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Frontiers in Coloproctology



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The Cover Shot



JUMPING JACK IN MOTION

This photograph of a hurdle race sportsman is one of my earlier creations, taken in 2004.

The work captures the sportsman head on at the instance of maximum speed over the hurdle, at the height of motion. The expression on his face, and the detailed depiction of his body and all 4 limbs, capture the intensity of the moment.

A dark background is chosen to highlight the athlete as the subject of interest. Post processing converts the photo into black and white, and motion blurring has been applied to intensify the feeling of movement. This was rarely done at the time.

The photo has won many international awards, including The Best of the Show, Gold Medal in Photographic Society of America in the St Paul Minneapolis Print Circuit 2005, Best of Action in the Central Washington, USA International Exhibition 2006, Medal in the Interimage Exhibition 2008, Belgium and numerous honourable mentions worldwide etc.

This technique has subsequently been applied in many works by other artists.



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There has been a rapid development in the field of Coloproctology in the last 3 decades. This has been in part catalysed by technology advancement in surgery and endoscopy, and by the results from large-scale studies led by scholars and investigators. For instance, just recently an article published in the New England Journal of Medicine has confirmed screening colonoscopy could significantly reduce mortality from large bowel cancer, a conclusion that certainly carries great impact on healthcare policies in areas where colorectal malignancy is prevalent, including Hong Kong.

For this reason, the theme chosen in this issue is "Frontiers in Coloproctology". There are two areas of focus under this theme: colorectal tumours and minimally invasive surgery, the latter includes the entire "spectrum" of minimally invasive surgical techniques such as endoscopic submucosal dissection, single-incision laparoscopic surgery, robot-assisted laparoscopic surgery and hybrid NOTES technique in colonic resection. Thus, we aim to cover the latest concepts and developments in the prevention and surgical/endoscopic treatment of large bowel neoplasms.

We hope we have chosen these topics to your satisfaction. Lastly, we must express our thanks to the authors – council members of the Hong Kong Society for Coloproctology – for keeping us abreast of the latest development in this field.

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Tools for Colorectal Cancer Screening of Average-Risk Individuals

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Dr. Yiu-wing LUK

This article has been selected by the Editorial Board of the Hong Kong Medical Diary for participants in the CME programme of the Medical Council of Hong Kong (MCHK) to complete the following self-assessment questions in order to be awarded 1 CME credit under the programme upon returning the completed answer sheet to the Federation Secretariat on or before 31 March 2012.

Hong Kong is one of the developed Asian cities where increasing incidences of colorectal cancer (CRC) are observed over the past few decades. The age-standardised incidence rates per 100,000 population in 2009 were 47.4 for men and 32.1 for women, respectively.¹ These rates have been gradually increasing over the past two decades and are more noticeable for men. CRC will replace lung cancer to be the top leading cancer here. In view of the burden, the Cancer Expert Working Group on Cancer Prevention and Screening, Department of Health, recommended CRC screening of men and women aged 50 to 75 with average risk.² Most CRCs arise from adenomatous polyps and the development of cancer from polyp generally takes more than 10 years. Treatment of early stages of cancer is associated with better survival. Cancer detection at early stages and the better strategy of polyp removal upon detection, form the basis of CRC screening. Various tools have been used extensively for CRC screening of average-risk individuals. These include stool tests which primarily help to detect cancers, and structural tests that consist of colonoscopy, flexible sigmoidoscopy, double-contrast barium enema, computed tomographic colonography, and colon capsule endoscopy, with direct or indirect mucosal visualisation to detect cancers as well as polyps.

Stool tests

Faecal occult-blood test (FOBT) as the screening tool is well established with several large scale, randomised, controlled trials of CRC screening for average-risk individuals in the West, which showed reductions in CRC-related mortality rate. The tests include the guaiac-based stool tests which detect blood in the stool through the pseudoperoxidase activity of haeme whereas the immunochemical-based tests with more specific human blood detection by direct reaction to human globin. One-time testing has sensitivity for detecting cancer of 33–50%, and 60–80% for standard guaiac-based test, and immunochemical test, respectively.^{3,4,5,6} These tests have poor sensitivity in detecting adenomas even for advanced adenomas, namely those of ≥ 1 cm, villous component or high grade dysplasia on histology. The reported sensitivity for detecting advanced adenoma with one-time testing was of 11%, and 20–50%, for standard guaiac-based test, and immunochemical test, respectively.^{7,8} With its relative low sensitivity in detecting polyps, FOBT is of limited value for cancer prevention. Study of one-time testing with unhydrated

guaiac-based FOBT for detection of advanced colorectal neoplasia in average-risk Hong Kong Chinese demonstrated a sensitivity and specificity of 14.3% and 79.2%, respectively, indicating its low sensitivity with considerable false positivity when being used in our local population.⁹ Although FOBT as a screening tool seems more convenient for individuals undergoing screening, it must be emphasised that adherence to repeated annual testing for negative test and prompt referral for colonoscopy in case of positive test result, are required to enhance screening effectiveness. Another form of commercially available stool test is stool DNA test which detects abnormal DNA with the use of polymerase-chain-reaction (PCR) methods as carcinoma and adenoma cells with altered DNA shed and passed in the stool. Studies on the sensitivity and specificity of this test showed superiority over the guaiac-based FOBT in detecting CRC at average-risk individuals, thus making it a potential tool for screening.⁶ However, its use at ordinary practice is not popular at the moment and it has not yet been carefully evaluated in screening cohorts, therefore no recommendation can be made with respect to the intervals of repeated testing in case of the initial negative test result.⁷ More data are certainly required before recommending it to be used as a screening tool in our community.

Colonoscopy

Colonoscopy is the ultimate confirmation test in every screening programme for the detection of CRC both for high- and average-risk individuals. Several large cohort studies have shown the feasibility and safety of colonoscopy as a primary screening test among average-risk individuals and yield of screening colonoscopy was colon cancer at 0.5–1.0% and advanced adenoma at 5–10%.^{10, 11, 12} Colonoscopy is associated with reductions in the incidence of and mortality from CRC as shown in several case-control studies. A local study of screening colonoscopy performed by fully trained endoscopists showed considerable yield and confirmed its safety for Chinese with average risk.⁹ Colonoscopy is the most effective screening tool at present as it completely fulfils the objectives of CRC screening with cancer detection and cancer prevention by endoscopic polypectomy. However, the complexity of bowel preparation, necessity of sedation, invasiveness of the examination as well as accessibility are the main issues hindering a more widespread use of colonoscopy as the primary



screening tool. As the performance and adverse events of colonoscopy are largely operator-dependent, there is concern about the effectiveness and safety when it is performed in diverse practice settings. The performance of screening colonoscopy by trained endoscopists is therefore recommended to ensure accurate and yet safe examinations. Given the example in the United States over the past decade, with the improved quality of colonoscopic performance, increased acceptance and insurance reimbursement, the volume of primary screening colonoscopy has been increasing. This trend is likely to be observed here as well.

Flexible sigmoidoscopy

Flexible sigmoidoscopy as a screening tool was supported by case control studies showing significant associations between screening flexible sigmoidoscopy and reduced mortality from colorectal cancer at left-sided colon. The beauty of sigmoidoscopy is that it can be performed with simple bowel preparation and without the necessity of sedation. However, studies with the use of screening colonoscopy have shown that more than 30% of individuals with advanced neoplasia have only proximal lesions that would not be reached with sigmoidoscopy.^{10,11} More than 20% of advanced colonic neoplasia had been missed in a local study comparing flexible sigmoidoscopy with colonoscopy for average-risk individuals.⁹ As a matter of fact, flexible sigmoidoscopy is not the test of choice for complete colonic evaluation, though it is recommended as one of the screening tools worldwide.

Double-contrast barium enema

Despite the use of double-contrast barium enema for detecting cancers in symptomatic patients for years, there are no actual data about its use as a primary screening tool in CRC screening. Previous trials comparing barium enema with colonoscopy in polyp detection, the sensitivity in detecting polyps of size >1cm by barium enema was 48% only.¹³ It is of use in detecting late-stage cancers, but its value in polyp detection is limited. Because of its poor sensitivity in detecting large-sized polyps, the Asian Pacific Working Group on Colorectal Cancer did not recommend double-contrast barium enema as a preferred CRC screening test in this region.¹⁴

Computed tomographic colonography

Computed tomographic (CT) colonography, the so-called virtual colonoscopy, provides an indirect visualisation of the colonic mucosa with minimal invasiveness. With current CT technology used in clinical practice, sensitivity in detecting polyps of size >9mm was reported to be around 85%, however, it is less sensitive and specific for polyps <6mm.^{15,16} Therefore, it is recommended by the American Cancer Society to repeat the investigation at 5-year intervals for initial negative tests.⁷ Formal bowel preparation as that for colonoscopy and gaseous inflation of the large bowel are required for an accurate examination. There is an increasing concern about the risk associated with radiation with serial CTs at the moment. These are

among other factors that hinder virtual colonoscopy as the primary screening tool currently. It seems an advantage of detecting incidental extra-colonic structural abnormalities with virtual colonoscopy, however, these may be of minimal clinical significance and could induce unnecessary anxiety and wastage of further investigations.

Colon Capsule Endoscopy

With the success of evaluation of the small bowel mucosa by wireless capsule endoscopy over the past decade, colon capsule endoscopy was developed and launched into the market. It appears to be a relatively non-invasive means for colonic evaluation, however, it is still inferior to colonoscopy with respect to the polyp pick-up rate.¹⁷ The incompleteness of colonic examination even with more intense bowel preparation than that for colonoscopy, is certainly one of the areas that need to be improved. Moreover, given the limited battery life of the capsule, shorter colon transit time should be achieved in some individuals with slow colon transit for the completeness of examination. It is premature to recommend colon capsule endoscopy as a CRC screening tool at the moment.

Conclusion

The available CRC screening tools have their pros and cons, as well as lots of unknowns when being implemented widely in the community for screening of individuals with average risk. Individuals undergoing screening should be well informed about the benefits and risks of the tests. The intervals of test repeat should be mentioned, understood and adhered to. With the enhanced public awareness of the updated local CRC epidemiology and benefits of screening, CRC screening is getting popular and will certainly continue to be one of the major cancer screening practices in Hong Kong over the coming decades.

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MCHK CME Programme Self-assessment Questions

Please read the article entitled "Tools for Colorectal Cancer Screening of Average-Risk Individuals" by Dr. Yiu-wing LUK and complete the following self-assessment questions. Participants in the MCHK CME Programme will be awarded CME credit under the Programme for returning completed answer sheets via fax (2865 0345) or by mail to the Federation Secretariat on or before 31 March 2012. Answers to questions will be provided in the next issue of The Hong Kong Medical Diary.

Questions 1-10: Please answer T (true) or F (false)

- Colorectal cancer was the second commonest malignancy in HK at the year of 2009.
- The Cancer Expert Working Group on Cancer Prevention and Screening, Department of Health, recommended colorectal screening of men and women aged 50-75 with average risk.
- Most colorectal cancers arise de novo and a precancerous stage is not present.
- Faecal occult-blood test is used as a screening test because it has a high sensitivity for detecting colonic adenomas.
- Studies with the use of screening colonoscopy have shown that more than 30% of individuals with advanced neoplasia have only proximal lesions that would not be reached with sigmoidoscopy.
- Barium enema examination is associated with a high sensitivity in detecting both colorectal adenomas and cancers.
- Virtual colonoscopy is a computed tomographic (CT) technique providing indirect visualisation of the colonic mucosa without actual colonic intubation; bowel preparation is unnecessary.
- Virtual colonoscopy is associated with a high sensitivity (85%) in detecting polyps of a size less than 6 mm.
- Studies have shown that colonoscopy as a screening tool is associated with reduction in the incidence of and mortality from colorectal cancer.
- Colonoscopy is the most effective screening tool at the present moment as it fulfils the objectives of cancer detection and prevention by endoscopic polypectomy.

ANSWER SHEET FOR MARCH 2012

Please return the completed answer sheet to the Federation Secretariat on or before 31 March 2012 for documentation. 1 CME point will be awarded for answering the MCHK CME programme (for non-specialists) self-assessment questions.

Tools for Colorectal Cancer Screening of Average-Risk Individuals

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Endo-laparoscopic Colectomy for Left-sided Colonic Tumours

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Dr. CC CHUNG

Prof. Michael KW LI

The development of laparoscopic colectomy in Hong Kong has been rapid in the last 2 decades. There are at least 3 factors accounting for this rapid development. First, there is a "market demand" for developing this minimally invasive technique because, like many areas in the western world, colorectal cancer is a very common GI malignancy in Hong Kong. Secondly, the favourable findings from multiple clinical trials and studies which suggested superior short term benefits and equivalent oncological outcomes to open surgery certainly help increase confidence of laparoscopic surgeons and coloproctologists, and increase the acceptance of the technique in the community¹⁻⁷. Of course, development of this minimally invasive technique has also been facilitated by advances in medical technology – the advent of mechanical endostaplers, alternative energy source, and hand access devices etc, all contributed⁷⁻⁹.

The pursuit of excellence – future directions

Despite the exaggerated view under the laparoscope, laparoscopic rectal cancer surgery in a deep and narrow pelvis still remains a major challenge to even the most experienced laparoscopic surgeons⁴. In an attempt to improve clarity of the view and dexterity of the dissection, investigations started to explore the feasibility of robot-assisted laparoscopic surgery, with the use of the Da Vinci system¹⁰. The system adds comfort to the chief surgeon, who sits in the console and operates with high-definition, 3-D view. Studies have already proven the feasibility of robot-assisted rectal cancer surgery^{11, 12}. But while most robotic surgeons agree the better view and more precise dissection could help preserve pelvic autonomic nerves better¹³, there is currently a lack of concrete data concerning the functional outcomes (ie, urogenital functions or dysfunctions), oncological outcomes as well as long-term survival figures associated with this modern technique.

Other investigators attempted to reduce the number of trocars or the length of the mini-laparotomy incision. In other words, they went back to square one and attempted to reduce the "access trauma". The advent of wound retractors is a good example; the device helps reduce significantly the length of the mini-laparotomy incision. The single port device is yet another late development¹⁴; the device allows laparoscopic colectomy to be carried out via a single incision (Single Incision Laparoscopic Surgery, SILS) and hence cuts down the number of trocars on the abdomen. But while SILS colectomy is proven to be feasible, it is

technically very demanding and requires stringent case selection. For this reason its penetration in the surgical community is still limited at the moment. Besides, the 2-3 cm incision used in SILS colectomy might still needs to be extended for specimen extraction at the end of operation, which means pain and complications related to mini-laparotomy have not been totally abolished.

The Hybrid NOTES technique – Endo-laparoscopic Colectomy

Investigators have also tried to develop natural orifice transluminal endoscopic surgery (NOTES) in an attempt to completely abolish abdominal incisions¹⁵. But while NOTES is feasible for simple procedures involving only removal of organs or tissues, for instance transvaginal cholecystectomy or transgastric appendectomy^{16, 17}, NOTES colectomy is much more complex and involves re-construction of anastomotic in addition to resection and removal of part of the colon. For this reason pure NOTES colectomy is still technically not feasible at present.

Inspired by the technique of transanal endoscopic microsurgery (TEM)¹⁸, the author and his co-workers have attempted to abolish the specimen – retrieved incision in laparoscopic colectomy by incorporating a "natural orifice" technique simultaneously using the TEO device. This Endo-laparoscopic technique is at best a "hybrid" NOTES technique¹⁹, but is a good substitute of pure NOTES colectomy.

Technique of Endo-laparoscopic Colectomy

The technique is suitable for most left-sided colonic tumours, but is contra-indicated for large tumours (> 4cm in dimension, the diameter of the TEO device) or tumours within 5cm from the anal verge (which impedes insertion of the TEO device). Laparoscopic mobilisation of the left-sided colon is carried out in the usual manner. The anus is the natural orifice employed in this technique, both for specimen extraction and anvil delivery and creation of the transanal stapled anastomosis. Following complete laparoscopic colonic mobilisation, the rectum is divided above the TEO device, and the detachable anvil of a circular stapler is passed into the peritoneal cavity via the device. The anvil is then passed to the proximal colon through an enterotomy, and after the spike exits at the anti-

mesenteric border, the colon is divided with endo-stapler proximal to the enterotomy. The specimen is extracted via the TEO device (Figure 1), and the rectal stump is closed with another stapler. Finally the TEO device is removed, and intracorporeal colorectal anastomosis is constructed in the usual way using the per anal circular stapler. The beauty of this technique is evident: only trocar wounds are left on the patient's abdomen at the end of surgery (Figure 2). It completely abolishes wound-related complications associated with the mini-laparotomy, including wound pain, dehiscence, infection and hernia formation.

Conclusion

We have found this endo-laparoscopic technique very feasible, with an average operation time of around 2 hours¹⁹. The technique is much easier to learn compared with SILS colectomy; there are no strict selection criteria and the technique is suitable for many patients suffering from left-colonic tumours. For this reason we believe this endo-laparoscopic technique has a wide applicability for our colorectal cancer patients in Hong Kong.



Figure 1: Extraction of colon segment via TEO device



Figure 2: Only trocar wounds are left on the patient's abdomen at the end of surgery

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Current Status of Colorectal Endoscopic Submucosal Dissection (ESD) in Hong Kong

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Introduction

Colonoscopy plays an increasingly important role in the diagnosis and treatment of colorectal pathologies. The recent interests in colorectal cancer screening and advances in endoscopic technologies like chromoendoscopy (CE) and narrow band imaging (NBI) have enabled the diagnosis of a larger number of early colorectal neoplasms, including benign polyps and early T1 cancers¹. Colonoscopic polypectomy remains the cornerstone of therapy for the majority of colorectal polyps and helps prevent colorectal cancer². If the colorectal neoplasms are too large or cannot be removed 'en bloc' endoscopically with conventional techniques (including endoscopic mucosal resection [EMR]), operative procedures are often required to reduce risks of incomplete removal and local recurrence. Laparoscopic resection represents a minimally invasive alternative for treating colorectal neoplasms that are not amenable to en bloc endoscopic resection³. However, laparoscopic surgery has to be done under general anaesthesia, is associated with operative morbidity, and is expensive.

Endoscopic submucosal dissection (ESD) is a revolutionary endoscopic procedure that enables en bloc resection of large tumours in the gastrointestinal (GI) tract, irrespective of the size of the lesion. ESD uses an electrosurgical cutting device or knife to purposely dissect the deeper layers of the submucosa to remove neoplastic mucosal lesions in a single piece (Figure 1). ESD, which was pioneered in Japan for the treatment of early gastric neoplasms, has now been successfully applied to the colon and rectum. ESD has been shown by recent studies (mostly from Japan) to be a safe and effective resection technique for large early colorectal neoplasms. The en bloc resection rate and perforation rate after colorectal ESD were found to be about 80-90% and 5-10%, respectively⁴.



Figure 1: Colorectal ESD with a Dual Knife.

Current Status and Development of Colorectal ESD in Hong Kong

The technique of ESD was introduced to Hong Kong by Professor Philip Chiu in 2004. He had received overseas training in Japan before starting his first case of ESD at the Prince of Wales Hospital. Initially, ESD was mainly used by our GI Surgeons to treat early neoplasms of the foregut⁵. With accumulation of clinical experience, ESD has been successfully applied to treat early colorectal neoplasms at our institution since 2006⁶. Both our Colorectal Surgeons and GI Physicians are actively practising colorectal ESD. Because of the increasing number of early colorectal neoplasms detected by our colorectal cancer screening programme, the number of colorectal ESD performed annually at our institution has now surpassed the number of upper GI ESD. Our present indications for colorectal ESD include: early colorectal neoplasms ≥ 2 and < 5 cm in size that are deemed not feasible for en bloc resection with conventional polypectomy or EMR, and absence of endoscopic signs of massive submucosal invasion; lesions with excavated/depressed morphology, Kudo's pit pattern Type V on CE/NBI, Sano's capillary pattern Type IIIB on NBI, or presence of 'non-lifting' sign are contraindications for colorectal ESD.

Between January 2006 and June 2009, we had performed ESD in 29 patients with early colorectal neoplasms (27 adenomas and 2 submucosal cancers) under conscious sedation⁷. En bloc resection was achieved in 27 cases. Perforations occurred in 3 patients (10.3%), and all were successfully managed with endoscopic clipping. When compared with 28 matched historical control patients with early colorectal neoplasms who underwent laparoscopic surgery, patients undergoing ESD had significantly lower morbidity (10.3% vs. 35.7%, $P = 0.02$), earlier recovery, and shorter hospital stay. A prospective randomised controlled trial that aims to compare the short-term clinical and immunologic outcomes of ESD versus laparoscopic resection for early colorectal neoplasms is currently underway at our institution.

In another case-control study conducted at our institution, 14 patients with early rectal neoplasms who underwent ESD between 2007 and 2010 were compared with a matched historical cohort of 30 patients with early rectal neoplasms who underwent local excision (LE) with either transanal excision or transanal endoscopic microsurgery⁸. En bloc resection was achieved in 12 patients (85.7%) in the ESD group and in all patients in the LE group. Comparing with the LE group, the ESD group had lower morbidity (7.1% vs. 33.3%, $P = 0.076$).



and faster recovery. Based on the results of this study, we propose to conduct another prospective randomised controlled trial that aims to compare the short-term clinical outcomes of ESD versus transanal endoscopic operation for early rectal neoplasms.

Besides Prince of Wales Hospital, at least three other Colorectal units in Hong Kong are currently performing colorectal ESD on a regular basis, including the North District Hospital, Queen Elizabeth Hospital, and Pamela Youde Nethersole Eastern Hospital⁹⁻¹³. The endoscopists from these units had all undergone observership programmes in several world-renowned endoscopy centres in Japan before starting ESD. Their preliminary data on the outcome of colorectal ESD had been presented in various local conferences (Figure 2). While most colorectal ESD procedures in Hong Kong are performed in the endoscopy centres under conscious sedation, some Colorectal Surgeons actually prefer the procedure to be done under general anaesthesia in the operating room with laparoscopic guidance – the ‘endolaparoscopic’ approach¹¹. One of the advantages of this approach is that an immediate laparoscopic repair or even bowel resection can be performed as salvage if a perforation occurs or the ESD procedure fails.

Data from Other Centers with Active Colorectal ESD Program			
Hospital	NDH	QEH	PYHNEH
First Author	Poon CM	Lee HWE ¹²	Cheung HYS ¹³
Study period	Jan 2009 - Dec 2010	Apr 2009 - Mar 2011	2008 - Jul 2011
Number of patients	23	16	8
Size of lesion	375 mm ²	36 mm × 31 mm	2 cm
Operative time	130 min	190 min	120 min
En bloc resection rate	70.3%	81.3%	/
Perforation rate	17.4%	6.3%	/

Figure 2: Local data on the outcome of colorectal ESD from centers with active colorectal ESD program.

Training of Colorectal ESD

Colorectal ESD is technically demanding and has a long learning curve. Adequate training is essential to make the procedure safe and reliable. In Japan, ESD training is a ‘step-up’ process that begins with observing/assisting ESD procedures and practising on animal models before hands-on training under the guidance of an expert endoscopist. The hands-on training programme should begin with gastric ESD, followed by rectal ESD, and finally colonic ESD. The manipulation of the diathermy knife to achieve precise incision inside the stomach is easier because there is no excessive looping or angulation. Furthermore, the risk of perforation of gastric ESD is lower than that of colorectal ESD because the gastric wall is thicker. The stomach is therefore regarded as the best location to begin one’s learning curve for complex ESD procedures. Unfortunately, Hong Kong has a low incidence of early gastric cancer and hence there are insufficient hands-on training materials for our ESD beginners to practise. In order to circumvent this problem, we have developed an in vitro porcine colon training model that allows endoscopists from low-volume centres to practise the technique of ESD in a safe environment¹⁴. This model is

inexpensive (costs only HK \$200), is easy to set up, and can be made available to all endoscopists in Hong Kong who are interested to acquire the skills of ESD (Figure 3). Although this model may help shorten the learning curve for colorectal ESD, we have to emphasise that it can never replace a standardised and structured patient-based training programme. According to a recent Japanese study on the learning curve of colorectal ESD, one would become safe in avoiding perforations after 40 procedures, and become proficient after 80 procedures¹⁵.



Figure 3: Colorectal ESD training with the in vitro porcine colon model.

Conclusions

Colorectal ESD is an emerging minimally invasive technique for treating early colorectal neoplasms in Hong Kong. Careful patient selection and adequate training are vital to the success of the procedure. Our preliminary results in terms of en bloc resection rate and perforation rate are comparable to those reported in the literature. Further research is necessary to compare the outcome of ESD and laparoscopic resection/transanal resection for treating early colorectal neoplasms.

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The Hong Kong College of
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Objectives:

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Private Psychiatrist

20 Apr

Topic : **Adjustment disorders & depression at different life stages**

Speaker : **Dr. Cindy CHIU**
Private Psychiatrist

27 Apr

Topic : **Assessment of elders with subjective cognitive complaints**

Speaker : **Dr. Wai-ching LEUNG**
Private Psychiatrist

4 May

Topic : **Anxiety and Phobias**

Speaker : **Dr. Chung-sing KAN**
Private Psychiatrist

11 May

Topic : **Basic psychotherapeutic approaches in psychiatry**

Speaker : **Dr. Lap-sun CHU**
Private Psychiatrist

18 May

Topic : **Psychosis**

Speaker : **Dr. Chi-lok CHANG**
Private Psychiatrist

Date : 13 April 2012 – 18 May 2012 (Every Friday)

Time : 7:00 p.m. – 8:30 p.m.

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Language Media : Cantonese (Supplemented with English)

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Robotics in Colorectal Surgery: Medical Miracle or Marketing Mania

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Over the past decades, laparoscopic colorectal surgery has been proven to have definite short-term benefits^{1,2}, and has rapidly gained popularity worldwide since its first report in 1991³. Despite this, conventional laparoscopic surgery still has its shortcomings, such as a limited 2-dimensional view, fixed instrument tips with only 4 degrees of freedom, limited dexterity of instruments within a confined space (e.g. the pelvis) making some demanding procedures like rectal cancer surgery continue to present a challenge⁴.

The Da Vinci robotic system® (Intuitive Surgical Inc., Sunnyvale, CA, USA) is the first tele-robotic manipulation system approved by the FDA for intra-abdominal surgery in the United States. This new technology has been developed to obviate some of the limitations of conventional laparoscopic surgery. In theory, robotic technology provides a stable camera platform with 3D imaging; the robotic handles could help transferring the surgeon's hand movement to the tip of the instrument, thus overcoming the limitations of rigid laparoscopic instruments, providing 7 degrees of movement and tremor filtration. It can also offer the surgeon a comfortable and ergonomically ideal operating position. This technique is especially suited for dissection in confined spaces requiring precise movements and fine tissue dissection, such as in the pelvis. Not surprisingly, robotic surgery has had a dramatic impact in prostate surgery: in just a few years the robot has become an essential tool in prostate cancer treatment with over 60,000 robotic assisted radical prostatectomies reported worldwide⁵.

Although many robots have been installed throughout the world, many surgeons are still struggling to determine whether this exciting new technology should be incorporated into their practice. The initial purchasing cost, instruments and maintenance fee are very high. Moreover, no large prospective randomised trial has shown definite benefits of robotics compared with conventional laparoscopy. Robotic surgery appears to be the "Ferrari" everyone wants but is affordable only to a few. Taking into these considerations, it is high time that we should better define the exact role of robotic surgery.

Following the lead of our urologists, several pioneers have started to do robotic-assisted colectomy. The first two cases of robotic-assisted colectomy were reported in 2001⁶. Since then, there have been a number of publications on the use of robotic system in colorectal surgery. However, the available literature is primarily low-level evidence with case series or small scale comparative studies on their fragmentary initial

experience demonstrating the safety and feasibility of robotic colorectal surgery, without showing a significant advantage of robot-assisted colectomy over conventional laparoscopic colectomy^{7,8}. Moreover, a recent retrospective comparative study on robotic versus conventional laparoscopic right hemicolectomy showed there was no significant difference between the two techniques in terms of conversion rate, postoperative and oncological outcomes⁹. Besides, the robotic group in this study required significantly longer operative time and higher cost compared with the laparoscopic group. These could be partly explained by the fact that colectomy often involves dissection in different quadrants of the abdomen; as a result multiple dockings in different quadrants are necessary, and the operating time would be significantly lengthened. For this reason, while the concept of robotic colectomy seems appealing, however, strong evidence supporting widespread implementation is still lacking particularly in the light of the high cost involved.

In contrast to robotic-assisted colectomy, the use of a robot in rectal dissection seems to be more promising. Since the first reported robotic total mesorectal excision (RTME) for rectal cancer by Pigazzi *et al* in 2006¹⁰, there have been several reports showing that RTME would result in lower rates of conversion and positive resection margins^{11,12}. Since converted patients may have higher complication rates and poorer oncological outcomes¹³⁻¹⁴, these better results may translate into better postoperative outcomes, superior oncological and functional outcomes after robotic TME. In theory, the endowrist of the robotic system with the stable 3-dimensional imaging should be of the greatest technological advantage as it allows the surgeon to perform fine and precise dissection in the pelvis. This may explain the zero conversion rate in the robotic group as compared with 6.2% in the laparoscopic group in the recent five comparative studies on robotic vs laparoscopic rectal cancer surgery^{11,15-18}. Currently, evidence on oncological outcomes following robotic rectal cancer surgery is still limited^{12,15-16}. The biggest case series from a multicentre study by Pigazzi *et al*¹², involving 143 patients showed a 97% 3-year overall survival and a 77.6% 3-year disease free survival, with no isolated local recurrence over a mean follow-up of 17.4 months. One recent published case control study from Korea also indicated no difference in local recurrence rates between the robotic and laparoscopic rectal cancer surgery groups¹⁵. Another comparative study by Patriiti *et al*¹⁶ evaluated 66 patients who had received either traditional laparoscopic anterior resection (TLAR) or robotic assisted laparoscopic anterior resection (RLAR); over a mean follow-up of

18.7 and 29.2 months, the local recurrence rate was 5.4% and 0% in the TLAR and RLAR respectively. Although no statistically significant difference was observed in the overall and disease-free survival, there is a trend towards a better disease-free survival in the RLAR group. Such excellent results of low conversion and local recurrence rates are very encouraging and suggest surgical robots may represent the next major leap in minimally invasive surgery, at least for the rectal cancer.

Apart from oncological outcomes, bladder and sexual dysfunction are well known complications of rectal cancer surgery. These complications are related to the avulsion or direct injury of pelvic autonomic nerves during rectal dissection. Despite the autonomic nerve-preserving techniques in TME, bladder and sexual dysfunctions have been reported to be as high as 12% and 35% respectively¹⁹⁻²¹. Moreover, when performing a laparoscopic TME, meticulous and precise dissection of the mesorectum down to the pelvic floor within a narrow pelvis, is technically very challenging to the most experienced laparoscopic colorectal surgeon. Not surprisingly, functional results in male patients undergoing laparoscopic TME are still similar, if not worse, as compared with open surgery²²⁻²³. Whether robotic rectal surgery with its technological superiority can result in a more precise pelvic dissection and hence better functional outcomes when compared with laparoscopic approach is of great interest to colorectal surgeons. To the best of our knowledge, there is no high level evidence evaluating bladder and sexual function after robotic rectal cancer surgery. In our unit, between May 2009 and December 2010, we have performed robotic rectal cancer surgery for 66 patients; 42 of them are male. Urinary and sexual functions as well as quality of life were assessed with questionnaires to obtain the international prostate symptom score (IPSS) and international index of erectile function (IIEF score) pre-operatively as well as post-operatively at one month, three months and six months after surgery. Our data showed that there were no significant changes in terms of the IPSS, IIEF as well as patients' quality of life before and after operation. Currently, an upcoming large international, multicentre randomised controlled trial, Robotic versus Laparoscopic Resection for Rectal Cancer (ROLARR), is underway and hopefully may give us more concrete data on the oncological and functional outcomes of robotic rectal surgery.

Another potential of robotic surgery is seen in intracorporeal suturing and anastomosis. The endowrist of the robot with 7 degree of movements can definitely facilitate intracorporeal sutured anastomosis. While this is not commonly done in laparoscopic colorectal surgery, currently there are some studies showing that intracorporeal anastomosis after laparoscopic right hemicolectomy could reduce specimen extraction site morbidity such as hernia and wound infection^{24,25}. Given the technical difficulties of laparoscopic intracorporeal suturing, many surgeons are reluctant to perform intracorporeal sutured anastomosis during conventional laparoscopic surgery. The robot may provide an objective advantage in this regard.

Another concern of interest is about the learning curve. Laparoscopic colorectal surgery is known to have a steep learning curve²⁶. It has been shown by urologists that robotic interface allowed a surgeon with limited

laparoscopic experience to perform minimally invasive radical proctectomy with comparable results to those of an experienced laparoscopic surgeon, after only 12 cases²⁷. In this regard, robotic surgery might be advantageous because of this ease of training.

While conventional laparoscopic colorectal surgery has paved the way by demonstrating the benefits of minimally invasive surgery, robotic surgery may provide a powerful tool for optimal management of more challenging pathology or scenario, such as rectal cancer as well as intracorporeal suturing, by virtue of the improved dexterity and vision offered. To date, most studies on robotic colorectal surgery were focused only on the investigators' initial experiences; the sample sizes in these reports were very small. Thus, large scale studies with longer follow up are desperately warranted to assess not only the feasibility of the robotic system in order to justify the widespread use of surgical robots.

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Update on single incision laparoscopic colectomy



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Prof. Wai-lun LAW

Introduction

Since the first laparoscopic cholecystectomy was performed by Prof Dr Med Erich Mühe of Böblingen, Germany in 1985¹, there has been rapid development in minimally invasive surgery and laparoscopy has become the preferred approach for many surgical procedures nowadays. Laparoscopic colectomy was first reported in 1991². It is considered as a complex procedure, which involves operating in different quadrants of the peritoneal cavity, ligation and division of major vessels, retrieval of a sizable specimen, and restoration of bowel continuity. The application of laparoscopy for colorectal cancers was once queried for its oncologic safety. With the publication of randomised trials comparing laparoscopic colectomy with open colectomy for cancer, the oncologic safety of laparoscopic colectomy was confirmed³⁻⁵. Currently, laparoscopic colectomy is widely used in the treatment of benign and malignant diseases of the colon and rectum.

Further development in minimally invasive surgery aims to minimise the trauma from the surgical incisions. The ultimate goal toward a "scarless" surgery has led to the emergence of the natural orifice transluminal endoscopic surgery (NOTES). Despite the initial enthusiasm, the current application of NOTES is limited as the equipment for NOTES is far from optimal and procedures by NOTES are difficult even for the most experienced laparoscopic surgeons. The quest for a 'scarless surgery' has also led to the development of the single incision laparoscopic surgery (SILS), in which the wound is usually hidden within the umbilicus. SILS has become a rapidly expanding field recently and it has the potential advantages to reduce the surgical trauma and incision-associated complications by reducing the number of incisions. It was initially applied in cholecystectomies, appendectomies and gynaecological operations. With the advances in the surgical techniques and instruments, SILS is now possible for more complex procedures such as nephrectomy, hepatectomy and colectomy. Single incision laparoscopic colectomy (SILC) was first reported in 2008^{6,7}.

What is single incision laparoscopic colectomy?

Laparoscopic colorectal resection is widely applied currently and it is usually performed with 3-6 trocars for the insertion of the telescope and laparoscopic instruments into the peritoneal cavity. The colon

is mobilised and the major vessels are divided intracorporeally. Transection of bowel can be performed with endoscopic staplers. An abdominal incision is usually required to retrieve the specimen and the length of the incision depends on the size of the specimen. The anastomosis can then be performed either extracorporeally, or intracorporeally with transanal insertion of a circular stapler in cases of left colon or rectal resection. The patient will have a few small (5-15 mm) incisions and an incision of about 5 cm for specimen retrieval.(Figure 1)

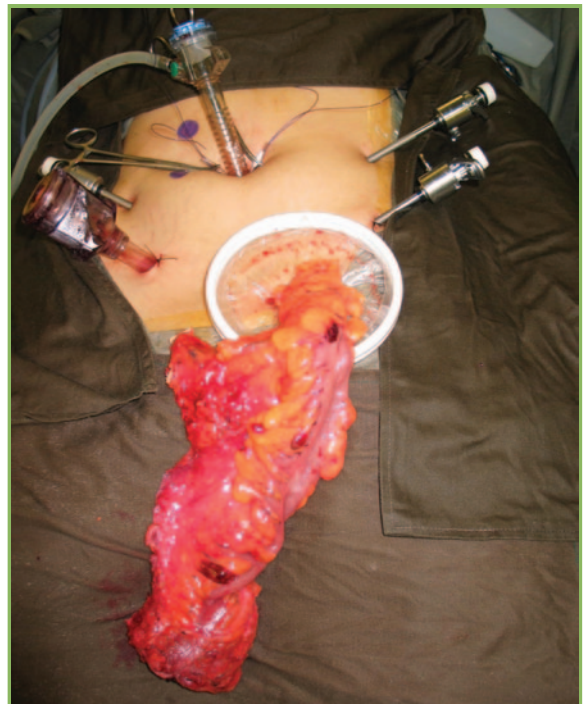


Figure 1: The positions of the trocars and the incision for specimen retrieval in a patient who underwent conventional multiport laparoscopic anterior resection

The incision-associated morbidities such as wound infection, incisional hernia and adhesions are found to be fewer in laparoscopic colectomies when compared to open operations^{8,9}. Endeavours have been made to reduce the number and the size of the incisions. With the development of SILS, the incision for specimen retrieval can be used as the only access site for the whole procedure, without other incisions as in conventional multiport laparoscopic colectomy.



In SILC, a single incision of 2-4 cm in length is made at the umbilicus for the insertion of the telescope and 2-3 laparoscopic instruments. Before single port devices were commercially available, SILS was performed with a single skin incision with multiple trocars inserted separately through the fascia or with 'home-made' devices such as a surgical glove. In cases of SILS with multiple trocars, the crowding of the trocars limits the manipulation of the instruments and causes significant clashing. The rapid development in SILS has led to the appearance of commercially available single port devices, which usually provide a durable sheath and can accommodate 3-4 working ports. These working ports allow the insertion of the telescope and laparoscopic instruments through the device to the peritoneal cavity.(Figure 2) All the essential steps of colectomy can be performed with the instruments placed within the single port device and the specimen can be retrieved through the same incision. The incision is usually well concealed within the umbilicus and a good cosmetic result can be achieved.(Figure 3) SILC was originally used for less complicated segmental colon resections such as right colectomy, left colectomy and high anterior resection. With the advances in the surgical techniques, complex procedures such as total colectomy,(Figure 4) total proctocolectomy and restorative proctocolectomy with ileal pouch anal anastomosis can be performed with single incision laparoscopy^{10,11}. In cases of total proctocolectomy or restorative proctocolectomy, the single incision is made through the ileostomy site.(Figure 5)



Figure 2: Single incision laparoscopic colectomy performed through a single port device



Figure 3: The umbilical incision of a patient after a single incision laparoscopic colectomy

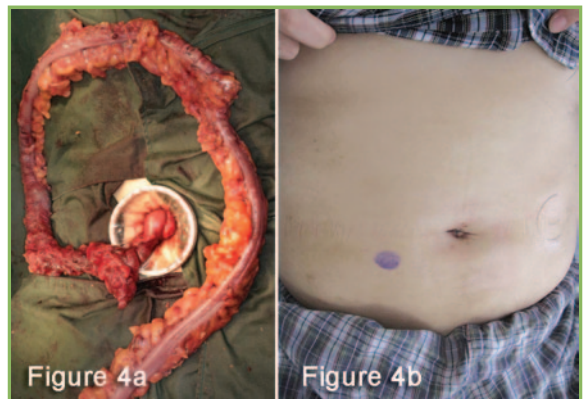


Figure 4a: The retrieval of specimen through the umbilical incision in a patient who suffered from familial adenomatous polyposis and underwent a single incision laparoscopic total colectomy with ileorectal anastomosis

Figure 4b: The umbilical incision of the patient in Figure 4a



Figure 5a: Construction of the ileal J pouch after a single incision laparoscopic proctocolectomy and ileal pouch anal anastomosis

Figure 5b: The loop ileostomy constructed at the single incision in the patient in Figure 5a

Limitations of SILC

The crowding of the telescope and instruments within a single incision causes clashing and manipulation of the instruments can be difficult. Moreover, the use of instruments in parallel with the laparoscope limits the freedom of movement of the instruments and the optimal laparoscopic view may not be obtained. The loss of triangulation also increases the difficulty of the procedure. Retraction of the bowel can be a problem as there are only a limited number of working ports in SILC. Many of the steps have to be performed using the cross hand manoeuvre.(Figure 6) Thus a new learning curve is needed even for those who are proficient in conventional multiport laparoscopy. SILC is now mostly performed for favourable lesions in selected patients. Operation in the deep pelvis for distal rectal cancers is still difficult.

The advances in technology have led to improvement in equipment for SILC and the procedure is facilitated. Laparoscopes with flexible tips are now available to provide better vision and avoid crowding with the instruments. Instruments are designed with articulated tips, different lengths and curvatures in

order to facilitate manipulation. Retraction can now be performed with external magnets.



Figure 6: Cross hand manoeuvre during single incision laparoscopic colectomy

Potential advantages and current status of SILC

An abdominal incision is associated with surgical trauma, leading to pain and potential morbidities such as infection and incisional hernia. Insertion of a laparoscopic trocar can cause an accidental injury to the internal viscera and bleeding. SILC has the potential advantages in reducing the postoperative pain and in avoiding complications related to the insertion of trocars as well as morbidities associated with multiple incisions.

Despite the problems mentioned above, SILC has become more popular since most of the procedures can be performed with ordinary laparoscopic instruments and the technique is more easily learned than NOTES. Since its first report in 2008, SILC has become increasingly popular. Now complex operations such as low anterior resection and restorative proctocolectomy with ileal pouch anal anastomosis can be performed. The safety and feasibility of SILC have been proven by numerous case series. The author reported the early experience in Hong Kong on eight patients and the technique was found to be feasible and safe¹².

In a recent systematic review of 23 studies with 378 patients, including 4 case-matched studies, SILC was found to be safe and feasible when performed by surgeons highly skilled in laparoscopy¹³. The operative mortality and morbidity were 0.5% and 12.9%, respectively. The operating time ranged from 83 to 225 min with blood loss of 0-115 ml. The conversion to open operation was only 1.6% while 4% required conversion to laparoscopy with multiple ports. The length of hospital stay ranged from 1.9-9.8 days. Thus the outcomes were found to be similar to conventional multiport laparoscopic colectomy.

Champagne et al reported a case-controlled comparison of SILC with multiport laparoscopic colectomy¹⁴. With the evaluation of 330 patients (SILC=165), the authors found that the operating time and the length of hospital stay were not significantly different between the two groups. The maximal pain score on postoperative day one was significantly lower in the SILC group. The

conversion to open laparotomy, complications and reoperations did not show any difference between the two groups.

In a randomised trial comparing SILC and conventional laparoscopic colectomy for cancer, 16 patients with SILC were compared with 16 with standard laparoscopic colectomy¹⁵. The demographics, tumour characteristics, operating time, operative mortality and morbidity were similar in the two groups.

We carried out a randomised controlled trial comparing SILC with conventional laparoscopic colectomy. There were 25 patients in each arm. The patients' demographics, tumour characteristics, operating time, blood loss, complication rate, number of lymph node harvested and resection margin did not show any significant difference between the two groups. The SILC group had consistently lower median pain score than conventional laparoscopic colectomy group in the whole post-operative course. The median hospital stay in the SILC group was also shorter than the conventional laparoscopic colectomy group.

Conclusion

While multiport laparoscopic colectomy remains the current standard in minimally invasive colon surgery, SILC has emerged into a safe and feasible technique. Although it may not be possible for all colorectal resections, SILC offers an alternative to selected patients. Early results showed that SILC is similar to conventional multiport laparoscopic colectomy regarding the short-term outcomes. Reports from case-controlled studies and randomised trials also confirmed the safety of SILC with the benefit of less pain in some series. This technique also has the potential to be combined with natural orifice surgery and robotic surgery and to further advance the scope of minimally invasive surgery.

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Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
<p>4</p> <ul style="list-style-type: none"> *HKMA Dragon Boat Team - 2012 HK Open Indoor Rowing Championships & Charity Rowathon *MPS Workshop – Mastering Your Risk 	<p>5</p> <ul style="list-style-type: none"> *Symposium of Nuclear Medicine Update on Radionuclide Therapy 	<p>6</p> <ul style="list-style-type: none"> *FMSHK Officers' Meeting *HKMA Council Meeting 	<p>7</p> <ul style="list-style-type: none"> *HKMA CW&S Community Network - Certificate Course on Alzheimer's Disease (Session 3) 	<p>8</p> <ul style="list-style-type: none"> *HKMA Kln East Community Network *HKMA NT West Community Network - Early Infant Nutrition for Long Term Health *HKMA Structured CME Programme with Hong Kong Sanatorium & Hospital Year 2012 – Glaucoma – a family physician's perspective *MPS Workshop – Mastering Difficult Interactions with Patients 	<p>9</p> <ul style="list-style-type: none"> *HKMA Dragon Boat Team - 2012 HK Open Indoor Rowing Championships & Charity Rowathon 	<p>10</p> <ul style="list-style-type: none"> *HKMA Powerlifting Subcommittee Training Session *MPS Workshop – Mastering Adverse Outcomes *Refresher Course for Health Care Providers 2011/2012 *HKMA Dragon Boat Team - 2012 HK Open Indoor Rowing Championships & Charity Rowathon
<p>11</p> <ul style="list-style-type: none"> *MPS Workshop – Mastering Your Risk 	<p>12</p> <ul style="list-style-type: none"> *MPS Workshop – Mastering Difficult Interactions with Patients 	<p>13</p> <ul style="list-style-type: none"> *HKMA Kowloon West Community Network – The Latest Update on Allergy Airway Management - Mild Asthma and Allergic Rhinitis 	<p>14</p> <ul style="list-style-type: none"> *The 8th Joint Professional Golf Tournament 	<p>15</p> <ul style="list-style-type: none"> *HKMA CME – Certificate Course for GPs 2012 	<p>16</p> <ul style="list-style-type: none"> *HKMA Powerlifting Subcommittee – Hong Kong Power-lifting Championship on 17 March 2012 *MPS Workshop – Mastering Professional Interactions 	<p>17</p> <ul style="list-style-type: none"> *MPS Workshop – Mastering Adverse Outcomes
<p>18</p> <ul style="list-style-type: none"> *HKMAPS Magic of Migration (追縱麻島之旅) - Photo Taking Tour in Mai Po 	<p>19</p> <ul style="list-style-type: none"> *MPS Workshop – Mastering Difficult Interactions with Patients 	<p>20</p> <ul style="list-style-type: none"> *HKMA Choir – Family Concert *MPS Workshop – Mastering Your Risk 	<p>21</p> <ul style="list-style-type: none"> *Joint Professional Golf Tournament 2012 *HKMA CW&S Community Network - Certificate Course on Alzheimer's Disease (Session 4) 	<p>22</p> <ul style="list-style-type: none"> *HKMA Kln East Community Network - TBC *FMSHK Executive Committee Meeting 	<p>23</p> <ul style="list-style-type: none"> *MPS Workshop – Mastering Adverse Outcomes 	<p>24</p> <ul style="list-style-type: none"> *MPS Workshop – Mastering Adverse Outcomes
<p>25</p>	<p>26</p>	<p>27</p>	<p>28</p>	<p>29</p>	<p>30</p>	<p>31</p>



Date / Time		Function	Enquiry / Remarks
1	THU 6:30 pm	MPS Workshop – Mastering Adverse Outcomes Organiser: The Hong Kong Medical Association, Speaker: Dr. HUNG Chi-wan, Emily, Venue: Eaton Hotel	HKMA CME Department Tel: 2527 8452 2.5 CME points
2	FRI 8:00 am	Joint Surgical Symposium - Surgeon's Role in Management of Colorectal Liver Metastasis Organiser: Department of Surgery, The University of Hong Kong & Hong Kong Sanatorium & Hospital, Chairman: Professor Ronnie POON, Speakers: Dr. Albert CHAN & Dr. DAI Wing-Chiu, Venue: Hong Kong Sanatorium & Hospital	Department of Surgery, Hong Kong Sanatorium & Hospital Tel: 2835 8698 1 CME point
3	SAT 2:00 pm	HKMA Powerlifting Subcommittee Training Session Organiser: The Hong Kong Medical Association, Venue: HKMA Head Office (5/F, Duke of Windsor Social Service Building, 15 Hennessy Road, Hong Kong)	Miss Alice TANG Tel: 2527 8285
	2:30 pm	MPS Workshop – Mastering Your Risk Organiser: The Hong Kong Medical Association, Speaker: Dr. LEE Wai Hung, Danny, Venue: The Hong Kong Medical Association Central Premises, Dr. Li Shu Pui Professional Education Centre, 2/F., Chinese Club Building, 21-22 Connaught Road Central	HKMA CME Department Tel: 2527 8452 2.5 CME points
6	TUE 8:00 pm	FMSHK Officers' Meeting Organiser: The Federation of Medical Societies of Hong Kong, Venue: Gallop, 2/F., Hong Kong Jockey Club Club House, Shan Kwong Road, Happy Valley, Hong Kong	Ms. Erica HUNG Tel: 2527 8898
	8:00 pm	HKMA Council Meeting Organiser: The Hong Kong Medical Association, Chairman: Dr. CHOI Kin, Venue: HKMA Head Office (5/F., Duke of Windsor Social Service Building, 15 Hennessy Road, Hong Kong)	Ms. Christine WONG Tel: 2527 8285
7	WED 1:00 pm	HKMA CW&S Community Network - Certificate Course on Alzheimer's Disease (Session 3) Organiser: HKMA CW&S Community Network, Chairman: Dr. LAW Yim Kwai, Speaker: Dr. CHAN Chun Chung, Ray, Venue: Central Premises, Central	Mr. Alan LAW Tel: 25278285
8	THU 1:00 pm	HKMA Kln East Community Network Organiser: HKMA Kln East Community Network, Chairman: Dr. Gary AU, Speaker: Dr. LAW Tse Sam, Grace, Venue: Lei Garden, Kwun Tong	Mr. Alan LAW Tel: 25278285
	1:00 pm	HKMA NT West Community Network - Early Infant Nutrition for Long Term Health Organiser: HKMA NT West Community Network, Chairman: Dr. WONG Yu Man, James, Speaker: Ms. TAI Kin Ki, Emily, Venue: Plentiful Delight Banquet, Yuen Long	Mr. Alan LAW Tel: 25278285
	2:00 pm	HKMA Structured CME Programme with Hong Kong Sanatorium & Hospital Year 2012 – Glaucoma – a family physician's perspective Organiser: The Hong Kong Medical Association, Speaker: Dr. LEUNG Yu Lung, Dexter, Venue: The Hong Kong Medical Association Central Premises, Dr. Li Shu Pui Professional Education Centre, 2/F., Chinese Club Building, 21-22 Connaught Road Central	HKMA CME Department Tel: 2527 8452 1 CME point
	6:30 pm	MPS Workshop – Mastering Difficult Interactions with Patients Organiser: The Hong Kong Medical Association, Speaker: Dr. CHENG Ngai Sing, Justin, Venue: The Hong Kong Medical Association Central Premises, Dr. Li Shu Pui Professional Education Centre, 2/F., Chinese Club Building, 21-22 Connaught Road Central	HKMA CME Department Tel: 2527 8452 2.5 CME points
10	SAT 2:00 pm	HKMA Powerlifting Subcommittee Training Session Organiser: The Hong Kong Medical Association, Venue: HKMA Head Office (5/F., Duke of Windsor Social Service Building, 15 Hennessy Road, Hong Kong)	Miss Alice TANG Tel: 2527 8285
	2:30 pm	MPS Workshop – Mastering Adverse Outcomes Organiser: The Hong Kong Medical Association, Speaker: Dr. FUNG Shu Yan, Anthony, Venue: The Hong Kong Medical Association Central Premises, Dr. Li Shu Pui Professional Education Centre, 2/F., Chinese Club Building, 21-22 Connaught Road Central	HKMA CME Department Tel: 2527 8452 2.5 CME points
	2:30 pm	Refresher Course for Health Care Providers 2011/2012 Organiser: The Hong Kong Medical Association, Speaker: Dr. CHUN Sing KUM, Venue: OLMH	Ms. Clara Tsang Tel: 2354 2440 2 CME points
	2:30 pm (11)	HKMA Dragon Boat Team - 2012 HK Open Indoor Rowing Championships & Charity Rowathon Organiser: The Hong Kong, China Rowing Association, Chairman: Dr. YAM Chun Yin, Abraham, Venue: Kowloon Park Sports Centre	Ms. Dorothy KWOK Tel: 2527 8285
11	SUN 2:00 pm	MPS Workshop – Mastering Your Risk Organiser: The Hong Kong Medical Association, Speaker: Dr. CHEUNG Kit Ying, Andy, Venue: Eaton	HKMA CME Department Tel: 2527 8452 2.5 CME points
12	MON 8:00 am	Symposium of Nuclear Medicine Update on Radionuclide Therapy Organiser: Hong Kong Society of Nuclear Medicine, Venue: InterContinental Grand Stanford Hong Kong	Symposium Secretariat Tel: 2559 9973
13	TUE 1:00 pm	HKMA Kowloon West Community Network – The Latest Update on Allergy Airway Management - Mild Asthma and Allergic Rhinitis Organiser: HKMA Kowloon West Community Network, Chairman: Dr. WONG Wai Hong, Bruce, Speaker: Dr. LO Chi Wai, Venue: Crystal Room I-III, 30/F., Panda Hotel, Tsuen Wan, N.T.	Miss Candice TONG Tel: 2527 8285 1 CME point
14	WED 11:00 am	The 8th Joint Professional Golf Tournament Organiser: The Hong Kong Medical Association, Venue: Sai Kung JC KSC	Miss Alice TANG Tel: 2527 8285
15	THU 1:00 pm	HKMA CME – Certificate Course for GPs 2012 Organiser: The Hong Kong Medical Association, Chairman: Dr. TSANG Man Wo, Speaker: Dr. Grace HUI Pui Sze, Venue: TKO	Ms. Gary Wong Tel: 3513 4821 1 CME point
17	SAT 6:30pm	HKMA Powerlifting Subcommittee – Hong Kong Power-lifting Championship on 17 March 2012 Organiser: The Hong Kong Medical Association, Venue: TBC	Miss Alice TANG Tel: 2527 8285
	2:30 pm	MPS Workshop – Mastering Professional Interactions Organiser: The Hong Kong Medical Association, Speaker: Dr. HAU Ka Lam, Venue: The Hong Kong Medical Association Central Premises, Dr. Li Shu Pui Professional Education Centre, 2/F., Chinese Club Building, 21-22 Connaught Road Central	HKMA CME Department Tel: 2527 8452 1 CME point
18	SUN 11:00 am	HKMAPS Magic of Migration (追蹤候鳥之旅) - Photo Taking Tour in Mai Po Organiser: The Hong Kong Medical Association, Venue: Mai Po	Miss Alice TANG Tel: 2527 8285



Date / Time	Function	Enquiry / Remarks
19 MON 2:00 pm	MPS Workshop – Mastering Difficult Interactions with Patients Organiser: The Hong Kong Medical Association, Speaker: Dr. CHENG Ngai-sing, Justin, Venue: Holiday Inn	HKMA CME Department Tel: 2527 8452 2.5 CME points
21 WED 8:00 pm 6:30 pm	HKMA Choir – Family Concert Organiser: The Hong Kong Medical Association, Venue: Theatre, Sheung Wan Civic Centre MPS Workshop – Mastering Your Risk Organiser: The Hong Kong Medical Association, Speaker: Dr. LEE Wai-hung, Danny, Venue: The Hong Kong Medical Association Central Premises, Dr. Li Shu Pui Professional Education Centre, 2/F., Chinese Club Building, 21-22 Connaught Road Central	Ms. Candy YUEN Tel: 2527 8285 HKMA CME Department Tel: 2527 8452 2.5 CME points
22 THU 1:00 pm	HKMA Kln East Community Network - TBC Organiser: HKMA Kln East Community Network, Chairman: Dr. MA Ping-kwan, Danny, Venue: East Ocean Seafood Restaurant, Tseung Kwan O FMSHK Executive Committee Meeting Organiser: The Federation of Medical Societies of Hong Kong, Venue: Council Chamber, 4/F, Duke of Windsor Social Service Building, 15 Hennessy Road, Wanchai, Hong Kong	Mr. Alan LAW Tel: 2527 8285 Ms. Erica HUNG Tel: 2527 8898 Fax: 2865 0345
28 WED 11:00 am 1:00 pm	Joint Professional Golf Tournament 2012 Organiser: The Hong Kong Dental Association, Chairman: Dr. HOU Lee Tsun, Laurence, Venue: JC Kau Kai CHAU Public Golf Course, Sai Kung HKMA CW&S Community Network - Certificate Course on Alzheimer's Disease (Session 4) Organiser: HKMA CW&S Community Network, Chairman: Dr. LAM Ming Yuen, Speaker: Dr. WU Yee Ming, Jimmpy, Venue: Central Premises, Central	Ms. Dorothy KWOK Tel: 2527 8285 Mr. Alan LAW Tel: 25278285
31 SAT 2:30 pm	MPS Workshop – Mastering Adverse Outcomes Organiser: The Hong Kong Medical Association, Speaker: Dr. LEUNG Kwok Ling, Ares, Venue: The Hong Kong Medical Association Central Premises, Dr. Li Shu Pui Professional Education Centre, 2/F., Chinese Club Building, 21-22 Connaught Road Central	HKMA CME Department Tel: 2527 8452 2.5 CME points

Upcoming Meeting

21/4/2012	Medical History Interest Group - 6th Meeting: "Starting from 1893 – Highlights in the History of Nursing in Hong Kong" Organisers: Hong Kong Museum of Medical Sciences Society and College of Nursing, Hong Kong, Venue: U/G Lecture Theatre, Ruttonjee Hospital, 266 Queen's Road East, Wan Chai, Hong Kong, Time: 3:30 – 5:30pm (Light refreshments from 3pm), Enquiry: Ms Cathy HUNG Tel: (852) 2549 5123
26-27/5/2012	13th Regional Osteoporosis Conference 2012 Organiser: Osteoporosis society of Hong Kong & Hong Kong Doctors Union, Venue: Hong Kong Convention and Exhibition Centre, Chairman: Dr Anita Sik-yau KAN, Enquiry: Ms Zita BAI Tel: (852) 2559 9973, Fax: (852) 2547 9528

Radiology Quiz



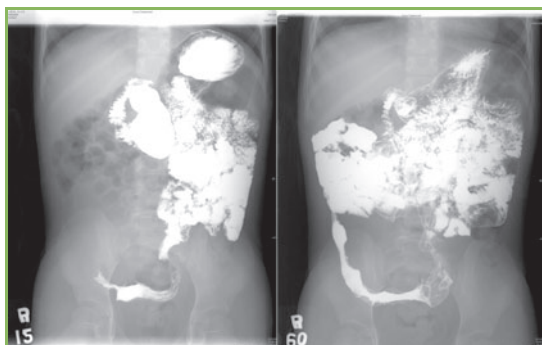
Radiology Quiz

Dr. Wendy LAM

HKWC Service Director (Radiology), Queen Mary Hospital



Dr. Wendy LAM



Medical History:

6 year-old female, complained of abdominal distension and pain

These are her Barium follow through examinations at 15 and 60min intervals.

1. What are the radiological findings?
2. What is your diagnosis or DDX ?

(See P.24 for answers)



Answer to Radiology Quiz

Findings:

Barium follow through study:

1. Large space-occupying lesion is seen at RLQ. The distal ileum is distorted and stretched. Mucosal thickening seen at that loop of small bowel.
2. The transit time is delayed. Partial obstruction seen.
3. The rest of the small bowel is unremarkable.

US and CT Abdomen:

There is a large cystic lesion with internal septation seen inside the lower abdomen and pelvis.
No significant contrast enhancement or solid component seen inside
The bowels are displaced and distorted.

Diagnosis:

Lymphangioma of small bowel causing intestinal obstruction

Discussion:

Lymphangiomas are benign lesions of vascular origin that show lymphatic differentiation. They occur in many anatomic locations and may have a paediatric or adult clinical presentation. Most (95%) occur in the neck and axillary regions; the remaining 5% are located in the mesentery, retroperitoneum, abdominal viscera, lung, and mediastinum. Lymphangiomatosis is a rare disease with multifocal lymphatic proliferation that typically presents during childhood and involves multiple parenchymal organs including the lung, liver, spleen, bone, and skin. Because lymphangiomas present across a wide age range of patients and occur in many sites, they are associated with a broad spectrum of clinical and radiologic manifestations.

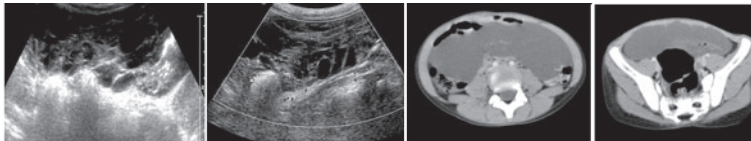
Abdominal lymphangiomas are reported to occur most commonly in the mesentery, followed by the omentum, mesocolon, and retroperitoneum. Mesenteric lymphangiomas may produce complications such as intestinal obstruction or volvulus, and infarction may occur.

Sonographically, lymphangiomas are most often multilocular cystic masses that are anechoic or contain echogenic debris. IV contrast-enhanced CT may show enhancement of the cyst wall and septa. The fluid component is typically homogeneous with low attenuation values. Occasionally, negative attenuation values occur in the presence of chyle. Calcification may occur but is uncommon. The signal pattern of lymphangiomas on MRI resembles that of fluid: low signal intensity on T1-weighted images and high signal intensity on T2-weighted images. The presence of haemorrhage or infection in the lesion may alter the CT attenuation and MRI signal pattern to give a more solid appearance.

Lymphangiomas are infrequently located in the oesophagus, stomach, small intestine, and colorectum. Most intestinal lymphangiomas are mural masses discovered incidentally at endoscopy or on radiologic studies performed for other reasons. Intramural lymphatic obstruction, disturbed endothelial permeability, inflammation, congenital absence of lymphatics, and ageing of the bowel wall have been suggested as causes for the development of intestinal lymphangiomas.

Barium studies show smoothly marginated mural masses, that deform when compression is applied. Endoscopic sonography and CT show evidence of cystic masses in the intestinal wall. Endoscopic "unroofing" or polypectomy has become the treatment of choice for small to intermediate colorectal lymphangiomas.

Ref: AJR June 2004 vol. 182 no. 6 1485-1491



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Hong Kong Sanatorium & Hospital

LI SHU PUI SYMPOSIUM 2012

Contemporary Medical Practice



Date: 17 June 2012 (Sunday)

Venue: N201, L2, Hong Kong Convention & Exhibition Centre (New Wing)

08:15 - 09:00	Welcome Keynote Lecture 1: Hong Kong Sanatorium & Hospital in Evolution	Dr. Joseph CHAN Dr. Walton LI
09:00 - 10:00	Symposium 1 Minimally Invasive Procedure – Is There a Limit? Minimally Invasive Aesthetic Surgery for Breast The New Landscape of Interventional Cardiology Recent Advance in Minimally Invasive Surgery Can Spinal Surgery be Minimally Invasive?	Chairperson Professor Simon LAW Dr. Duncan HO Dr. Walter KING Dr. Vincent KWOK Dr. Michael LI Dr. Stephen WU
10:00 - 11:00	Symposium 2 Obstetrics/Paediatrics in 2012 Changing Trends of Prenatal Diagnosis Puberty, Genes and Environment The Success of IVF – Experience Over a Quarter Century Paediatrics Oncology – Drugs, Needles and What?	Chairperson Dr. YEUNG Chap Yung Dr. TANG Oi Shan Dr. Danny LEUNG Dr. Louis LOW Dr. Milton LEONG Prof. Godfrey CHAN
11:15 - 12:15	Symposium 3 Early Diagnosis of Cancer and Effective Therapy Improved Clinical Outcome of Patients with Leukaemia, Lymphoma and Myeloma Lung Cancer – Biomarkers & Diagnostic Tools Screen-Detected vs Self-Discovered Breast Cancers: A Hong Kong Study Surgery for Gynaecological Cancer	Chairperson Dr. KWAN Wing Hong Dr. Thomas LEUNG Dr. Raymond LIANG Dr. Edmond MA/Dr. CHAN Wai Kong Dr. Polly CHEUNG/Miss Silvia LAU Dr. TAM Kar Fai
12:15 - 13:15	Li Shu Pui Lecture PET in Contemporary Medical Practice	Chairperson Dr. Garrett HO Prof. Michael M. GRAHAM
13:15 - 14:00	Lunch	
14:00 - 15:00	Symposium 4 Ultrasound, MRI, CT, PET – When and How? Ultrasound Sonography Applications in Pain Management Interventional Radiology MRI for Head & Neck Diseases Hidden Treasures Behind Our CT Scanners	Chairperson Dr. Daniel CHUA Dr. Paul AU YEUNG Dr. Carina LI Dr. Victor AI Prof. Ann KING Dr. John CHAN
15:00 - 16:00	Symposium 5 Endoscope in Diagnosis and Therapy Endo-Laparoscopic Management of Co-Existing Gall Bladder & Common Bile Duct Stones Gynaecology – Endoscopic Surgery Optimal Surgery for Prostate Cancer – The Robot Colorectal Surgery with Endoscope	Chairperson Dr. FAN Sheung Tat Dr. LAM Bing Dr. Angus CHAN Dr. YUEN Pong Mo Dr. WONG Wai Sang Prof. LAW Wai Lun
16:15 - 16:45	Keynote Lecture 2: Functional CT and MRI	Dr. Gladys LO
16:45 - 17:45	Symposium 6 Advances for Primary Care Diabetic Eye and Macula Eye Disease How Can Rehabilitation Medicine Help? The Cutting-Edge Technologies for Cutting Bone Accurately in Knee Replacement Strategy in Managing Chronic Constipation	Chairperson Dr. Alvin KWOK Dr. Elaine TSUI Dr. CHAN Wai Man Dr. Alex CHOW Dr. TANG Wai Man Dr. CHAN On On

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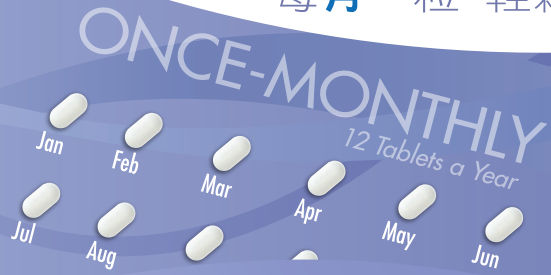
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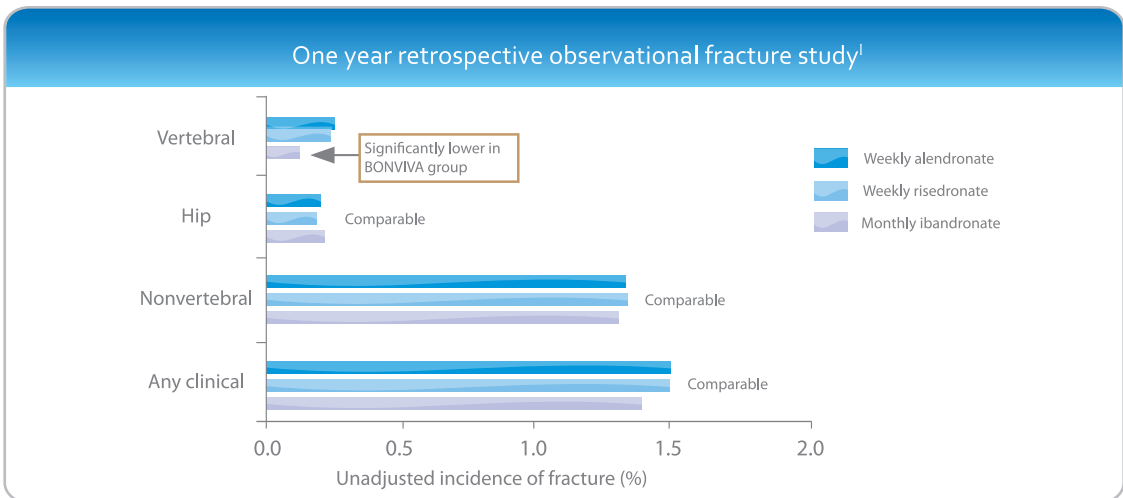
養和醫院

Hong Kong Sanatorium & Hospital



The VIBE^{*} Study

Proven efficacy: Once-monthly Bonviva vs. weekly bisphosphonates (BP)



Bonviva-treated patients had statistically lower incidence of vertebral fractures.¹

BONVIVA
 66%
 significant lower
 risk vs.
 Alendronate
 (p=0.004)

BONVIVA
 61%
 significant lower
 risk vs.
 Risedronate
 (p=0.014)

^{*}The eValuation of Ibandronate Efficacy (VIBE) study was a retrospective claims database study with a 12-month observational period that included women ≥45 years of age (n=64,182), newly prescribed monthly oral ibandronate (Bonviva) (n=7345) or weekly oral BPs (alendronate 35 mg or 70 mg, or risedronate 35 mg) (56,837) for a period between April 1, 2005 and December 31, 2005. Ref:1. Bone. 2009;44:758-765. Full prescribing information available upon request

