pigs during the latter part of 2007 with the Korean NOTES Study Group. Since then, we have had experience in 20 porcine models and 2 human cases. During the experimental periods, we performed cholecystectomy or oophorectomy with several approaches such as transgastric, transvaginal and transcolonic routes. To overcome the limits of NOTES, we devised simple magnetic coupled traction (SMCT) for transvaginal endoscopic cholecystectomies. SMCT was composed of internal magnets and external handheld magnets. Internal magnets were fixed to endoscopic clips on the gall bladder (GB) and external handheld magnets supplied the traction GB to an abdominal wall. It provided a good operation field through offering excellent fundus retraction.

As development of technique, transgastric sigmoidectomy was performed with colon mobilization under sigmoidoscopy assistance. Recently, we performed the transvaginal approach for endoscopic appendectomy in humans before transvaginal hysterectomy.

There were some reports for development of NOTES in animal models and human. However, as a newest surgical technique, NOTES are still in early stages of development and more robust technologies will be needed to achieve reliable closure and overcome technical challenges. Furthermore, well-managed human studies need to be conducted to determine the safety and efficacy of NOTES in a clinical setting.
Perianal Crohn’s disease is often an enormously debilitating disease for the young patients who tend to get Crohn’s disease, often dramatically affecting their quality of life. The investigation and management of these patient gives great insight also in the management of those complex cryptoglandular fistulae that involve the upper half of the anal canal. These suprasphincteric and extrasphincteric fistula usually only comprise less than 10 % of cryptoglandular fistulae but up to 50% of Crohn’s fistulae.

Investigation prior to the operating theatre (EUA is inevitably required) in 2009 is usually by MRI or Endorectal and anal ultrasound depending on local experiences of the colorectal surgeons and radiologists. These investigation aim to define undrained sepsis, categorise complex fistulae by way of defining their relationship to the sphincter mechanism and the origin of the internal openings. Our published experience with TRUS has confirmed, as it is in complex non-Crohn’s fistulae, that the Crohn’s fistulae still arise from the glands and not the transmural sinus throughout the anal canal. Anal wall thickness (AWT) can be accurately measured in Crohn’s and reflects not only the activity of the primary transmural Crohn’s disease but is sensitive to change (discriminate validity) and reflects treatment response to medical managements such as Flagyl (+/- Ciprofloxacin), Imuran and Infliximab. Management of perianal Crohn’s requires close collaboration between the gastroenterologist and the colorectal surgeon and much debate currently is the role of log term Setons after infliximab treatment. While external opening will close with infliximab TRUS and MRI confirm the persistence if the tracks beneath the skin.

Surgery requires long term drainage on sepsis. Small soft mushroom catheters are best for suprlevator sepsis when the cavities are large. These patients often describe cyclical sepsis associated with sacrococcygeal pain relieved by an increase in fistula discharge. While superficial fistulae can be laid open this is much less likely and long term ethibond Setons drains (vessel loops) are the mainstay of controlling sepsis and improving quality of life. External openings need to be surgically brought close to the anal canal for easier control and ofet requires staged operations with long term control in mind. This approach is also relevant for complex and recurrent suprasphincteric non-Crohn’s fistulae as a staged approach prior to flap repairs. Anocutaneous flap repairs are often used in combination with mucosal advancement flaps in this small subset who have usually had between 5 – 10 operations (including fibrin plugs) prior to attempted flaps repairs. Flap repairs in complex Crohn’s are rarely attempted unless a persistent rectovaginal fistula cannot be diverted by laterally placed Setons and the primary Crohn’s is relatively quiescent. A multidisciplinary approach improves quality of life and rarely requires the need for proctectomy and permanent stomas in Crohn’s disease.

Radiotherapy is frequently used in the treatment of abdominal and pelvic malignancies. Unfortunately, 2 to 5% of patients receiving radiotherapy for these conditions develop chronic radiation enteritis. Common symptoms include colicky abdominal pain, chronic diarrhea and malnutrition. Patients with radiation enteritis are generally managed conservatively; however, results have been dismal. Radiation enteritis may result in serious complications such as intestinal obstruction, fistulas, bowel perforation, and massive bleeding. Surgical management of the condition remains a challenge because radiation induces dense fibrosis, friability of bowel, fistulas, severe bleeding and impedes healing. In recent years, there has been better understanding of the pathogenesis of radiation injury to small intestine and new advances radiation delivery techniques. This has helped us to focus on strategies to reduce amount of exposed intestine to field of radiation.
Despite its first description in 1948, pelvic exenteration for locally advanced primary or recurrent rectal cancer still remains a surgical challenge associated with a high mortality and significant morbidity. As a result, the role of pelvic exenteration still remains somewhat contentious even though promising evidence shows a marked improvement in survival amongst those who undergo such radical surgery. Our experience over the past decade with this procedure has demonstrated a 36% – 46% 5 year survival rate for those who undergo pelvic exenteration for recurrent rectal cancer. (1) While the evidence shows a marked improvement in survival compared to those treated non-operatively, its role remains debatable for lateral pelvic side wall recurrence (LR). (1)

We have previously demonstrated that the ability to achieve a clear resection margin (R0 stage) is predictive of survival. However, for patients with local recurrence achieving an R0 stage is technically more difficult due to the proximity of the recurrence to the boney pelvis. For this reason, some believe that extensive radical resection for LR may not translate into a worthwhile survival gain, and, that the subsequent quality of life during this period will be extremely poor. However, our data combined with other encouraging survival data has prompted the development and adoption of a more radical lateral approach to lateral pelvic involvement. This paper describes the technique developed to particularly address extensive lateral pelvic side wall involvement by locally advanced or recurrent pelvic cancer, in order to achieve a clear resection margin, which should translate into improve survival in these patients. The effect on quality of life of pelvic exenterations will be discussed.

Better imaging techniques available today, a multidisciplinary surgical approach and improved surgical technique have changed the definition of resectability. Patients previously considered unresectable due to ischium or ileum bone involvement are now considered resectable by functional preserving composite resection of the pelvis, that is, resection of an anatomical boney component of the pelvis. Computed Tomography combined with Positron Emission Tomography (CT-PET scan) has arguably allowed better assessment of metastatic disease from what appears to be local recurrence alone. Magnetic resonance imaging (MRI) of the pelvis allows accurate and individual assessment of the tumour and planning of the surgical approach particularly with assessment of the lateral pelvic side wall and bone involvement.

Importantly this lateral dissection technique described, achieved clear margins (R0 stage) in 53% of patients who would otherwise have been considered “unresectable”. Moreover, 71 % of these patients remained disease free at the site of surgical resection with an average disease free interval of 30 months. Despite the complexity and magnitude of this technique, in our experience it is feasible and safe as indicated by a 0% perioperative mortality rate in this patient cohort. Careful preoperative planning with extensive radiological assessment and a multidisciplinary approach is paramount prior to proceeding to surgery if one wishes to achieve a clear (R0) resection. The benefit of this technique is that it enables one to get lateral from the level of the internal iliac vessels and into a fresh tissue plane. This allows exposure and resection of involved ischium and ileum, prirformis and obturator muscles, and the lumbosacral trunk and sciatic nerves in order to achieve that clear margin.

In conclusion we can not stress enough the importance of a multidisciplinary approach and careful and thorough preoperative radiological assessment if an R0 margin of resection is to be achieved. The complexity of this procedure can involve any combination of procedures as demonstrated in this series of patients. Extensive preoperative assessment and operative planning can be predictive of the number of specialties and type of resection that may be required. Quality of life is comparable to quality of life after primary rectal cancer resections.

- Austin K, Solomon MJ. Young J. Quality of life after pelvic exenteration for recurrent and locally advanced rectal cancer. Dis Colon Rectum (submitted)
HAND ASSISTED LAPAROSCOPIC SURGERY

Chun Ho-Kyung

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Over the past decade, the application of minimally invasive techniques has increased for performing colorectal cancer (CRC) operations. A previous randomized controlled trial showed the benefits of laparoscopic colectomy. However, performing laparoscopic operations for rectal cancer is only slowly becoming popular because of the procedure's technical complexity, prolonged operative times and extensive experience requirement.

Hand assisted laparoscopic surgery (HALS) has been introduced as an alternative to the conventional laparoscopic surgery (CLS) in the mid-1990s with the intent to solve these problems. However, there are currently no known data concerning the prognosis when comparing HALS with CLS for treating CRC.

From Oct. 1995 to Nov. 2008, total of 8,276 CRC operation were performed at the Samsung Medical Center, Seoul, Korea. HALS was performed in 433 patients among 1,223 patients undergone laparoscopic CRC surgery. The HALS procedures included 36 right hemicolectomies, 10 transverse colectomies, 8 left hemicolecotomies, 261 anterior resections, 75 low anterior resections, one subtotal colectomy with ileorectal anastomosis and one abdominoperineal resection.

During the study period, 246 patients underwent curative laparoscopic anterior resection for colon cancer (118 in the HAL-AR group and 128 in the CL-AR group). There were no differences between the HAL-AR and CL-AR groups, except for the operation time and the size of the primary tumor. The operation time of the HAL-AR group was significantly shorter than that of the CL-AR group (147.6±41.4min vs. 161.3±33.0 min, respectively, p= 0.004). The size of the primary tumor of the HAL-AR group was significantly larger than that of the CL-AR group (3.5cm vs. 2.9cm, respectively, p=0.019). The short term outcomes for both groups were similar in terms of survival and recurrence (p=0.996 and p=0.476, respectively). Therefore, HAL-AR is comparable technique to CL-AR when performing anterior resection for treating colon cancer.

HALS has some limitations to progress. There was little information about generalized technique and device performing HALS operation. A few devices were introduced and a few surgeons had performed HALS. Furthermore, it was required that establishment of generalized technique and delicate HALS devices for conducting a future randomized study on HALS and CLS for treating colon cancer patients.
PALLIATIVE ASPECTS OF COLORECTAL CANCER

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Colorectal cancer is among the commonest cancers in Malaysia as well as a leading cause of cancer deaths in the country. Although recent developments in cancer therapy has improved the survival in colorectal cancer patients there is still significant mortality and suffering related to advanced disease. Palliative care is an approach that improves the quality of life for patients and their families who are facing the problems associated with life-threatening illness and is applicable even in the earlier stages of disease where active disease modifying therapies may still be in use. Many patients with advanced colorectal cancer suffer from issues of pain and bowel dysfunction as well as cancer related fatigue and psychosocial issues related to the cancer. It is therefore important that clinicians are able to manage the whole patient and alleviate suffering whilst striving to provide a longer survival for patients so that regardless of the duration of survival, quality of life is always a key priority. Some important aspects of palliative care in colorectal cancer include relieving pain, nausea, vomiting and bowel obstruction through non-surgical means as well as seeing patients through their last days at the end of life.
COLORECTAL TRAINING IN MALAYSIA

Wan Khamizar
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Colorectal service initially started in Malaysia in early 1990s. The first colorectal surgeon went for training in Scotland from National University of Malaysia then and came back to the university to offer his services there. Then another surgeon who was trained in Singapore joined the university. Together both surgeons introduced the subspecialty to Malaysia and inspired the younger trainees to take it up later. I was one of those privileged trainees.

Later more and more surgeons came back to Malaysia gradually increasing the number. All of them were either trained in UK or Singapore. At that time, there were no structured training locally and many aspiring trainees went straight overseas for adequate exposure.

In the year 2003, the Ministry of Health (MOH) Malaysia introduced the Fellowship Programme for aspiring trainees in all disciplines. In this programme, trainees are required to register themselves first with the MOH and then undergo training with local specialists for 2 years. On the third year, based on merit & recommendation, these trainees are then sent overseas for one year. After 3 years subject to local assessment, the trainees are then recognized accordingly.

The Colorectal Training Committee of the MOH was formed in 2005. It has members not only from the MOH but also from all the universities and from the Malaysian Society of Colorectal Surgeons. It is one of the training committee that functions transparently with full support from all the Colorectal Surgeons in Malaysia. The committee follows the MOH Fellowship programme closely. It is one of the most popular programmes and to date has more than 20 trainees following the programme.
Local excision techniques are well-described alternative methods associated with less postoperative morbidity and mortality in early rectal carcinoma and large adenoma.

In the previous report, per anal excision of carcinoma is suitable for a lesion with its upper margin within 7 cm from the anal verge. For the precise local excision, transanal endoscopic microsurgery (TEM) is first reported by Buess et al. in 1983. It uses a resectoscope to give a stereoscopic view of the rectum and distal sigmoid colon. TEM has emerged because it offers several advantages over the traditional transanal excision by providing improved visualization and exposure, permitting more precise resection of tumors located 2 to 22 cm from the anal verge. However, TEM is technically difficult and complex, the equipment is expensive and the operating time may be prolonged. To much more simplify the procedure, a few modified TEM methods were introduced, such as gasless transanal endoscopic surgery (GTES) and video endoscopic transanal rectal tumor excision (VTEM). These methods used standard laparoscopic instrument and video camera without use of a completely closed system.

In our hospital, most of local excision was performed with direct visual field TEM (DVTEM). It was accomplished under direct visual field with rectoscope without gas insufflation.

Between 1994 and 2007, 544 patients underwent DVTEM for rectal tumor. Histological examination revealed 380 carcinomas, 80 adenomas, 57 carcinoid tumors, 8 GISTs, 17 inflammations, one melanoma and one anal cancer. During the periods, DVTEM was performed in 351 patients who had primary rectal cancer. The median height above the anal verge and maximum tumor diameter was 6.1 cm (range 1~17 cm) and 2.1 cm (range 0.5~10.0 cm) respectively. Histological examination revealed 167 cases of Tis (47.4%), 140 cases of T1 (39.8%), 38 cases of T2 (10.8%) and 7 cases of T3 (2.0%). The postoperative complication was occurred in 7 patients (2.0%) such as bleeding (2 patients), urinary discomfort (2 patients), rectovaginal fistula (1 patient) and incomplete healing (1 patient) and perforation of repair site (1 patient). There was no postoperative mortality. Recurrence occurred in 14 patients who had pT1 with risk factor or pT2 or pT3 rectal cancer. There was no recurrence in patients who had pTis and pT1 without risk factors in early rectal cancer. Mean follow up duration was 17.1 months.

Because of technical complexity in TEM, a few surgeons introduced modified TEM in purpose to simplify. Although DVTEM was not familiar, it may be considered a safe and effective minimally invasive treatment for patients with large adenomas and early carcinomas of the rectum.
POSTER PRESENTATIONS

PO 1  Review of Surgical Treatment in Familial Adenomatose Polyposis Coli in Hospital Tuanku Ja’afar, Seremban, Negeri Sembilan, Malaysia
Azali Hafiz Yafee B Amar, Jasiah Bt Zakaria, Paul Selvindoss
Colorectal Unit, Surgical Department, Hospital Tuanku Ja’afar, Seremban, Negeri Sembilan, Darul Khusus, Malaysia

PO 2  Synchronous Rectal Carcinoma And Pancreatic Endocrine Tumour - Difficulties In Decision-Making
S Samsudin, April Camilla Roslani
Department of Surgery, University Malaya Medical Centre, Kuala Lumpur, Malaysia

PO 3  Isolation And Establishment Of Primary Cell Lines From Malaysian Colorectal Cancer Patients
Melanie Arul1, Cheah Swee Hung1, Colin Ng Leong Liong2, April Camilla Roslani2
1Faculty of Medicine, University of Malaya, Kuala Lumpur, Malaysia
2Pantai Medical Centre, Kuala Lumpur, Malaysia

PO 4  Case Report: Concurrent Amoebic And Histoplasma Colitis: A Rare Cause Of Massive Lower Gastrointestinal Bleeding
Koh P S1, April Camilla Roslani1, Vimal K V2, Shariman M S2, Umasangar R2, Lewellyn R2
1Department of Surgery, University of Malaya, Kuala Lumpur, Malaysia
2Department of Surgery, Hospital Taiping, Taiping, Perak, Malaysia
3Department of Pathology, Hospital Raja Permaisuri Bainun, Ipoh, Perak, Malaysia

PO 5  2-Dimensional Gel Electrophoresis Analysis Of Colorectal Cancer Serum
Munirah Mihat1, April Camilla Roslani2, Rosmawati Mohamed1, Rohana Yusof3, Colin Ng Leong Liong2, Sanjiv Mahadeva1, Saiful Anuar Karsani4
1Department of Medicine, 2Department of Surgery, 3Department of Biomolecules, Faculty of Medicine, 4Institute of Biological Sciences, Faculty of Science, University of Malaya, Kuala Lumpur, Malaysia

PO 6  Outcomes In Young Colorectal Cancer Patients: The UMMC Experience
Nor Hasmiza Abdul Latif, April Camilla Roslani, Law Chee Wei, Colin Ng Leong Liong
Department of Surgery, University Malaya Medical Centre, Kuala Lumpur, Malaysia

PO 7  Traumatic Perforated Appendix: A Case Report
T M Yeoh, April Camilla Roslani
Department of Surgery, University Malaya Medical Centre, Kuala Lumpur, Malaysia

PO 8  A Case Report Of Muir-Torre Syndrome
Sivakumar K, Selvan N, Ashok K, Yan Y W
Department of General Surgery, Hospital Raja Permaisuri Bainun, Ipoh, Perak, Malaysia

PO 9  A Case Report Of Fulminant Amoebic Colitis
Sivakumar K, Chan C P, Benedict D, Yan Y W
Department of General Surgery, Hospital Raja Permaisuri Bainun, Ipoh, Perak, Malaysia
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<td>Suraya B¹, I Sagap¹, Yan Y W², Azmi M N²</td>
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<td>¹Surgical Department, Hospital Universiti Kebangsaan Malaysia, Kuala Lumpur, Malaysia</td>
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<td>²Surgical Department, Hospital Tengku Ampuan Afzan (HTAA) / International Islamic University Malaysia (IIUM), Kuantan, Pahang, Malaysia</td>
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<td>I Sagap, A Mukhtar, H Imtiaz</td>
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<td>Colorectal Unit, Department of Surgery, UKM Medical Center, Kuala Lumpur, Malaysia</td>
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<td>¹Department of Surgery, Hospital Sultanah Bahiyah, Alor Star, Kedah, Malaysia</td>
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OBJECTIVE
The aim is to study the demographics data, type of surgery, complications and management of the complications that occurred in FAP patients.

METHODS
Total of 6 patients were identified of FAP who undergone surgical procedure in Hospital Tuanku Ja’afar Seremban from January 2007 to December 2008. Case records were analysed retrospectively.

RESULTS
Out of 6 patients, 3 were male and 3 were female age between 26 – 40 years old. 3 of them have family history of FAP and 2 patients have history of 1st degree relative died due to colorectal carcinoma at young age, except 1 patient did not family history. From biopsy result, 4 patients have tubular adenoma, 2 have tubular villous adenoma and 3 patients have mild dysplasia, 1 patient has mild to moderate dysplasia, 1 has moderate dysplasia and 1 has severe dysplasia. 2 patients underwent panproctocolectomy laparoscopically, 3 patients laparoscopic converted to open surgery and 1 has open surgery. 5 of them have ileo-anal anastomosis with J pouch and covering ileotomy, only one did not. Post-operatively, 3 patients having high output ileostomy and 1 suffered severe electrolytes abnormalities. 1 patient underwent relaparotomy for suspected of ischemic bowel. 1 patient has anastomotic leaked at the pouch. 3 patients underwent closure of ileostomy. Post closure of ileostomy, all treated as pouchitis. 2 have erectile dysfunction. 1 is waiting for ileo-anal anastomosis and J pouch and 1 is plan for reversal of ileostomy.

CONCLUSIONS
Primary aim of surgery in FAP is to prevent death from colorectal cancer. Although this syndrome is rare, it remains a unique challenge, not only to the patients and caregivers, but also to the surgeons. It require specialised knowledge and experience regarding the issues of screening, diagnosis and timing of surgery, follow up and complications that occurs.
SYNCHRONOUS RECTAL CARCINOMA AND PANCREATIC ENDOCRINE TUMOUR – DIFFICULTIES IN DECISION-MAKING

S Samsudin, April Camilla Roslani

Department of Surgery, University Malaya Medical Centre, Kuala Lumpur, Malaysia

BACKGROUND
Sporadic synchronous bowel adenocarcinoma and endocrine tumour is rare and has not been reported in the literature to our knowledge. Even in the most common colorectal susceptibility syndromes, Hereditary Non-Polyposis Colorectal Carcinoma (HNPCC) and Familial Adenomatous Polyposis (FAP), in which there is an increased risk of other tumours, pancreatic lesions are adenocarcinomas, whereas in MEN1, the multiple tumours involving pancreas and gut are endocrine in nature. We report a case of synchronous adenocarcinoma of the rectum and pancreatic endocrine tumour, highlighting the difficulties in decision-making.

CASE REPORT
A 52-year old lady was admitted to our institution with a history of altered bowel habit for six months associated with abdominal pain, rectal bleeding and loss of weight. There was no history of cancer in the family. Abdominal examination and rectal examination were not remarkable. However, colonoscopy revealed a tumour at 10 cm from the anal verge. Biopsy of the tumour came back as moderately differentiated adenocarcinoma. Staging CT scan showed irregular rectal thickening, with a 4.5cm mass arising from the tail of the pancreas. She underwent low anterior resection and covering ileostomy, distal pancreatectomy and splenectomy electively. Definitive histopathology examination confirmed Modified Duke’s C1 (pT3N1) rectal adenocarcinoma with clear margins, and a well differentiated glucagonoma in the pancreas with suspicion of capsular and lymphovascular invasion. She underwent a PET-CT subsequently to investigate a lung nodule which turned out to be benign. However, metastasis to the liver, was noted. At present, she is well and is to undergo the FOLFOX regime for systemic treatment, due to start at the end of January.

CONCLUSION
Synchronous tumours of differing origin pose a difficult clinical problem when adjuvant or palliative chemotherapy is required. Multi-modality assessments are required to aid decision-making.

REFERENCE
- Watson P, Lynch HT; Extracolonic cancer in Hereditary non Polyposis Colorectal Cancer 1993: 71:677-685
ISOLATION AND ESTABLISHMENT OF PRIMARY CELL LINES FROM MALAYSIAN COLORECTAL CANCER PATIENTS

Melanie Arul1, Cheah Swee Hung1, Colin Ng Leong Liong2, April Camilla Roslan1

1Faculty of Medicine, University of Malaya, Kuala Lumpur, Malaysia
2Pantai Medical Centre, Kuala Lumpur, Malaysia

OBJECTIVE
To obtain low passage cell lines from colorectal cancer of known source and disease progression and to determine the optimum conditions for in vitro growth. These cell lines with well-defined clinical and genetic history provide an excellent model system for molecular characterizations and serve as reagents for biochemical, molecular and pharmacological studies.

METHODS
Tumor samples were transported to the research lab on wet ice in transport medium. The specimens were vibrated for 10 minutes and washed 5 times with transport medium. Connective tissues were removed and specimens were incubated with transport medium for 20 minutes. The specimens were dissected into 1x1 mm pieces and cells were dispersed by sequential exposure to trypsin and collagenase. First, the tissues were immersed in a tenfold volume of 0.25% trypsin solution, kept overnight at 4°C and later incubated at 37°C for 30 minutes. Trypsin activity was stopped with addition of complete culture medium. The tissues were further immersed in collagenase solution and incubated at 37°C for 1 hour. The released cells were collected, centrifuged, re-suspended with growth medium and seeded into culture flasks. Cultures were fed twice weekly with fresh growth medium. Initial cell passage was delayed until cells were confluent. Cell lines were cryopreserved with 90% FBS and 10%DMSO to generate small cell banks at passage numbers of 1 to 4.

RESULTS
Tumor cells attached to the culture flasks on the next day after seeding. Initial primary cell culture was maintained for 4 weeks before their first passage. The cells showed several morphological forms which indicate a heterogeneous population of cells in the culture flask.

CONCLUSION
We have established the methodology to obtain cell lines from the primary tumor of colorectal cancer patients. These heterogeneous cells will be further cloned to obtain homogeneous cell lines for further studies.
CASE REPORT: CONCURRENT AMOEBIC AND HISTOPLASMA COLITIS: A RARE CAUSE OF MASSIVE LOWER GASTROINTESTINAL BLEEDING

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²Department of Surgery, Hospital Taiping, Taiping, Perak, Malaysia
³Department of Pathology, Hospital Raja Permaisuri Bainun, Ipoh, Perak, Malaysia

INTRODUCTION
Infective colitis can be a cause of massive lower gastrointestinal bleeding requiring acute surgical intervention. Causative organisms include entamoeba and histoplasma species. However, concurrent infection with both these organisms is very rare. We present a case of amoebic and histoplasma colitis causing fatal massive lower gastrointestinal bleeding.

CASE REPORT
Mr A, a 58 year old male, presented initially to the physicians with pyrexia of unknown origin and bloody diarrhoea for the past one month. Blood investigations were unremarkable except for elevated ESR and CRP levels. Cultures were negative and stool did not show evidence of ova and cysts. Colonoscopy revealed inflammation along the rectum and sigmoid with further inflammation and ulcers seen along the hepatic flexure. Amoebic colitis was diagnosed based on biopsies, and he was treated with metronidazole.

Five days later, the patient developed massive lower gastrointestinal bleeding with haemorrhagic shock. Emergency total colectomy with end-ileostomy was performed. However, he deteriorated and died on the second post-operative day. Histopathological examination revealed multiple deep ulcers at the hepatic flexure where fungal bodies in the mycelial and yeast forms were noted. Lymph nodes isolated showed abscess formation with fungal bodies. There was no evidence of malignancy or residual amoebic parasites. Infective fungal colitis with Histoplasma capsilatum was diagnosed.

CONCLUSION
Massive lower gastrointestinal bleeding warrants urgent surgical intervention. Infective colitis, especially with this unusual dual infection, as a cause of such a presentation is rare, but should be considered in the differential diagnosis.

KEY WORDS
Amoebic colitis, histoplasma colitis, gastrointestinal bleeding, colectomy.
Colorectal cancer (CRC) is one of the most common cancers in the world, ranking as the third highest cause of cancer mortality in Western populations such as the United States and Europe. It is also the third most common cancer reported in the Malaysian population, the incidence rising in individuals above the age of 50. Unfortunately, it may remain asymptomatic until it reaches an advanced stage, rendering an understanding of the pathophysiological mechanisms crucial.

It is recognized that CRC develops from a series of genetic and epigenetic events, causing changes in epithelial cells transforming them to carcinoma cells, with three pathways: mutator, suppressor and methylator pathways having been described. In these pathways, there is a transition from polyps to cancers, perhaps best characterized by the adenoma-carcinoma sequence of FAP, an example of the suppressor pathway. However, in Malaysia, despite a similar incidence of CRC, polyps are uncommon.

In an effort to understand and elucidate the mechanisms that may be involved in the progression and manifestation of the disease, we used two-dimensional gel electrophoresis to identify proteins that are differentially expressed in the serum of Malaysian patients with CRC. Using the Image Master Platinum analysis, we have identified at least 30 individual protein spots as being differentially expressed in the serum of CRC patients. Further investigation of these proteins may provide clues to a novel pathway for CRC development.
OUTCOMES IN YOUNG COLORECTAL CANCER PATIENTS: 
THE UMMC EXPERIENCE

Nor Hasmiza Abdul Latif, April Camilla Roslani, Law Chee Wei, Colin Ng Leong Liong
Department of Surgery, University Malaya Medical Centre, Kuala Lumpur, Malaysia

BACKGROUND
Colorectal cancer (CRC) is generally thought of as a disease of the elderly with the incidence increasing exponentially with age. However it is not rare for the disease to be diagnosed below the age of 40, even in those without defined hereditary cancer syndromes. In addition, published data is conflicting with regards to the prognosis of CRC in the young. The aim of this study was to identify possible risk factors and determine prognosis among young patients with CRC in UMMC.

MATERIALS AND METHODS
A database of CRC patients presenting to UMMC between 2000 and 2007 was retrospectively reviewed. Demographics, presentation, treatment and outcomes of patients below and above the age of 40 were compared. SPSS 13.0 was used for statistical analysis. A p-value of < 0.05 was considered significant.

RESULTS
A total of 613 patients were identified, of whom 565 had analyzable data. Young patients formed 5.5% of the total. There was no significant difference in demographics, stage at presentation or treatment in the two age groups. However, young CRC patients were more likely to progress to metastatic disease (p=0.012).

CONCLUSION
Younger patients are at higher risk for developing metastatic disease, regardless of stage at presentation. A more aggressive strategy in neoadjuvant and adjuvant therapies should be considered in these patients.
TRAUMATIC PERFORATED APPENDIX: A CASE REPORT

T M Yeoh, April Camilla Roslani
Department of Surgery, University Malaya Medical Centre, Kuala Lumpur, Malaysia

BACKGROUND
Blunt abdominal trauma occurs frequently in our practice. Commonly injured viscera include spleen, liver, small bowel, colon, kidneys and bladder. However, traumatic perforated appendix has not been reported in the literature to our knowledge.

CASE REPORT
A 56 year old man sustained multiple thoracic and intra-abdominal blunt injuries following a fall. He was initially managed conservatively, but developed signs of peritonitis two days post-trauma. Laparoscopy revealed a perforated appendix. Recovery was uneventful following appendicectomy.

CONCLUSION
Perforated appendix in the setting of polytrauma is a challenging diagnostic problem. Early intervention is vital to minimize morbidity and mortality.
A CASE REPORT OF MUIR-TORRE SYNDROME

Sivakumar K, Selvan N, Ashok K, Yan Y W
Department of General Surgery, Hospital Raja Permaisuri Bainun, Ipoh, Perak, Malaysia

Muir – Torre syndrome is an autosomal dominant condition with variable penetration and is characterized by skin manifestation including benign and malignant sebaceous neoplasm, keratoacanthomas and internal manifestations (eg. colonic polyps and colonic malignancies). This case report discusses about a patient who has had a history of right and left sided colonic malignancy and polyps, and currently having sebaceous cyst over the nape of the neck which was reported as sebaceous carcinoma. In Muir – Torre syndrome 40 % of patients with sebaceous carcinoma has a history of colorectal malignancy.
A CASE REPORT OF FULMINANT AMOEBIC COLITIS

Sivakumar K, Chan C P, Benedict D, Yan Y W
Department of General Surgery, Hospital Raja Permaisuri Bainun, Ipoh, Perak, Malaysia

Amoebiasis is an infection caused by the protozoal organism Entamoeba histolytica. Transmission usually occurs by food-borne exposure, particularly when food handlers are shedding cysts or food is cultivated in feces-contaminated soil, fertilizer, or water. Asymptomatic intestinal infection occurs in 90 – 99 % of infected individuals. Ameobic colitis is complicated by fulminant or necrotizing colitis in approximately 0.5% of cases, with a resultant mortality rate of greater than 40%. This case report discusses about a patient who presented with peritonitis secondary to fulminant amoebic colitis and its management.
FLEET VERSES PICOPREP SOLUTION IN BOWEL PREPARATION FOR COLONOSCOPY

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2Surgical Department, Hospital Tengku Ampuan Afzan (HTAA) / International Islamic University Malaysia (IIUM), Kuantan, Pahang, Malaysia

OBJECTIVES
We conducted this study to compare the effectiveness in bowel cleansing, side effects and electrolyte imbalance between Fleet and Picoprep in our population.

METHODS
This was a prospective, randomized, double-blinded study comparing two different types of bowel preparation for colonoscopy. Hundred and eighty five patients who were scheduled for elective colonoscopy both inpatients and outpatients in the Tengku Ampuan Afzan Hospital (HTAA), Kuantan were recruited in this trial from the period of August 2007 to August 2008. Randomization using sealed envelope yield a total of 93 patients in the Picoprep group and 92 patients in the Fleet group. Patient with stoma, end stage renal disease, heart and liver failure were excluded in this study. Patients were instructed to take the solutions at 2pm and 6pm one day preceding colonoscopy. Colonoscopy was done by consultants. Baseline renal profile and phosphate were taken one day prior to the consumption of the solution and repeated on the day of colonoscopy. Compliance, tolerability and side effects were assessed using a standard validated questionnaire. The effectiveness was assessed based on the quality of bowel cleansing using a standard validated grading.

RESULTS
Patients in the Picoprep group was documented to have significantly less nausea (p=0.05), headache (p=0.02) and vomiting (p=0.019). There was no significant difference in the abdominal cramps and bloatedness. There was an increase in serum sodium (p<0.001) and reduction in serum potassium (p<0.001) in Fleet group as compared to Picoprep group. Hyperphosphatemia was only seen in the Fleet group (p<0.00). A rise in serum urea and creatinine were noted in both group but not statistically significant. Picoprep group was noted to have better quality of bowel cleansing than Fleet group. (p<0.05)

CONCLUSION
Picoprep has better cleansing ability with less adverse side effects and electrolytes derangement as compared to Fleet solution in our study.
A PROSPECTIVE OBSERVATIONAL STUDY OF PAIN FOLLOWING STAPLED HEMORRHOIDOPEXY

I Sagap, A Mukhtar, H Imtiaz
Colorectal Unit, Department of Surgery, UKM Medical Center, Kuala Lumpur, Malaysia

BACKGROUND
Stapled hemorrhoidopexy has resulted in a radical change in the treatment of 3rd and 4th degree hemorrhoids. By avoiding wound creation in the sensitive perianal skin, stapled hemorrhoidopexy is intended to offer less postoperative pain compared to the conventional techniques.

AIM
Correlation between postoperative pain assessed by Visual Analogue Score (VAS) and the distance of the stapled line from the dentate line as well as to the histological examination of the resected specimen (presence of squamous epithelium and muscle fibers) were obtained in prospective manner.

METHODS & MATERIAL
Fifty-four patients underwent stapled hemorrhoidopexy between February 2007 to May 2008; 28 males and 26 females. The median age was 47.5 years (range 25 to 76 years). Forty-nine patients had 3rd degree hemorrhoids and 5 patients had 4th degree hemorrhoids. The mean postoperative follow up was 5.4 months.

RESULTS
Predominant symptoms for hemorrhoids were prolapse (100%), bleeding (42.6%), pain (42.5%) and flatus incontinence were present in 3 patients. The median staple line height was of 2.5 cm (range 0 – 4 cm) from the dentate line. Intra-operative additional hemostasis was required in 43 patients (79.9%). The median postoperative pain score measured by (VAS) at 6, 12 and 24 hours and following the first motion was 4 at all intervals. Median hospital discharge time was 28 hrs (24 – 72 hrs). Histopathological examination of resected tissues revealed the presence of muscularis propria in 32 (59.3%) cases and squamous epithelium in 22 (40.7%). Postoperative pain was significantly associated with the presence of squamous epithelium (p < 0.001) and low-lying staple height (p < 0.001).

CONCLUSION
Technical default causes significant pain after stapled hemorrhoidopexy. This is evidenced by low staple line height and the inclusion of skin within resected specimen. The optimal height for staple line may be around 2.5 cm from the dentate line. However the procedure is well tolerated with no major complication observed in our series.
A REVIEW OF PREOPERATIVE STAGING OF RECTAL TUMOUR BY ENDORECTAL ULTRASOUND IN HOSPITAL SELAYANG

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OBJECTIVE
The objective of the study is to determine the accuracy of preoperative T staging of rectal tumour by endorectal ultrasound performed by colorectal surgeons by comparing with HPE or MRI in a government hospital.

METHODS
This is a retrospective study of 34 consecutive patients presented with rectal tumour in Hospital Selayang who had undergone endorectal ultrasound by surgeons of the same hospital trained in colorectal surgery from July 2005 to December 2008.

In this study, the accuracy of preoperative staging of rectal tumour was by comparing the endorectal ultrasound staging with that of preoperative MRI or pathology report of the resected specimens.

RESULTS
There were only 12 patients suitable for this study after excluding the cases as mentioned above. (n = 12)

The accuracy in preoperative ERUS staging when correlated with MRI or HPE report was 75 % (9/12). 16.7 %( 2/12) of the cases was overstaged and 8.3 % (1/12) was understaged.

ERUS was able to stage correctly all the eight T3 tumours. (100 %)

CONCLUSIONS
The accuracy of preoperative staging by ERUS when correlates with MRI or HPE is comparable with some of the other colorectal units in the world with 75 % accuracy, overstaging in 16.7 % and understaging in 8.3 % of the cases. The ability to diagnose tumours which require preoperative neoadjuvant therapy i.e T3 tumour is high (100 %). The preoperative staging of rectal tumours by ERUS service in this hospital is well utilized with 34 cases from July 2005 to December 2008 and with some cases being referred from both private hospitals and other government hospitals. As the number of patients included in this study is small, a larger study to assess the accuracy of ERUS performed by colorectal surgeons in Malaysia is desired so that surgeons may not need to wait for the long list of MRI appointment in managing these patients in the future.
PET Scan in Colorectal Cancer

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The use of PET scan in colorectal cancer is still not clearly defined. As the management and prognosis of colorectal cancer is largely determined by its stage, PET scan can provide useful information, particularly in detection of distant metastasis. Our study is a retrospective study audit of PET scan use in colorectal patients from 2007 – 2009. The study is concluded with an early protocol for PET scan use in colorectal cancer.
RESULTS OF SURGICAL TREATMENT OF FISTULA-IN-ANO IN SINGAPORE

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OBJECTIVE
To review the practice and outcome of surgical management of fistula-in-ano (FIA) in a specialist colorectal unit of National University Hospital of Singapore. Specific end points studied include patient demographics, type of surgical procedure correlated with type of fistula, healing rate, recurrence rate and incontinence rate.

PATIENTS AND METHODS
457 consecutive patients who underwent surgery for FIA from 2002 to 2006 were studied retrospectively from case notes review and telephone interview. Details of patients’ age, gender, ethnicity, co-morbidity, pre-operative endoanal ultrasonography (EAUS), fistula type, surgical treatment and outcome were collected for analysis.

RESULTS
457 patients with a mean age of 41 years were assessed. Male to female ratio was 4:1. 61% of them were evaluated preoperatively with EAUS. The distribution based on classification during examination under anesthesia was as follows: inter-sphincteric 223 (49%), trans-sphincteric 227 (50%), supra-sphincteric 2 (0.4%) and extra-sphincteric 5 (1.1%). 33 patients (7%) had secondary extension of fistulous track. Single-staged fistulotomy was predominantly performed for low inter-sphincteric (98%) & low trans-sphincteric fistulae (93%). Seton insertion with or without definitive surgery later on was mainly performed for high inter-sphincteric (80%) & high trans-sphincteric (75%), supra-sphincteric (50%) & extra-sphincteric (80%) fistulae. The number of patients on follow up was 303 (66%), with the mean follow up of 25 weeks. The mean time to complete wound healing following surgery was 15 weeks. Fistulae persistence occurred in 30 patients (9.9%). Recurrence was noted in 9 patients (3%). Post-operative continence was recorded in 277 patients (61%). Out of this, 4 (1.4%) developed incontinence to gas while 3 (1.1%) to liquid stool.

CONCLUSIONS
Inter-sphincteric and trans-sphincteric fistulae accounted for 99% of the total fistulae. Higher complex fistulae had a higher failure and recurrence rate. Only 2.5% of patients were complicated by post-operative incontinence.
HAND-ASSISTED LAPAROSCOPIC ABDOMINO-PERINEAL RESECTION UTILISING PLANNED END COLOSTOMY SITE

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OBJECTIVE
To evaluate the technique of hand-assisted laparoscopic (HAL) abdomino-perineal resection (APR) utilizing the planned end colostomy site in patients with low rectal cancer.

PATIENTS AND METHODS
6 patients with low rectal cancer who were unsuitable for a sphincter salvage procedure were recruited. The stoma site was marked prior to the operation. A transverse incision was made over the marked colostomy site for hand device placement. Surgery was performed in the usual manner as in HAL surgery. After the specimen was delivered, polydioxanone sutures were used to appose the rectus fascia in an interrupted fashion, leaving an approximate gap in the central part of the incision for the colostomy. The skin edges were then apposed using an absorbable suture, and the end colostomy created in the standard fashion.

RESULTS
4 males and 2 females with a mean age of 61 (38 – 76) years were recruited. All the procedures were completed without any intra-operative complication or conversion. Length of incision for hand device placement was 6.13 (6 – 6.5) cm in average. The mean operative time was 212 (150 – 295) minutes. During the post-operative recovery period, normal diet was tolerated after a mean of 4.33 (4 – 6) days. 1 patient developed post-operative ileus but this resolved spontaneously. No wound infection was noted. The maximal pain score on the first, second and third post-operative days were 5, 3 and 2 respectively. The average length of hospital stay was 5.6 (4 – 9) days. After a mean follow-up of 13.3 months, one patient developed a parastomal hernia. None of the patient had any evidence of local tumour recurrence.

CONCLUSIONS
HAL APR with the hand device placed at the planned stoma site is technically feasible. Without creating an additional incision, the operation is oncologically comparable, with a shorter operative time compared to straight laparoscopic methods, whilst maintaining the benefits of a minimally invasive approach.
CASE REPORT: FLEXI-SEAL® FAECAL MANAGEMENT SYSTEM – AN ALTERNATIVE TO COLOSTOMY

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Flexi-seal® Faecal Management System was a product designed for temporary faecal diversion and containment in faecal incontinence to reduce the risk of skin breakdown, minimize soiling of linens, minimize tissue necrosis and to protect surgical sites, wounds and burns. A stoma will be indicated in any cases where wound healing will require long-term faecal diversion. However, in a severe degloving injury of the anterior abdominal wall, there is no place to site a stoma.

CASE
This 22-year-old Malay lady was rolled over by a tractor in a motor vehicle accident and sustained a severe anterior abdominal wall degloving injury with extensive skin and subcutaneous tissue necrosis involving the entire anterior abdominal wall extending from the coastal margin to the perineum and the left thigh with an anal laceration. There was no available healthy site for stoma. In an attempt for effective faecal diversion and containment to prevent soiling of the affected tissue, Flexi-seal® Faecal Management System was used in replacement.

CONCLUSION
The Flexi-seal® Faecal Management System is an alternative for faecal diversion and containment in cases where a colostomy cannot be done.

KEYWORDS
Flexi-seal® Faecal Management System, colostomy
THE STAGE AT PRESENTATION AND SURVIVAL RATES IN PATIENTS WITH COLORECTAL CANCER BASED ON SOCIOECONOMIC STATUS AT SARAWAK GENERAL HOSPITAL AND UMMC

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OBJECTIVE
Studies have reported reduced survival rates for colorectal cancer patients in lower socioeconomic status categories, but this finding could be due (at least in part) to higher co-morbidity. Objective of this study is to assess the relationship between socioeconomic status with the stage at presentation and the subsequent survival rate. It will also assess the associated co-morbidities such as age, race, gender, family history and tumour site.

METHOD
This study involved 1,521 patients diagnosed with invasive colorectal cancer in 2000 – 2006 who were diagnosed at Sarawak General Hospital and UMMC. The data were obtained from hospital inpatient records and Surgical Clinic records. They were followed to their death or last follow-up date. Multivariate logistic regression was used to examine the association between socioeconomic status, stage at diagnosis and years of survival.

RESULTS
Risk of death was elevated for patients living in lower socioeconomic background, independent of co-morbidity, age, and stage at diagnosis. Moreover, the patients in lower socioeconomic background presented at a more advanced stage irrespective of the center.

CONCLUSION
These findings showed the significance of reaching out to communities of socioeconomic background to improve the colorectal survival rates. Thus, the colorectal cancer screening program should pay more attention on primary and secondary prevention of these communities.
THE LIGATION OF INTERSPHINCTERIC FISTULA TRACT (LIFT) FOR FISTULA-IN-ANO: SPHINCTER SAVING TECHNIQUE

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BACKGROUND
The study was designed to assess results of total anal sphincter saving technique by ligating the intersphincteric fistula tract (LIFT) for the treatment of fistula-in-ano.

MATERIAL AND METHOD
A prospective observational study in forty-five fistula-in-ano patients treated by ligation of intersphincteric fistula tract (LIFT) technique from May 2007 to September 2008. All patients had fistulas arising from cryptoglandular infections. They were followed-up by a standard protocol to determine the recurrence rate, healing time and related morbidity associated with the procedure.

RESULTS
Forty-five patients were included in the study of which five patients (11.1 %) were recurrent fistula-in-ano after previous surgery using other recognized treatment procedures. The mean age was 42.6 years. The mean follow-up was nine months ranging from two months to sixteen months. Primary healing was achieved in thirty seven patients (82.2 %). The healing time ranged from four to ten weeks and the mean was eight weeks. Eight patients (17.7 %) had recurrence after a period between three months to eight months of surgery. No significant morbidity was noted in any of the forty five patients.

CONCLUSIONS
A new technique for fistula-in-ano surgery aimed at total anal sphincter preservation appears to be safe, easy and have a good early outcome.

KEYWORDS
Fistula-in-ano, Anal fistula, Sphincter saving operation, LIFT.
PRELIMINARY RESULTS OF A SURVEY ON FAECAL INCONTINENCE

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INTRODUCTION

Faecal incontinence has been defined as the inappropriate passage of faeces, and can be either passive or urgent in nature.

This condition affects men and women of all ages, with an estimated incidence of 1 – 2 percent. There has been much debate on whether there are gender differences. The prevalence rises with age and has been reported as high as 7 per cent in otherwise healthy adults over 65 years, and is particularly prevalent among those living in long-term care settings (27 – 46 per cent).

Despite this, the majority of people with faecal incontinence do not seek professional help. Currently, there is no data on the prevalence of this condition in Malaysia.

AIMS

To estimate the prevalence and severity of faecal incontinence in a Malaysian population, and identify susceptible sub-groups.

METHODS

Survey methodology is used to prospectively collect data using printed questionnaire forms. The target population is a sampled group of patients and/or accompanying relatives attending Surgical Follow Up Clinics (including Urology) and Antenatal Clinics at our institution.

The Incontinence instrument used is the Wexner Continence Grading System and the questionnaire includes demography, faecal behaviours and reason to seek professional help.

RESULTS

Our preliminary results show 8 of 30 people surveyed said ‘Yes’ to Faecal Incontinence (26.66 %) and gave a score between 2 – 8 out of 20. All those who admitted to some degree of incontinence were aged between 46-82 years (mean age 59.5 years) and consisted of 5 females and 3 males. None sought professional help as it did not affect their daily activities.

CONCLUSION

Despite small numbers, our data suggest that faecal incontinence is not uncommon in our population. Further accrual of data is required to further define the scope of the problem, and allow planning of screening, diagnostic and management protocols.
HAEMORRHOIDAL ARTERY LIGATION (HAL): A PAINLESS ALTERNATIVE TO HAEMORRHOIDAL SURGERY?

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BACKGROUND
A number of modalities exist for the treatment of symptomatic internal haemorrhoids, with surgical options providing the best long-term outcomes in terms of recurrence rates. However, surgery is often associated with some post-operative pain, even with stapled haemorrhoidopexy techniques, as well as other complications such as bleeding, infection and strictures. Haemorrhoidal artery ligation (HAL), using a Doppler proctoscope to guide suture placement, potentially combines the advantages of both surgical (lower recurrence rates) and non-surgical (painless) methods. The aim of this study was to assess the outcomes of HAL in our patients.

MATERIALS & METHODS
Patients who had undergone HAL from 2005 to 2008 for symptomatic internal haemorrhoids were included in a prospective database. Data recorded included demographics, presenting symptoms, history of previous haemorrhoidal treatment and outcomes, including pain scores. Pain scores were compared with those of patients who had undergone stapled haemorrhoidopexy. The Doppler-guided proctoscope (AMI, Austria) was used for all patients. Short-term clinic follow up was at four and eight weeks, while long-term outcomes were assessed by telephone.

RESULTS
Fifty patients were included. All patients had had previous treatment for internal haemorrhoids. There were no intra-operative complications. Post-operative pain scores on day one were less than 1. This compared to pain scores of 3 – 5 for patients who had undergone stapled haemorrhoidopexy. Two patients required further HAL, while one patient went on to have a stapled haemorrhoidopexy.

CONCLUSION
HAL is a less painful alternative for treatment of symptomatic internal haemorrhoids.
INFLAMMATORY PSEUDOTUMOUR: A GREAT MIMICRY!

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INTRODUCTION
Inflammatory pseudotumour, better known as inflammatory myofibroblastic tumor (IMT), is a rare benign solid tumor mimicking a malignant neoplasm. This condition, though the aetiology is still unknown, is characterized by chronic inflammatory infiltration with myofibroblastic proliferation, which ultimately grows to a large size. It can be treated surgically. We report a case of inflammatory pseudotumour of the stomach in a 65 years old patient for whom curative resection was done.

CASE REPORT
A 65 years old female patient presented with one-year history of abdominal discomfort and intermittent constipation. There was no history of weight loss or appetite, febrile illness, urinary symptoms or evidence of intestinal obstruction. Clinical examination revealed a huge painless mass over the epigastric region extending to the left hypochondrium, measuring 20 x 15 cm. Blood investigations and tumour markers were normal. Computed tomography (CT) scan of the abdomen showed well-defined cystic mass measuring 12.8 x 9.6 x 12.8 cm over the epigastric region. Mesenteric cyst with probable infection or hemorrhage was suspected. The patient underwent explorative laparotomy, complete excision of the mass arising from the greater curvature of stomach and subtotal gastrectomy with gastrojejunostomy. HPE revealed Inflammatory pseudotumour. Postoperative course was uneventful. At follow up nine months later, she is well, with no evidence of recurrence.

CONCLUSION
We report this case because of its rarity and close resemblance to malignancy. In addition, this is a unique case as this pathology occurred in an elderly woman though most cases reported occurred among children and young adults. Besides that, her presentation was rather atypical compared to other reported cases of similar pathology.
A RETROSPECTIVE COHORT STUDY OF GASTROINTESTINAL STROMAL TUMOURS (GIST) IN HUSM FOR THE LAST 12 YEARS (1997 – 2008)

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INTRODUCTION
GI stromal tumours (GISTs) are a subset of GI mesenchymal tumours of varying differentiation. Previously, these tumours were classified as GI leiomyomas, leiomyosarcomas, leiomyoblastomas, or schwannomas as a result of their histologic findings and apparent origin in the muscularis propria layer of the intestinal wall. With the advent of immunohistochemical staining techniques and ultrastructural evaluation, GISTs now are recognized as a distinct group of mesenchymal tumours. In the present classification, GISTs account for approximately 80 % of GI mesenchymal tumours

OBJECTIVE
To determine the demographic characteristics, mode of presentation and outcome of patients with GIST in HUSM for the last 12 years (1997 – 2008).

METHODOLOGY
All the case notes of patients with GIST in HUSM from the year 1997 till 2008 were reviewed and analyzed.

RESULTS
From 1997 to 2008, there were 29 patients diagnosed as GIST. Out of these patients only 21 had complete data to be analyzed. The age range was from 19 to 97 years, (mean 48 years). Demographically, in HUSM, there were more female patients diagnosed GIST, more common among Malays. Clinically, GIST commonly occurred in the stomach in these patients and commonly presented as abdominal pain and upper GI bleed.

18 patients underwent surgical resection in which 10 (57.1 %) had partial gastrectomy, small bowel resection with end-to-end anastomosis in 6 (28.6 %) and colectomy in 2 (14.3 %). Tumour size when operated frequently was more that 10 cm and commonest type was the undifferentiated type. Post operatively, 12 patients were under follow up and well, four died and two defaulted follow up.

CONCLUSION
GISTs have a wide clinical spectrum at presentation. Diagnosis and management still remains a challenge.
ABDOMINAL AMYLOIDOSIS MIMICKING ABDOMINAL LYMPHOMA: A CASE REPORT

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INTRODUCTION
Amyloidosis is a pathological process encompassing a spectrum of diseases that results from the extracellular deposition of fibrillar amyloid proteins. Although it is usually seen in systemic form, 10 – 20 % of cases can be localized. Systemic amyloidosis is subclassified into an idiopathic primary form and a secondary or reactive form. The progressive deposition of amyloid compresses and replaces normal tissue, which leads to organ dysfunction and a wide variety of clinical presentations. Amyloidosis involving the mesentery is very rare, and the radiological appearance of this condition has been poorly documented. We report a case of amyloidosis involving the mesentery and small intestine in a 46 years old Malay man.

CASE REPORT
A 46-year-old man was admitted to hospital with acute onset of sharp, constant left-upper abdominal pain accompanied by nausea and vomiting. He had been having recurrent abdominal pain over the left hypochondrium and lumbar region for the last two months, associated with constitutional symptoms prior to admission. Physical examination revealed soft abdomen with mild hepatosplenomegaly. All routine blood investigations, Chest X-ray and Abdominal X-ray were normal. CT scan showed dilatation and circumferential thickening of small bowel from the third part of duodenum to jejunum with multiple mesenteric lymphadenopathy. Initial laparotomy, which was done for lymph node biopsy, in view that the diagnosis was lymphoma, denoted thickened jejunal wall from duodenjejunal junction up to about 100cm, enlarged mesenteric lymph nodes at proximal jejunum and numerous thickened haemorrhagic mesenteric lymph nodes. HPE showed reactive lymphoid hyperplasia and no evidence of lymphoma. Post operatively, patient was worsening. Re-laparotomy was done following persistent abdominal distension. Jejunal resection of about two metres long and jejuno-ileal anastomosis done three weeks after first laparotomy. Second HPE pale, eosinophilic, acellular material in the subepithelial stroma with positive Congo red stain and showed apple-green birefringence under polarizing microscopy. After the second operation, patient improved and currently stable.

CONCLUSION
Abdominal amyloidosis should be considered as a differential diagnosis of a multinodular mesenteric mass and it can mimic lymphoma.
A PROSPECTIVE COMPARISON OF FECAL OCCULT BLOOD TESTS IN PATIENTS UNDERGOING COLONOSCOPY IN UNIVERSITY MALAYA MEDICAL CENTRE

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BACKGROUND
A more specific, sensitive and non-dietary restriction requiring fecal occult blood test which can be used in outpatient setting could reduce the number of unnecessary colonoscopies thus cutting the cost and the high burden on the University Malaya Medical Centre (UMMC) colonoscopy service. We aimed to investigate the performance characteristics of Immunohistochemical FOBT (iFOBT) and Combination FOBT (iFOBT + gFOBT) compared to the Guaiac test alone.

METHOD
Patients referred to the UMMC endoscopy unit for colonoscopy were included. The stool samples were tested for fecal occult blood with gFOBT and iFOBT. Only patients who underwent complete colonoscopy included in the analysis. Those with incomplete examinations were excluded. Results of the FOBTs were compared to colonoscopy findings. A combination testing strategy was also evaluated.

RESULTS
103 patients were eligible for analysis. The sensitivity for detecting neoplastic lesions was 53.3 % with iFOBT (95% CI 34.6 – 71.2), 40% with gFOBT (95% CI 23.2 – 59.2), and 23.3 % with iFOBT/gFOBT (95% CI 10.6 – 42.1), while specificity with iFOBT was 91.7% (95% CI 82.3 – 96.6), gFOBT, 74.0 % (95% CI 62.2 – 83.2) and iFOBT/gFOBT, 94.5% (95% CI 85.8 – 98.2). Sensitivity for detecting colorectal carcinoma with iFOBT was 77.8% (95% CI 40.2 – 96.1), gFOBT, 67.7% (95% CI 30.9 – 90.9) and iFOBT/gFOBT, 55.5 % (95% CI 22.6 – 84.6), while specificity with iFOBT was 84.0% (95% CI 74.7 – 90.5), gFOBT, 73.4% (95% CI 63.1 – 81.7) and iFOBT/gFOBT, 93.6% (95% CI 86.1 – 97.4).

CONCLUSIONS
The iFOBT has better performance characteristics in comparison to the gFOBT by the higher specificity and sensitivity of the iFOBT. Combination testing has improved specificity than the individual tests at the expense of reduced sensitivity.
AN AUDIT OF COLORECTAL CANCER EMERGENCIES IN UKM MEDICAL CENTRE OVER THREE YEARS

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INTRODUCTION
Approximately one third of colorectal cancers were operated as emergency cases. These are in the form of acute intestinal obstruction, bowel perforation and excessive bleeding. Optimal surgical management for colorectal emergencies depends largely on several conditions. Intra-operative decisions and choice of techniques are among other factors that might have significant impact to the overall outcome. Identified risk factors for poor outcome include patients age, general health and co-morbidities; the services available to support post-operative events and tumour characteristics at presentation. The peri-operative mortality rate for emergency colorectal cancer surgery is around 10-27 percent. The aim of our audit is to describe peri-operative criteria associated with these emergency surgeries and to observe the immediate outcome in a colorectal unit of a tertiary referral centre.

METHODS
Data were collected from patients record of all colorectal cancer patients operated from 2006 to 2008 in UKM Medical Centre. There were 44 cases fell into the emergency criteria out of 220 colorectal cancer cases (20 percent). We then analysed these patients demography, co-morbidities, tumour characteristics, type of surgery and mortality.

RESULTS
The emergency surgery involved 32 Chinese, 9 Malays, 1 Indian and 2 foreigners (Burmese). The mean age at presentation was 63.5 years. Acute abdominal distension was evidenced in 29.5 percent of patients while worsening abdominal pain occurred in 68.1 percent. Abdominal mass were detected at presentation in 25.0 percent of patients. Per rectal bleeding was reported in 43.1 percent of these patients. Hypertension and Diabetes mellitus were the two main co-morbidities at 31.8 percent and 25.0 percent respectively.

Most tumours were found distal to the splenic flexure (88.6 percent) and the rectum were involved in 26 patients (59.0 percent). Half of the cases were operated with curative intent while the rest was for palliation. The choices of operation were Hartmann's procedure (31.8 percent), right hemicolecotomy (9.1 percent), defunctioning colostomy (52.3 percent), AP Resection (2.3 percent) and ileo-colonic bypass surgery (4.5 percent).

Final staging showed 18.1 percent Duke’s B, 27.3 percent Duke’s C and 45.5 percent Duke’s D stages. There was one case of non-Hodgkin lymphoma of the caecum that was operated after causing bowel obstruction. Final staging were not available in 3 cases.

To date, twenty-two (50 percent) patients died within an average of 6.3 months after operation. Of these, peri-operative (30-day) mortality occurred in 7 cases (15.9 percent).

CONCLUSION
Colorectal cancer patients who underwent urgent intervention after an acute episode tend to have poor outcome. In our experience, they belong to advanced tumour stage at surgery. Despite optimal treatment, 50 percent of these emergency cases died within 6-months of operation.
THE IDENTIFICATION OF NOD2/CARD15 MUTATIONS IN MALAYSIAN PATIENTS WITH CROHN’S DISEASE

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INTRODUCTION
The NOD2/CARD15 gene is identified as an important susceptibility gene for Crohn’s disease (CD) and the aim of our study was to look for the common disease predisposing mutations (DPMs) in our multiracial population.

METHODS
Blood samples from consecutive CD patients and healthy controls were obtained and analyzed for the three common mutations (R702W, G908R, 1007fs) but we also looked for the SNP5 and JW1 variants which are associated with CD in the Ashkenazi Jews. PCR-RFLP technique was used to identify the mutations which were confirmed by sequencing. Baseline demography and clinical characteristics of the CD patients were recorded.

RESULTS
45 patients with confirmed CD and 300 controls were recruited. The three common DPMs were not observed in either the CD patients or the controls. However, the SNP5 mutation was identified in 6 (13.3%) CD patients and the JW1 mutation in 8 (17.8%) different patients which were not found in the controls. (p<0.001). The SNP5 mutation was present only in Indians. There was a trend towards younger age of onset and stricturing disease in patients carrying the JW1 mutation.

CONCLUSIONS
These findings suggest the presence of novel DPMs in the NOD2/CARD15 gene in Asian patients with CD.
A STUDY ON THE STAGING AND SURVIVAL OF PATIENTS WITH COLORECTAL CARCINOMA AT HOSPITAL SEBERANG JAYA FROM 2003 – 2007

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OBJECTIVE
This study was undertaken to determine the staging and 2 year survival of patients with colorectal carcinoma based on the Dukes Staging. Methods: This was a retrospective observational study analyzing those with colorectal carcinoma from January 2003 till January 2007 and their survival status as of January 2009 as the date of study.

SUMMARY
A total of 199 patients were diagnosed with colorectal cancer in that timeframe. However, only 98 patients were analyzed due to unavailable medical records. This study revealed that a significant proportion of them, 35.7 % were in the Dukes B category while only 1.5% in Dukes A. The 2 year survival was only 43.8 %; with 100 % in Dukes A, 60 % in Dukes B, 55.1 % in Dukes C and only 14.3 % in Dukes D. Conclusion: A comprehensive database for colorectal carcinoma is required. The two survival is lower than the five year survival in other countries. One of the limitations of this study was the unavailability of medical records.
AN AUDIT ON THE DEMOGRAPHICS OF PATIENTS WITH COLORECTAL CARCINOMA AT HOSPITAL SEBERANG JAYA FROM 2003 – 2007

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OBJECTIVE
This audit was performed to look into the demographics in patients with colorectal carcinoma at Hospital Seberang Jaya.

METHODS
This was a retrospective observational study analyzing patients with colorectal carcinoma from January 2003 till January 2007 at Hospital Seberang Jaya.

SUMMARY
A total of 199 patients were diagnosed with colorectal carcinoma during that period. However, only 98 patients’ records were retrieved from the medical records. This study revealed that males (60 %) in the Malay population (48 %) were more commonly affected. Majority of patients (28.6 %) were between 60 – 69 years of age.

CONCLUSION
The main limitation of this study was the small amount of records being able to retrieve. It supports data from other centers whereby colorectal carcinoma is more common in ages 50 and above.
AN AUDIT ON THE PRESENTING COMPLAINT AND TUMOUR SITE OF PATIENTS WITH COLORECTAL CARCINOMA AT HOSPITAL SEBERANG JAYA FROM 2003 – 2007

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OBJECTIVE
This audit was performed to look into the presenting complaint and tumor site in patients with colorectal carcinoma at Hospital Seberang Jaya.

METHODS
This was a retrospective observational study analyzing patients with colorectal carcinoma from January 2003 till January 2007 at Hospital Seberang Jaya.

SUMMARY
A total of 199 patients were diagnosed with colorectal carcinoma during that period. However, only 98 patients’ records were retrieved from the medical records. This audit revealed that rectum was the most common site of malignant change with per rectal bleeding being the commonest mode of presentation.

CONCLUSION
The main limitation of this study was the small amount of records being able to retrieve. It supports other studies with rectum being the most common site of malignant involvement.
INTRODUCTION

A colorectal polyp is a growth comprising small clumps of cells that emerge out of the lining of the colon or rectal mucosa. Patients usually present with rectal bleeding, bloody stools, constipation or diarrhea and rarely abdominal pain. Colorectal polyps are sub-classified into two main types which are non-neoplastic (hyperplastic, inflammatory) and neoplastic (adenomatous) such as tubular, tubulovillous and serrated adenoma of varying degrees of dysplasia. Malignant potential of adenomas correlates with its type, size (more than 1 cm) and degree of dysplasia. The adenoma-carcinoma sequence has traditionally been characterized as a uniform progression from normal mucosa, to adenoma, to carcinoma through an underlying homogenous carcinogenic pathway. The process of adenoma development is initiated when both copies of the adenomatous polyposis coli (APC) tumor suppressor gene are deactivated in a single epithelial cell. The consequent lack of the suppressor permits activation of oncogenes, including p53 and k-ras. There is evidence, however, that colorectal carcinogenesis is a heterogeneous process involving more than one precursor lesion.[1].

OBJECTIVES

To review site and types of polyps in the large intestine among patients undergoing elective colonoscopy for various clinical indications.

METHODOLOGY

An audit of incidence of polyps among patients undergoing elective colonoscopy from Jan 2006 to Dec 2008 in Department of Surgery, Hospital Sultan Bahiyah, Alor Setar was undertaken. Data obtained from endoscopy records and case records were analysed.

RESULTS

A total of 151 patients undergoing colonoscopy were found to have polyps. The male:female ratio was 2:1 with 101 male patients. The common age group were between 61 – 70 (42 %) and 51 – 60 (30 %). Ethnic distribution comprised Malays (56 %), Chinese (42 %) and Indians (2 %). 57 % of the polyps were colonic polyps and 33 % were in the rectum. Most common type being adenomatous polyps (77 %), hyperplastic polyps (23 %) and rarely inflammatory polyps (1 %).

CONCLUSION

The most common type of polyps found were adenomatous polyps which are known for the high potential of malignant changes and the most common site was in the colon.
ALARMING LOWER GASTROINTESTINAL SYMPTOMS – COLITIS MIMICKING MALIGNANCY

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INTRODUCTION
Colitis is inflammation of the colon that commonly presents with symptoms like abdominal pain, fever, rectal bleeding, loose stools and bloody mucus discharge.

As these alarming symptoms may suggest underlying malignancy, colonoscopy and biopsy is a common procedure undertaken to confirm the diagnosis.[1]

OBJECTIVE
To review incidence of biopsy-confirmed colitis in patients presenting with alarming lower gastrointestinal symptoms mimicking an underlying malignancy.

METHODOLOGY
A retrospective study of all patients with biopsy confirmed colitis presenting to the Department of Surgery, Hospital Sultanah Bahiyah, Alor Star, Kedah between January 2006 and December 2008 was undertaken. Data obtained from case records, endoscopic findings and histopathology reports were analyzed.

RESULTS
A total of 1547 colonoscopy was performed during this period. Of these 20.5 % were for alarming lower gastrointestinal symptoms.(n=317 ). Biopsy confirmed colitis was identified in 58 cases( 18.3 %). 56.9 % were men and the remaining were women. The mean age of presentation is 54.6 (range17 – 81), and 30 % were from the mode age group between (40 – 49) years old. Ethnic distribution include Malays (69 %), Chinese (29.3 %) and others (1.7 %). Acute colitis was the most common diagnosis at 41.4 % followed by non-specific colitis 37.9 %, Amoebic colitis 7.0 %, Ulcerative colitis 5.2 % and Cytomegalovirus colitis 3.4 %.

CONCLUSION
Nearly 20 % of patients presenting with alarming lower gastrointestinal symptoms mimicking malignancy are due to colitis.


DISTRIBUTION OF TYPES OF COLITIS

<table>
<thead>
<tr>
<th>DIAGNOSIS</th>
<th>N</th>
<th>PERCENTAGE (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACUTE COLITIS</td>
<td>24</td>
<td>41.4</td>
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<tr>
<td>CHRONIC COLITIS</td>
<td>1</td>
<td>1.7</td>
</tr>
<tr>
<td>AMOEBOIC COLITIS</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>CMV COLITIS</td>
<td>2</td>
<td>3.4</td>
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<tr>
<td>ISCHEMIC COLITIS</td>
<td>1</td>
<td>1.7</td>
</tr>
<tr>
<td>NON SPECIFIC COLITIS</td>
<td>17</td>
<td>37.9</td>
</tr>
<tr>
<td>RESOLVING COLITIS</td>
<td>1</td>
<td>1.7</td>
</tr>
<tr>
<td>ULCERATIVE COLITIS</td>
<td>3</td>
<td>5.2</td>
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</table>
**INTRODUCTION**

Solitary rectal ulcer syndrome (SRUS) is a rare disorder of defecation and persistence of symptoms commonly bleeding per rectum (BPR), in association with other symptoms such as abdominal pain, passage of mucus, straining during defecation and feeling of incomplete evacuation.[1] This study aims to assess the clinical, endoscopic characteristics and outcomes in patients with SRUS.

**OBJECTIVES**

To identify the incidence of SRUS, presenting symptoms, histopathological findings and the outcomes in patients with SRUS.

**METHODOLOGY**

A retrospective study of all patients diagnosed as solitary rectal ulcer syndrome presenting to Department of Surgery, Hospital Sultanah Bahiyah, Alor Star between January 2006 and December 2008 was undertaken. Data obtained from case records, endoscopic findings and histopathology reports were analyzed.

**RESULTS**

A total of 20 patients were diagnosed as Solitary Rectal Ulcer Syndrome (SRUS) during this period and the mean age of presentation was 41.1 (range 17 – 84 years old), and 30 % were from the mode age group between 21 – 30 years old. Ethnic distribution included Malays (95 %) and Chinese (5 %) with predominance of male over female ratio 11:9 (n=20). Common clinical findings which were reported included bleeding per rectum (90 %), prolonged time on the commode (60 %), straining during defecation (55 %), abdominal pain (55 %), constipation (55 %), digital manual evacuation (50%), tenesmus (50 %), and 20 % reported to have psychiatric problem. Endoscopic assessment showed macroscopic features of ulcerative lesion in 50 % of cases. Others include polypoidal (30 %), and erythematous lesions (20 %). Histopathology showed that 70 % of the ulcers were extending into muscularis mucosa and lamina propria with crypt distortion (65 %) and fibrosis (60 %). Two patients underwent resection rectopexy due to concurrent presence of rectocele diagnosed via defecating proctogram and the others were treated conservatively. Follow-up showed overall clinical improvement in 65% of patients, worsening symptoms in 15 % and 20 % had no change in symptoms. Both patients who underwent surgical intervention cited no clinical improvement post-operatively.

**CONCLUSION**

Conservative management of patients with SRUS shows good clinical improvement however a larger sample population is needed for significant statistical evaluation.

<table>
<thead>
<tr>
<th>TYPE OF LESIONS</th>
<th>CLINICAL IMPROVEMENT</th>
<th>WORSENING SYMPTOMS</th>
<th>NO CHANGE</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>N (%)</td>
<td>n (%)</td>
</tr>
<tr>
<td>Ulcerative</td>
<td>10</td>
<td>7 (70)</td>
<td>1 (10)</td>
</tr>
<tr>
<td>Polypoidal</td>
<td>6</td>
<td>3 (50)</td>
<td>1 (16.7)</td>
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<tr>
<td>Erythematous</td>
<td>4</td>
<td>3 (75)</td>
<td>1 (25)</td>
</tr>
<tr>
<td>Overall</td>
<td>20</td>
<td>13 (65)</td>
<td>3 (15)</td>
</tr>
</tbody>
</table>

Surgery sigmoid/rectal resection done to one patient with HPE showing ulcerative but still had recurrence

**REFERENCES**

2. Hong Jo Choi, MD et al. Clinical Presentation and Surgical Outcome in Patients With Solitary Rectal Ulcer Syndrome. SAGE publication 2005