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[Delivered]

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#### Access

- Anoscope with innovative Bridge Design suspends prolapsing tissues to provide optimal access while placing the pursestring
- Detachable Anvil technology separates the Anvil from the instrument and provides direct access to captured tissues
- Winged Port design allows vertical or horizontal placement between the buttocks

#### Visibility

- Transparent Port and Anoscope enable the surgeon to visualize the underlying anatomy while placing the pursestring
- Detachable Anvil technology provides clear visualization of the captured tissues

#### Consistency

- Anoscope markings help guide even pursestring placement
- DST Series™ Technology provides optimal staple formation for a wide range of anastomotic scenarios
- Anchor points on Detachable Anvil provide consistency in tissue specimen formation



# ColoRectal Forum 2011

November 05~06, 2011

Location: China Medical University Hospital Building I

[www.crf2011.tw](http://www.crf2011.tw)

## Program

Taichung, Taiwan



中國醫藥大學附設醫院  
China Medical University Hospital





Ethicon  
Endo-Surgery



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CLOSING MECHANISM



ERGONOMIC DESIGN



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Cutting length compared to other commercially available 5 mm laparoscopic sealing devices.



## Avastin (bevacizumab), 癌思停已於 100年6月1日 通過健保給付 使用於轉移性大腸直腸癌第一線治療

「全民健康保險藥品給付規定」修正規定 / 第 9 章 抗腫瘤藥物 Antineoplastics drugs (自100年6月1日生效)

### 給付規定

- Bevacizumab 與含有 irinotecan / 5-fluorouracil / leucovorin 或 5-fluorouracil / leucovorin 的化學療法合併使用，作為轉移性大腸或直腸癌患者的第一線治療。
- 本藥需經事前審查核准後使用，每次申請事前審查之療程以 12 週為限，再次申請必須提出客觀證據（如：影像學）證實無惡化，才可繼續使用。使用總療程以 24 週為上限。

使用前詳閱說明書，警語及注意事項



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inhibition

# Contents

## Preliminaries

- 04 Welcome Message
- 05 Organizing Committee
- 05 International Faculty
- 05 Local Faculty
- 06 Acknowledgements

## General

- 06 Forum Information
- 08 Daily Program
- 10 Exhibition
- 10 Social Program

## Scientific Program

- 13 Curriculum Vitae of Invited Faculty
- 53 Abstract

## Welcome Message



It gives me great pleasure to invite you to participate in the 2nd Annual Colorectal Surgery Forum. This forum is scheduled to take place on November 5-6, 2011 at China Medical University Hospital, Taichung, Taiwan. This forum will focus on the standardization and trends of colorectal surgery, current concepts in anorectal surgery, and other topics regarding the future of colorectal surgery. Similar to last year, we hope to present cutting-edge, complex, and even controversial topics in the field of colorectal surgery, catering to the diverse interests of our attendees which include superb faculty from China, France, Hong Kong, Japan, Korea, Philippine, Singapore, and Taiwan. Topics such as NOTES, robotics,

TEM, TME, robotic colorectal surgery, and advanced laparoscopy will be highlighted throughout the meeting. Hopefully, this forum will not only bring all these developments to light, but also serve as a platform for us to discuss the current status of colorectal surgery in these challenging areas.

For those that have not visited our city, Taichung is a beautiful city located in the central part of Taiwan. It is blessed with temperate weather (yearly average temperature of 22.8 degrees- Celsius), making all the seasons reminiscent of spring. It is a city that boasts abundant natural resources and supports a population of more than 2 million people. The people of Taichung are full of culture and welcome international visitors, making it a great city for tourism. Along with the hospitality, Taichung is surrounded by vast mountains and rivers that offer once-in-a-lifetime experiences for sightseeing!

On behalf of the President of the China Medical University System, Chang-Hai Tsai, China Medical University Hospital, and the rest of the organizing committee, I extend my warmest welcome to everyone who will be participating in the Colorectal Surgery Forum 2011 in Taichung. I look forward seeing you in November!

A handwritten signature in black ink that reads "William Tzu-Liang Chen, M.D." The signature is written in a cursive, flowing style.

William Tzu-Liang Chen, M.D.  
Forum Director

## Organizing Committee

Dr. William Tzu-Liang Chen	China Medical University Hospital, Taichung
Dr. Tao-Wei Ke	China Medical University Hospital, Taichung
Dr. Hua-Che Chiang	China Medical University Hospital, Taichung
Dr. Sheng-Chi Chang	China Medical University Hospital, Taichung

## International Faculty

Prof. Akiyoshi Kanazawa	Osaka Red Cross Hospital, Osaka, Japan
Prof. Abe Fingerhut	Centre Hospitalier Intercommunal de Poissy-Saint-Germain
Prof. Fumio Konishi	Jichi Medical University, Japan
Prof. Michael Li	Pamela Youde Nethersole Eastern Hospital, Hong Kong
Prof. C.C. Chung	Pamela Youde Nethersole Eastern Hospital, Hong Kong
Prof. Francis Seow-Choen	Seow-Choen Colorectal Centre, Mt Elizabeth Medical Centre, Singapore
Prof. Manuel Francisco T. Roxas	The Medical City, Asian Hospital and Medical Center, Philippine General Hospital, Philippine
Prof. William Meng	Kwong Wah Hospital, Hong Kong
Prof. Yoshihisa Saida	Toho University School of Medicine, Toho University Ohashi Medical Center, Tokyo, Japan
Prof. Takeshi Nakajima	National Cancer Center Hospital, Tokyo, Japan
Prof. Robert Ding	Shanghai Tenth People's Hospital, Tenth People's Hospital of Tongji University, China
Prof. Nam-Kyu Kim	Younsei Hospital, Korea

## Local Faculty

Dr. William Tzu-Liang Chen	China Medical University Hospital, Taichung
Dr. Jeng-Fu You	Chang Gung Memorial Hospital, Taipei
Dr. Yueh-Tsung Lee	Show Chwan Memorial Hospital, Changhwa
Dr. Chung-Hung Yeh	Chiayi Chang-Gung Memorial Hospital, Chiayi
Dr. Koung-Hung Hsiao	Buddhist Tzu Chi General Hospital, Taipei Branch
Dr. Hsin-Chung Lee	Cathay General Hospital, Taipei
Prof. Jin-Tung Liang	National Taiwan University Hospital, Taipei
Dr. Bruce Lu	Kaohsiung Chang Gung Memorial Hospital, Kaohsiung
Dr. Po-Li Wei	Taipei Medical University Hospital, Taipei
Dr. Jeng-Kae Jiang	Taipei Veterans General Hospital, Taipei
Dr. Tao-Wei Ke	China Medical University Hospital, Taichung

# Acknowledgements

The CRF 2011 organizing committee would like to extend its great gratitude to the following sponsors who generously contribute and support to the success of the ColoRectal Forum 2011:

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# Forum Information

## Dates

Saturday, November 05 - Sunday, November 06, 2011

## Forum Venue

China Medical University Hospital Building I

Address: No. 2 Yuh-der Road, North Dist., Taichung City 404, Taiwan

## Language

English is the official language of the Forum.



## Registration

### • Registration Desk

1st Fl., China Medical University Hospital Building I

### • Registration Hours

Saturday, November 05, 2011	08:30 - 18:00
Sunday, November 06, 2011	07:00 - 17:00

### • On-site Registration

On-site registration is accepted at the on-site counter during the Forum period. Only cash (NTD) will be accepted.

## Coffee Break

Refreshments will be served on the 2nd floor of the CMUH Building I, China Medical University Hospital Building I.

## Shuttle Bus

### Routes & Time Table

Bus A: Evergreen Laurel Hotel (Taichung) → China Medical University Hospital Building I

Bus B: China Medical University Hospital Building I → Evergreen Laurel Hotel (Taichung)

### Saturday, November 05, 2011

Route	Boarding Area	Boarding Time	Departure Time	Arrival Time
Bus A	Hotel Lobby	08:00-08:10	08:10	08:35
Bus B	Lobby, CMUH Building I	18:15-18:25	18:25	18:50

### Sunday, November 06, 2011

Route	Boarding Area	Boarding Time	Departure Time	Arrival Time
Bus A	Hotel Lobby	06:50-07:00	07:00	07:25
Bus B	Lobby, CMUH Building I	18:00-18:10	18:10	18:35

# Daily Program

Nov. 5				
From-To	Topic	Speaker	Moderator	Period
08:30-08:50	Registration			
08:50-08:55	Opening Speech	Dr. William Tzu-Liang Chen Forum Director		00:05
08:55-09:00	Welcome Speech	Prof. Der-Yang Cho Superintendent of China Medical University Hospital		00:05
09:00-09:05	Welcome Speech	Prof. King-Jen Chang President, Taiwan Society of Coloproctology		00:05
09:05-09:10	Welcome Speech	Dr. Jinn-Shiun Chen President, Society of Colon and Rectal Surgeons, Taiwan		00:05
09:10-09:15	Welcome Speech	Prof. Jin-Tung Liang President, Taiwan Association for Endoscopic Surgery		00:05
Current Strategy in Laparoscopic Colorectal Surgery				
09:15-09:30	Set up for Starting Laparoscopic Colorectal Surgery	Prof. Akiyoshi Kanazawa	Dr. William Tzu-Liang Chen Dr. Jinn-Shiun Chen	00:15
09:30-09:45	Ergonomics for Appropriate Trocar Placement	Prof. Abe Fingerhut		00:15
09:45-10:00	Medial to Lateral or Lateral to Medial Approach for Colectomy	Prof. Abe Fingerhut		00:15
10:00-10:15	Pushing Back the Frontier of Laparoscopic Surgery for Colorectal Cancer - Taiwan Experience	Prof. Jin-Tung Liang		00:15
10:15-10:30	Green Surgery: Feasibility of Gasless Laparoscopy Assisted Surgery in Colorectal Cancer	Dr. Jeng-Kae Jiang		00:15
10:30-10:45	Coffee Break			00:15
10:45-11:00	Laparoscopic Colectomy, Tricks and Tips in Avoiding Complications	Dr. Jeng-Fu You		00:15
11:00-11:15	The Viewpoints for a Laparoscopic Surgeon to Perform Laparoscopic Colectomy	Dr. Yueh-Tsung Lee		00:15
11:15-11:30	Laparoscopic Colorectal Surgery - Credentialing of the Technique in Japan-	Prof. Fumio Konishi		00:15
11:30-11:45	Optimal Total Mesorectal Excision for Rectal Cancer : Robotic vs. Laparoscopy	Prof. Nam-Kyu Kim		00:15
11:45-12:00	Panel Discussion		00:15	
Live Demonstration				
12:00-14:00	Live Demonstration - Laparoscopic LAR	Prof. Michael Li	Dr. Ting-Ming Huang Dr. Hsin-Chung Lee	02:00
14:00-15:00	Live Demonstration - PPH or STARR Procedure	Dr. Chung-Hung Yeh		01:00
15:00-16:00	Live Demonstration - Hemorrhoidectomy	Dr. Koung-Hung Hsiao		01:00
16:00-16:15	Coffee Break		00:15	
New Concepts in Anorectal Surgery				
16:15-16:30	Minimally Invasive Anorectal Surgery	Dr. Chung-Hung Yeh	Prof. Jeng-Yi Wang Prof. Francis Seow-Choen	00:15
16:30-16:45	Management of Fistula in - Ano	Prof. C.C. Chung		00:15
16:45-17:00	Fibre and Anorectal Diseases	Prof. Francis Seow-Choen		00:15
17:00-17:15	The Application of New Energy Source in Hemorrhoidectomy	Dr. Koung-Hung Hsiao		00:15
17:15-17:30	Whitehead-Type Hemorrhoidectomy-A Useful Surgical Procedure in Selected Patients	Dr. Hsin-Chung Lee		00:15
17:30-17:45	Local Anesthetic Techniques for Anal Surgery	Prof. Manuel Francisco T. Roxas		00:15
17:45-18:00	Establishment of Anorectal Physiology (ARP) Laboratory	Prof. William Meng		00:15
18:00-18:15	Panel Discussion			00:15
18:15	Move to Dinner			

Nov. 6				
From-To	Topic	Speaker	Moderator	Period
07:30-08:30	Breakfast Symposium - Covidien			
08:30-09:00	Registration			
Normal Orifice Surgery - Where are We up to?				
09:00-09:15	Laparoscopic Surgery with Minimal Ports	Prof. Francis Seow-Choen	Dr. Jung-Cheng Kang Prof. King-Jen Chang	00:15
09:15-09:30	Inspiration after One Hundred Experiences of Single Incision Laparoscopic Colectomy	Dr. Bruce Lu		00:15
09:30-09:45	NOTES	Prof. Yoshihisa Saida		00:15
09:45-10:00	Update on Transanal Endoscopic Microsugery (TEM)	Prof. William Meng		00:15
10:00-10:15	How to Perform ColoRectal ESD and to Manage Its Complications	Prof. Takeshi Nakajima		00:15
10:15-10:30	Panel Discussion			
10:30-10:45	Coffee Break			00:15
Challenge and Frontier in ColoRectal Surgery				
10:45-11:00	Endo - Laparoscopic Approach to Obstructing Colonic Cancer	Prof. C.C. Chung	Prof. Jenq-Chang Lee Prof. Fumio Konishi	00:15
11:00-11:15	Self-Expandable Metallic Stent for ColoRectal Obstructing Lesions	Prof. Yoshihisa Saida		00:15
11:15-11:30	The Value of Adhesion Prevention in Laparoscopy	Dr. William Tzu-Liang Chen		00:15
11:30-11:45	Delayed Coloanal Anastomosis after TME for Mid to Low Rectal Cancer	Prof. Manuel Francisco T. Roxas		00:15
11:45-12:00	Laparoscopic Surgery for Rectal Cancer: A Single-Center Clinical Experience and a Retrospective Analysis of 538 Cases	Prof. Robert Ding		00:15
12:00-12:15	Laparoscopic LAR, ISR	Prof. Akiyoshi Kanazawa		00:15
12:15-12:30	Sessile Serrated Adenoma of the Colon as a Precursor of Colon Cancer	Prof. Fumio Konishi		00:15
12:30-12:45	Short Term Result of Inter-Sphincteric Resection for Low Rectal Cancer	Dr. Po-Li Wei		00:15
12:45-13:00	Panel Discussion			00:15
13:00-14:00	Lunch Symposium - J & J			01:00
Live Demonstration				
14:00-16:00	Live Demonstration - Laparoscopic Colectomy	Dr. Tao-Wei Ke Dr. William Tzu-Liang Chen	Prof. Michael Li Prof. Jin-Tung Liang	02:00
16:00-16:20	Coffee Break			00:20
Future and Trend in ColoRectal Surgery				
16:20-16:35	Surgical Ego, the Good, the Bad and the Ugly	Prof. Abe Fingerhut	Prof. Abe Fingerhut Dr. William Tzu-Liang Chen	00:15
16:35-16:50	The Ethics of Innovation in ColoRectal Surgery	Prof. Francis Seow-Choen		00:15
16:50-17:05	Early Experience with Robotic Surgery	Prof. Manuel Francisco T. Roxas		00:15
17:05-17:20	The Application of Endo - Laparoscopic Approach to Laparoscopic ColoRectal Surgery	Prof. C.C. Chung		00:15
17:20-17:35	Challenging and Critical Issues in Surgery for Low Rectal Cancer	Prof. Nam-Kyu Kim		00:15
17:35-17:50	Panel Discussion			00:15
17:50-18:10	Adjourn			00:20

# Exhibition

The exhibition is located on the 2nd floor of the CMUH Building I. All participants are welcomed to visit during the exhibition hours.

## Exhibition Hours

Saturday, November 05, 2011	08:30 - 18:00
Sunday, November 06, 2011	08:30 - 18:00

## Exhibitors

Booth 1- Johnson & Johnson Medical

Booth 2- COVIDIEN

Booth 3- Roche Products Ltd.

Booth 4- Giddi Pharma Company Limited

Booth 5- Taiwan Trump Corporation

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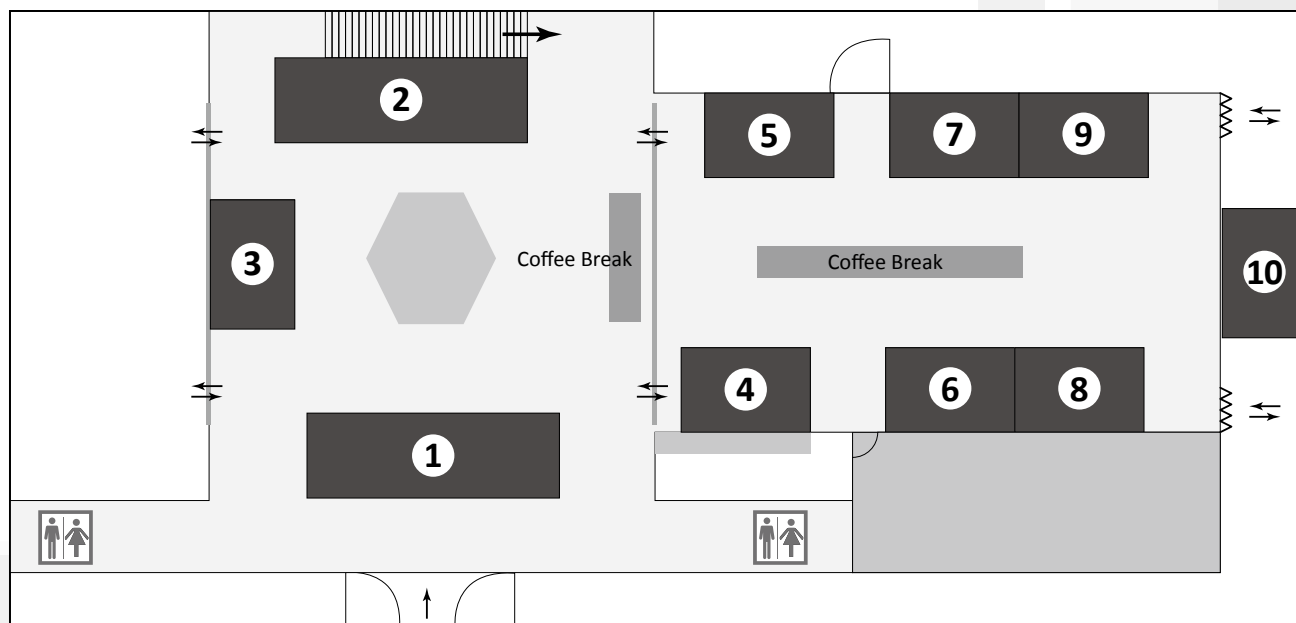
Booth 7- TTY Biopharm Company Limited

Booth 8- Baxter International Inc.

Booth 9- Surgitech Company

Booth 10- Merck Ltd., Taiwan

## Booth Layout



# Social Program

## Dinner

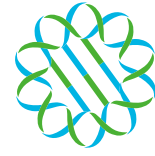
Date: Saturday, November 05, 2011

Time: 19:00-21:00

Venue: Laurel Ballroom, basement level 2, Evergreen Laurel Hotel (Taichung)

Dress: Smart Casual

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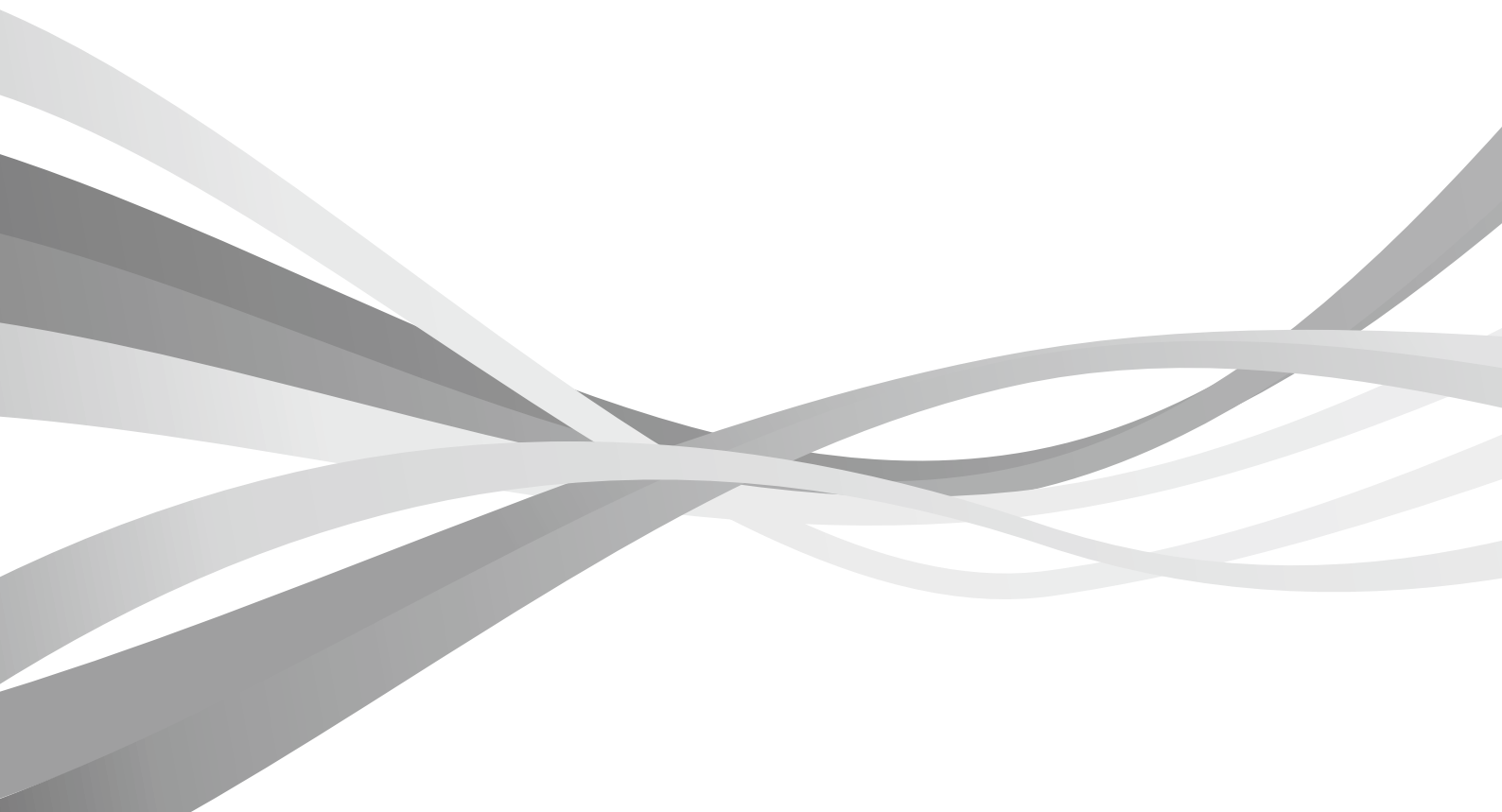
1. Ghaib M, Anderson C, Chiverton D, Bull D, Pappas D. Short-term Outcomes After Robot-assisted Total Mesorectal Excision for Rectal Cancer: Results of a Randomized Study. *Journal of Clinical Oncology*. 2011;29:2100-2106.

2. Ghaib M, Chiverton D, Anderson C, Bull D, Pappas D. Robot-assisted Total Mesorectal Excision and Open Total Mesorectal Excision for Rectal Cancer: A Randomized Study. *Journal of Clinical Oncology*. 2011;29:2107-2114.

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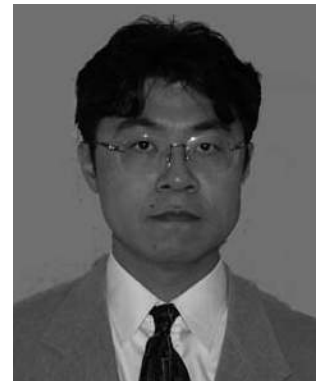
# **Curriculum Vitae of Invited Faculty**



# International Faculty

## Akiyoshi Kanazawa

Email:kana@osaka-med.jrc.or.jp



- Job Title:** Director, Ambulatory Treatment Center  
Assistant director, Department of Gastroenterological Surgery
- Organization:** Osaka Red-Cross Hospital
- Major Field:** Colorectal Surgery, Chemotherapy
- Education:** 1995-1999 Department of Gastroenterological Surgery, Kyoto University Graduate School of Medicine , Awarded the degree of Ph.D.  
1983-1989 Faculty of Medicine, Osaka Medical Collage  
Awarded the degree of M.D.
- Professional Experience:** 2008-current  
Director, Ambulatory Treatment Center, Osaka Red-Cross Hospital  
2007-current  
Assistant director, Dept of Gastroenterological Surgery, Osaka Red-Cross Hospital  
2001-2007  
Assistant director, Dept of Surgery, Shimane Prefectural Central Hospital  
1999-2001  
Research fellow, Dept of Surgery, Transplant biology(Dr. Jeffrey L. Platt) Mayo clinic, Rochester  
1994-1995  
Staff surgeon, Dept of Surgery, Saisei-kai Izuo Hospital, Osaka  
1990-1994  
Staff Surgeon, Dept of Surgery, Ako Municipal hospital, Hyogo  
1989-1990  
Resident Surgeon, Kyoto University Hospital, Kyoto
- Research Interests:** Laparoscopic colorectal surgery, Chemotherapy for colorectal cancer



## International Faculty

### Abe Fingerhut

Poissy 78303 France

Tel + 33 (0) 1 39 27 51 65

Fax + 33 (0) 1 39 27 44 02



**Job Title:** Past Chief of Surgery, Centre Hospitalier Intercommunal

**Organization:** Centre Hospitalier Intercommunal

**Major Field:** His major fields of surgery have focused on trauma and digestive surgery with a particular interest in hernia repair, gastro-esophageal and hepatobiliopancreatic surgery. He is an enthusiastic proponent of the laparoscopic approach to gastro-esophageal, biliary, and colorectal surgery.

**Education:** Born in New Brunswick, New Jersey, USA, November 12, 1939, Abe Fingerhut graduated from Highland Park High School, Highland Park, New Jersey, USA, in 1957. He was a member of the varsity track and field, and basketball teams who both won Middlesex county titles in 1956-7. He attended the "College" of the University of Pennsylvania, Philadelphia from 1957, and obtained his BA degree in Organic Chemistry in June 1961. In 1961, he decided to attend Medical School in Paris. He pursued his residency, and obtained his MD from the University of Paris with honors in 1975. Appointed Assistant Surgeon at the Centre Hospitalier Intercommunal in 1975, he rose to full time staff surgeon (Praticien Hospitalier) in 1979 and was appointed Chief of Service in 1987, position he held until March 2006. He remained on the staff until January 2007 but continued his clinical practice in North Africa. He was appointed Associate Professor of Surgery in the Department of Surgery at the Louisiana State University in New Orleans in 1993, Professor of the Collège des Médecins des Hôpitaux de Paris in 2000, and visiting professor in the University of Athens in 2009, position he holds at the present time.

Professional Experience: He is the author of or has co-signed more than 350 articles or book chapters in peer-reviewed journals and major textbooks, and has participated in more than 700 National and International meetings as speaker, chairman, or organizer. As assistant secretary of the French Association for Clinical Research, he has been involved in and responsible for the publication of more than 100 controlled or prospective trials run in France in the last 19 years. Most of these trials have been published in major international peer review journals.

He holds or has held several positions on editorial boards of major journals including Gastro-entérologie Clinique et Biologique, World Journal of Surgery (European co-editor), American Journal of Surgery (now senior member of the board), European Journal of Surgery (now part of British Journal of Surgery), Journal of Trauma, European Journal of Emergency Surgery and Intensive Care, British Journal of Surgery, Surgical Endoscopy, Indian Journal of Minimal Access Surgery, the Asian Journal of Surgery, Cochrane Library (Co-Editor of the Hepatobiliary section), ad hoc reviewer for Annals of Surgery, Archives of Surgery, Journal of American College of Surgeons, Lancet, and Journal of Surgery (Paris).

He has organized and conducted several courses on medical writing, notably for the Swiss Surgical Society, for the Tunisian Surgical Society, in Greece (EAES meeting), the Netherlands, Liechtenstein (University of Liechtenstein), Canada (Mount Sinai Hospital Toronto), University of Milan, and Turkey (Turkish Trauma Society), Adelaide (during the ISS/SIC meeting), University of Mumbai, India, and how to give a talk in Beijing and Shanghai, 2010.

Research Interests:

Academically, he taught Anatomy at the Faculté de Médecine Paris-Ouest starting in 1971, and became a Research Fellow in 1973. He was a clinical teaching assistant from 1976-1981.

His interest in evidence-based medicine (EBM) stems from the above mentioned Clinical research. He teaches EBM regularly worldwide and in particular, in the Universities of Singapore, Tunis, Milan, and in France.

At the present time, he teaches within the College of General and Digestive Surgeons in France and is one of the scientific and program committee directors of several of the Post graduate education courses which take place annually.

In connection with the EAES (European Association for Endoscopic Surgery), he teaches on a regular basis in Dundee (Cushieri Skills center), in Hamburg (European Surgical Institute), in Elancourt (Covidien Center of Excellence) and in Athens (Faculty of Medicine).

He was one of the founders of the Definitive Surgery Trauma Care (DSTC) courses of the International Association for Trauma and Surgical Intensive Care (IATSIC): as such, has played and still has an active role in the organization of worldwide courses. He is the founder of the European Society of Trauma and Emergency Surgery (ESTES) affiliated course on emergency surgery, the Emergency Surgery Course.

He has been active in teaching medical writing for over 20 years. He teaches medical writing in French and in English on a regular basis (nearly monthly) for the last 18 years.

#### Honors & Awards:

He was elected President of the European Association for Endoscopic Surgery (EAES) in June 2009 to June 2011. As such, and as the past Chairman of Scientific, Educational and Program Committee, he has a major role in the teaching courses run by the EAES on laparoscopic and endoscopic surgery throughout Europe, stressing EBM whenever possible. The programs of the EAES meetings have been under his responsibility during the last 8 years. Under his guidance, the EAES is currently a leader in the creation of the European based curriculum in laparoscopic surgery.

As a founding member and past president of the International Association for Trauma and Surgical Intensive Care (IATSIC), he has played and still has a leading role in the organization of worldwide courses on "Definitive Trauma Care": he is a co-author of the official manual.

He is one of the founding members and was president of the European Society of Trauma and Emergency Surgery (ESTES) May 2010-11.

He is member of several other national and international surgical associations including the Association Française de Chirurgie, Association de Recherche Chirurgicale (presently called FRENCH), Société Internationale de Chirurgie (past member of the executive and program committees), European Surgical Association (Founding Member and past member of Council), Surgical Association for Clinical Research in Europe (SACRE) (Founding Member and Secretary), European Digestive Surgery (President 2001), Society of American Gastroenterology Surgery (SAGES) (currently member of the International Committee and the Program Committee).

He is Fellow of the American College of Surgeons (past member of the International Committee of American College of Surgeons), Fellow of the American Association for the Surgery of Trauma AAST, Fellow of the Royal College of Physicians and Surgeons of Glasgow, and Fellow of the Royal College of Surgeons of Edinburgh.

He is member of the committee on OR safety set up in Geneva within the World Health Organization.

He sits on several Data and Safety Monitoring Boards for clinical trials.

In 1995, as the team doctor, but also as a climber, he accompanied a French expedition to the Himalayas (Barumsee).

## Fumio Konishi

Email: DZD00740@nifty.ne.jp



Job Title:	Professor of Surgery
Organization:	Saitama Medical Center, Jichi Medical University
Major Field:	Colorectal Surgery
Education:	University of Tokyo
Professional Experience:	Colorectal Surgery, Laparoscopic Surgery
Research Interests:	Carcinogenesis of the Colon and Rectum
Honors & Awards:	1994 Ohio Valley Society Award, American Society of Colon and Rectal Surgeons. 2000 Ohio Valley Society Award, American Society of Colon and Rectal Surgeons
Short Bio:	1973- 1977 Surgical Resident, Department of Surgery, Tokyo 1978-1980 Research Fellow, St. Mark's Hospital 1984 Degree of Doctor in Medical Science (PhD) 1981-1986 Staff Surgeon, Department of Surgery, University of Tokyo 1986-1988 Lecturer, Department of Surgery, Jichi Medical University Associate Professor, Department of Surgery, Jichi Medical University 2000- Professor and Chair, Department of Surgery, Saitama Medical Center, Jichi Medical University

# Michael Li

Email: mkwli@ha.org.hk



**Job Title:** Chief of Service & Consultant Surgeon,  
Department of Surgery,  
Pamela Youde Nethersole Eastern Hospital, Hong Kong  
Director of Minimal Access Surgery Training Centre,  
Pamela Youde Nethersole Eastern Hospital, Hong Kong

**Organization:** Pamela Youde Nethersole Eastern Hospital, Hong Kong

**Major Field:** Colorectal

**Education:** MBBS (London), MRCS, LRCP,  
FRCS Ed, FRCS (England),  
FCSHK, FHKAM (Surgery)

**Honors & Awards:** Hunterian Professor, Royal College of Surgeons of England (2009/10)  
Honorary Consultant in Surgery, Queen Elizabeth Hospital NHS Trust, London, UK  
Honorary Consultant in Surgery, Royal Free Hospital, London, UK  
Honorary Consultant in Laparoscopic Surgery,  
Guangzhou Medical College First Affiliated Hospital  
Honorary Consultant, Shenzhen Hospital of Beijing University  
Honorary Consultant Surgeon, St. Paul's Hospital, Hong Kong  
Honorary Consultant in General Surgery, Hong Kong Sanatorium & Hospital  
Honorary Consultant, Hospital Centre S. Januario, Health Bureau, the Macao Special  
Administrative Region Government  
Honorary Professor in Surgery, Philippine General Hospital, University of Philippines  
Visiting Associate Professor of Laparoscopic Surgery,  
Sun Yat Sen University of Medical Sciences, Guangzhou  
International Advisory Committee, the American Society of Colon & Rectal Surgeons  
Examiner in General Surgery, Royal College of Surgeons of Edinburgh  
Examiner in General Surgery, College of Surgeons of Hong Kong  
Examiner in Surgery, Part III Licentiate Exams Hong Kong

Short Bio:

Fellow of Hong Kong Academy of Medicine  
Fellow of the College of Surgeons of Hong Kong  
Fellow of Royal Society of Medicine  
Member of Asian Surgical Association  
Member of Association of Coloproctology of Great Britain & Ireland  
Member of British Medical Association  
Member of Diploma in Gastroenterology Nursing Academic Advisory Committee,  
the University of Hong Kong School of Professional & Continuing Education  
Member of European Society for Surgical Research  
Member of General Medical Association  
Member of Hong Kong Association of Day Surgery  
Member of Hong Kong Cancer Society  
Member of Hong Kong Medical Association  
Member of Hong Kong Society for Coloproctology  
Member of Hong Kong Society of Digestive Endoscopy  
Member of International HepatoPancreatobiliary Association  
Member of Medical Protection Society  
Member of the Hong Kong Society of Minimal Access Surgery  
Member of the Society of American Gastrointestinal Endoscopic Surgery

# Cliff Chi Chiu CHUNG

Ccchung827@yahoo.com.hk



**Job Title:** Consultant Surgeon, Department of Surgery  
Co-director, Minimal Access Surgery Training Centre

**Organization:** Pamela Youde Nethersole Eastern Hospital, Hong Kong

**Major Field:** Colorectal & Minimally Invasive Surgery

**Education:** Graduated from Chinese University of HK in 1989 (MBChB)

**Professional Experience:** FRCS (Edin) – 1996, FHKAM (Surgery) – 1997

**Research Interests:** Laparoscopic colorectal surgery  
Anorectal surgery

**Short Bio:** Dr. Chung graduated in 1989 from the Faculty of Medicine, the Chinese University of Hong Kong, with first prize in surgery. He received surgical training under Professor Arthur KC Li and Professor WY Lau in Prince of Wales Hospital. He became an exit fellow of the Royal College of Surgeons of Edinburgh in 1996. In 2005, he was appointed consultant surgeon in Pamela Youde Nethersole Eastern Hospital, and is currently head of colorectal team in the Surgery Department.

Dr. Chung's main interests are colorectal as well as minimal access surgery. He is currently the President of the Hong Kong Society for Coloproctology. He has been visiting surgeon to the colorectal surgery units in Cleveland Clinic Florida and Memorial Stone Kettering Centre. Dr. Chung has published more than 100 full-texted articles including peer-review journals or book chapters. He has been a regular faculty member of many laparoscopic courses, including the International Colorectal Disease Symposia and International Endo-Laparoscopic Symposia held in Hong Kong. He was also speaker and organizer for many laparoscopic and colorectal surgery courses held in Minimal Access Surgery Training Centre (MASTC) in Pamela Youde Nethersole Eastern Hospital.



## Francis Seow-Choen

seowchoen@colorectalcentre.com



- Job Title:** Colorectal Surgeon & Director
- Organization:** Seow-Choen Colorectal Centre PLC
- Professional Experience:** Prof Seow-Choen's distinguished achievements can be seen by his appointments to the Editorial Boards of many prestigious journals including Diseases of the Colon and Rectum(USA), Colorectal Disease(European), British Journal of Surgery(UK), Techniques in Coloproctology(Italian-co-editor), Indian Journal of Coloproctology(Indian), Digestive Surgery(Germany), Chinese Journal of Coloproctology(Zhongguo gangchangbing zazhi) PRC-dy chairman, Journal of Surgical Oncology, BMC Surgical Journal, the World Journal of Gastroenterology, World Journal of Gastrointestinal Surgery, World Journal of Colorectal Surgery as well as the Chinese Integrative Journal of Colorectal Disease.
- Research Interests:** Prof Seow-Choen is very actively involved in lecturing and demonstrating the finer act of surgery around the world. He had chaired many medical courses, published extensively and had been instrumental in the training of many world renown colorectal surgeons from around the world.
- Honors & Awards:** He has published 30 chapters in surgical textbooks and more than 244 original articles in peer reviewed surgical journals. He also has written 32 papers in entomological journals and three books on stick insects. Dr Seow-Choen is also the president of the two charitable organizations in Singapore ie. Guide Dogs Association of the Blind Singapore and the Chairman of the Board of Directors of City College in Singapore. He was the American Society of Colon and Rectum Surgeons' first International Travelling Fellow in 1993. He was also the ESR Hughes Lecturer for the Royal Australian College of Surgeons in 1999 and the Rupert B Turnbull Memorial Lecturer for the Cleveland Clinic, Ohio, USA in 2004 and the Philip Gordon lecturer for the Canadian Colorectal Society in 2005. Prof Seow-Choen's international achievements was recognised by Singapore in the conferment upon him of The Excellence for Singapore Award in 2000.

Short Bio:

Dr Francis Seow-Choen is an internationally recognised colorectal surgeon. He had previously held posts as the Head and senior consultant in the Department of Colorectal Surgery, Singapore General Hospital, Director of the Endoscopy Centre and Director of Surgical Oncology at the National Cancer Centre. He is now in practice at Mt Elizabeth Medical Centre. He was previously Associate Professor at both National University of Singapore and Nanyang Technological University. He is also Visiting Professor to the Tianjin Police Hospital, National Centre for Colorectal Diseases, Nanjing University Of Traditional Chinese Medicine, Wenzhou Medical College, PR China, Guigang People's Hospital, Tianjin Union Medical College, Wuhan 8th Hospital and Tianjin Institute of Colorectal Diseases. He is past president of the Society of Colorectal Surgeons of Singapore(SCRS), The Asian Federation of Coloproctology(AFCP) and he is the current and founding President The Eurasian Colorectal Technology Association(ECTA).

## Manuel Francisco Tañada Roxas

ramroxas\_md@yahoo.com



**Job Title:** President  
**Organization:** Philippine Society of Colon and Rectal Surgery  
**Major Field:** Colon and Rectal Surgery, Laparoscopic and General Surgery  
**Education:** Medicine: De La Salle University College of Medicine, 1984-1988  
 President, Student Council, 1986-1987  
 Class President, 1987-1988  
 Internship: De La Salle University Health Sciences Campus, 1988-1989  
 President, DLSUHSC Interns' Organization 1988-1989  
 Physician Licensure Exam Certification: August 1989 (Rating: 87%)  
 Residency: General Surgery, De La Salle University Health Sciences Campus, 1990-1995  
 Chief Resident, 1994  
 President, DLSUHSC Residents' Organization, 1993-1994; 1994-1995  
 Diplomate, Philippine Board of Surgery, 1995  
 Clinical Fellowship: Colon and Rectal Surgery, University of the Philippines College of Medicine- Philippine General Hospital, 1996  
 Visiting Fellowship: Anorectal Physiology and Endorectal Ultrasonography, University of Minnesota, 1997  
 Diplomate, Philippine Board of Colon and Rectal Surgery, 1998  
 International Guest Scholar, American College of Surgeons, October to December, 2002, with rotations at the Mayo Clinic, Rochester, Mn. and Memorial Sloan Kettering Cancer Center, Manhattan, NY  
 Completed all subjects in the Masters of Science Program in Clinical Medicine, University of the Philippines College of Medicine. (only thesis required for graduation)

Professional Experience: President, Philippine Society of Colon and Rectal Surgery  
Clinical Associate Professor, University of the Philippines College of Medicine  
Chief, Division of Colon and Rectal Surgery, Philippine General Hospital  
Head, The Medical City Colorectal Cancer Program and Colorectal Clinic  
President-elect, Asean Society of Colorectal Surgeons  
Lead Convenor, University of the Philippines – Philippine General Hospital Colorectal Polyp and Cancer Study Group  
Board of Directors, Philippine Association of Laparoscopic and Endoscopic Surgeons

Honors & Awards: Outstanding Research Paper, “A Randomized Controlled Trial to Determine the Effectivity of Nivatvongs Technique versus Conventional Local Anesthesia Infiltration for Out-patient Hemorrhoidectomy”. 21st Faculty Research Forum, UPCM-PGH, 2007  
2nd Prize, Research Poster Presentation, “A Double Blind, Randomized, Placebo – Controlled Trial to Determine the Effectivity of Eutectic Lidocaine / Prilocaine Cream (EMLA) in Decreasing Pain During Local Anesthetic Infiltration for Out – Patient Hemorrhoidectomy”  
10th Congress of the Asian Federation of Coloproctology, Singapore, March 24 – 26, 2005  
Outstanding Research Paper, “Evidence Based Clinical Practice Guidelines for The Management of Curable Rectal Cancer”, 19th Faculty Research Forum UPCM-PGH, 2005  
International Research Award for “Validating the Use of Rectus Muscle Fragment Welding to Control Presacral Bleeding During Rectal Mobilization”, Philippine College of Surgeons, December 7, 2004.  
International Guest Scholar, American College of Surgeons, 2002  
1st Prize Winner, Teodoro P. Nuguid Research Award for “Endorectal Ultrasonography for Pre-operative Staging of Staging of Rectal Tumors: The Philippine General Hospital Experience”, Philippine Society of Colorectal Surgeons, February 28, 2002  
Outstanding Faculty Research Paper, “Evidence Based Clinical Practice Guidelines on Seeking Preoperative Cardiac Evaluation for Noncardiac Surgery”, 14th Faculty Research Forum, UPCM-PGH, 1999  
DLSU-Medicine Class 1988 Valedictorian  
DLSU-Medicine Dean’s Special Award, 1988  
DLSU-Medicine Leadership Award, 1988  
DLSU-Medicine Outstanding Clinical Clerk, 1988  
DLSU-Medicine Outstanding Clinical Clerk in Pediatrics, 1988

44 published researches, 3 RCTs cited in Cochrane; over 100 speaking engagements; 34 varied post-graduate courses

## MENG Chia Shing William

wmeng@netvigator.com



- Job Title:** Consultant Surgeon In-charge,  
Director of the Minimally Invasive Surgery Centre & Surgical Endoscopy
- Organization:** Our Lady of Maryknoll Hospital, Hong Kong;
- Major Field:** Minimal Access Surgery, Colorectal Surgery and Endoscopy
- Education:** Graduating from the Chinese University of Hong Kong in 1989 and trained in Prince of Wales Hospital, Hong Kong. He was also one of the first who passed the Conjoint Exit Fellowship Exam of the Hong Kong Academy of Medicine and Royal College of Surgeons of Edinburgh in 1996.
- Professional Experience:** His specialty training was in the Royal London Hospital, London with Professor Norman Williams. He was also trained in St. Mark's Hospital, London, United Kingdom and National Cancer Centre, Tokyo. In 2006, he was awarded the prestigious G. B. Ong Travelling Scholarship. This allowed for more experiences of Colorectal surgery and Upper Gastrointestinal Surgery in Japan and Germany.
- Research Interests:** One of the first surgeons to perform Laparoscopic Colorectal Surgery in Hong Kong.  
Leading figure in Transanal Endoscopic Microsurgery (TEM) in China.  
Pioneered Anorectal Physiology Laboratory in Hong Kong  
Application of new techniques e.g. Natural Orifice Transluminal Endoscopic Surgery (NOTES) and Single Port Access (SPA) and Endoscopic Submucosal Dissection (ESD).
- Honors & Awards:** G. B. Ong Travelling Scholarship 2006  
Honorary Clinical Associate Professor of The Chinese University of Hong Kong  
Honorary Clinical Associate Professor of the University of Hong Kong  
Examiner for Fellowship Examination of Royal College of Surgeons of Edinburgh, UK  
Visiting Professor of Peking Union Medical College Hospital, BEIJING  
Visiting Professor of First Affiliated Hospital, Sun Yat-sen University, GUANGZHOU  
Honorary Professor of Tianjin University Hospital, TIANJIN  
Honorary Professor of University of Shanghai for Science and Technology, SHANGHAI

Short Bio:

Dr. Meng is one of the first surgeons to perform Laparoscopic Colorectal Surgery in Hong Kong. He is also the leading figure in Transanal Endoscopic Microsurgery (TEM) in China. He pioneered a comprehensive Anorectal Physiology Laboratory and applications of new techniques e.g. Natural Orifice Transluminal Endoscopic Surgery (NOTES) and Single Port Access (SPA) Surgery and Endoscopic Submucosal Dissection (ESD).

He is active in International & Local Committee. He is the Honorary Treasurer of Eurasia Coloproctology & Technology Association (ECTA) and also Steering Committee Member of Society of Medical Innovation and Technology (SMIT). He is the office bearer of Hong Kong Society for Coloproctology (HKSCP) and also Hong Kong Society of Minimally Access Surgery (HKMAS). Dr. Meng is also editor to several international peer-reviewed journals.

Dr. William Meng is experienced in pioneering Minimally Invasive Surgery and Endoscopy Centres. The very first "Endosuite" in Asia was installed in 2005 in his centre in Kwong Wah Hospital. In 2011, another cutting edge "Endolap Operation Room" was established in Our Lady of Maryknoll Hospital. The Ambulatory Centre was also successfully established and an Endoscopy Centre is in its planning stage.

## Yoshihisa Saida

yoshisaida@nifty.com



Job Title: Associate Professor

Organization: Third Dept. of Surgery, School of Medicine, Toho University

Major Field: SPECIALTY CERTIFICATION:

General Surgery, Japan Surgical Society (1992)

Gastroenterological Surgery, The Japanese Society of  
Gastroenterological Surgery (1994)

Gastroenterology, Japanese Society of Gastroenterology (1994)

Gastroenterological Endoscopy, Japan Gastroenterological Endoscopy Society (1995)

CERTIFICATED SPECIALIST:

Gastroenterological Surgery, The Japanese Society of  
Gastroenterological Surgery (1999)

Coloproctology, The Japan Society of Colo-Proctology (1999)

Endoscopic Surgery(colon), Japan Society for Endoscopic Surgery (2006)

Education: High School

Azabu High School, Private, Tokyo, 1980

Medical School

Toho University, School of Medicine, Tokyo M.D., 1986

Post Graduate School

Post-graduate course (Surgery) of Toho University, School of Medicine, Tokyo Ph. D., 1991

Post Graduate Fellowship

Endoscopic Department of Akita Red Cross Hospital (Dr. Sin-ei Kudo), 1992

Research Fellowship

Dep. Colorectal Surgery Cleveland Clinic Florida (Dr. Steven D. Wexner), 1998

Professional Experience: Associate Professor of Third Dept. of Surgery, School of Medicine, Toho University (Ohashi Medical Center)  
June 2008-present

Instructor of Endoscopic Division of Toho University Ohashi Medical Center  
January 1994-present

Chief of Department of Colorectal Surgery, Toho University Ohashi Medical Center  
April, 2004- present

Short Bio:

MEMBERSHIPS:

Japan Surgical Society  
The Japanese Society of Gastroenterological Surgery  
Japanese Society for Clinical Surgery  
Japanese Society of Gastroenterology  
Japan Gastroenterological Endoscopy Society  
Japanese Society for Abdominal Emergency Medicine  
Japan Society for Endoscopic Surgery  
The Japan Society of Colo-Proctology

INTERNATIONAL ACTIVE MEMBERSHIPS:

The American Society of Colon and Rectal Surgeons  
Society of American Gastrointestinal Endoscopic Surgeons  
Endoscopic and Laparoscopic Surgeons of Asia

FELLOW:

International College of Surgeons

COUNCILOR:

The Japanese Society of Gastroenterological Surgery (2005)  
The Japan Society of Colo-Proctology (2004)  
Japan Gastroenterological Endoscopy Society (2000- )  
Japanese Society for Abdominal Emergency Medicine (1999)  
Japan Society for Endoscopic Surgery (2000)  
Japanese College of Surgeon (2004)  
Japanese Association for Operative Medicine (2006)  
Japan Surgical Association (2002)  
The Japan Society of Adult Diseases (2008)



## Takeshi Nakajima

5-1-1-1518, Chuo-ku, Tokyo 104-0045, Japan



- Job Title:** Staff at Endoscopy Division
- Organization:** Endoscopy Division, National Cancer Center Hospital
- Education:** 1/4/90 Yokohama City University, School of Medical  
31/3/97 Graduated from the above
- Professional Experience:** 1/4/97 Trainee at Yokohama City University Hospital,  
1/4/99 Staff at Internal Medicine and Gastroenterology division  
Yokosuka Hokubu Kyosai Hospital, Yokosuka, Japan  
1/6/2001 Resident at Endoscopy Division, National Cancer Center Hospital, Tokyo, Japan  
1/6/2004 Chief Resident at Endoscopy Division, National Cancer Center Hospital, Tokyo, Japan  
1/4/2006 Research Resident at Carcinogenesis Division, National Cancer Center Institute, Tokyo, Japan  
1/6/2007 Staff at Endoscopy Division, National Cancer Center Hospital, Tokyo, Japan
- Honors & Awards:** 3/2007 Nishi Memorial Award in Gastric Cancer (Japanese Gastric Cancer Association)
- Short Bio:** Lecture and Live demonstration  
Nakajima T. Hands-on Course: Advanced course on Endoscopic Mucosal Dissection in animal model. (Cáceres, Spain, 14-15 October 2008).  
Nakajima T. Live demonstration and. 2nd Beijing International Workshop on Early Detection and Treatment of Gastrointestinal Tumor—From Screening to Therapy. (Beijing, China, 9-11 January 2009)  
Nakajima T. Lecture and Hands-on Course: Advanced course on Endoscopic Mucosal Dissection in animal model. Annual National Meeting XXXVII Congress Of Gastroenterology, XXI Congress Of Gastrointestinal Endoscopy And XIX Chilean Congress Of Hepatology. (Puerto Montt, Chile, 17-19 November 2010)  
Presentations (international conferences)

Short Bio:

Takeshi Nakajima, Ichiro Oda, Takuji Gotoda, Hisanao Hamanaka, The incidence of metachronous early gastric cancers after endoscopic mucosal resection and the adequate surveillance interval. 11th UNITED EUROPEAN GASTROENTEROLOGY WEEK, November 2003, Madrid, Spain.

Takeshi Nakajima, Yutaka Saito, Takahisa Matsuda, Daizo Clinicopathological differences of colorectal cancer in three age groups of a Japanese population. Saito, Masahiro Moriya. Digestive Disease Week. May 2004. New Orleans, USA

Takeshi Nakajima, Yutaka Saito, Takahisa Matsuda, Nozomu Kobayashi, Toshio Uraoka, Hiroaki Ikematsu, Hisatomo Ikehara, Fabian Emura, Ichiro Oda, Takuji Gotoda, Daizo Saito. Endoscopic Submucosal Dissection for Laterally Spreading Tumors in the Colorectum, UNITED EUROPEAN GASTROENTEROLOGY WEEK, September 2004, Prague, Czech

Takeshi NAKAJIMA, Yutaka SAITO, Takahisa MATSUDA, Nozomu KOBAYASHI, Toshio URAOKA, Hisatomo IKEHARA, Daizo SAITO, Yoshihiro MORIYA Clinicopathological features of metachronous colorectal cancers as they relate to the Revised Bethesda Guidelines. Analysis of a large series of surgically resected cases. Digestive Disease Week. May 2005. Chicago, USA

Nakajima T, Maekita T, Oda I, Gotoda T, Ichinose M, Saito D, Ushijima T. Induction of aberrant methylation in gastric mucosae by H. pylori infection, and its association with risk of single and multiple gastric cancers. Digestive Disease Week. May 2006. Los Angeles, USA (AGA Poster of Distinction)

Takeshi Nakajima Takuji Gotoda, Naoko Watanabe, Ichiro Oda, Daizo Saito, and Toshikazu Ushijima. Retention of high levels of DNA methylation 6 weeks after Helicobacter pylori eradication. Association American Cancer Research 2007. Los Angeles, USA.

Takeshi Nakajima, Satoshi Yamashita, Takao Maekita, Tohru Niwa, and Toshikazu Ushijima. The presence of a methylation fingerprint of Helicobacter pylori infection in human gastric mucosae. 16th UNITED EUROPEAN GASTROENTEROLOGY WEEK, October 2008, Vienna, Austria.

Takeshi Nakajima, Shotaro Enomoto, Takeshi Nakajima, Shotaro Enomoto, Takayuki Ando, Yukihiro Nakanishi, Satoshi Yamashita, Ichiro Oda, Takuji Gotoda, and Toshikazu Ushijima. Decrease of DNA methylation after Helicobacter pylori eradication. Association American Cancer Research 2009. Denver, USA.

## Weixing Ding

Dingwx@medmail.com.cn



- Job Title:** Professor of Tongji University
- Organization:** Department of Gastrointestinal Surgery of The Tenth People's Hospital of Tongji University
- Major Field:** Minimally invasive treatment of gastrointestinal tumor, Metabolic disorder syndrome
- Education:** Ph.D. of medical school of Huazhong university of science and technology ,2005  
M.D. of Southern medical university,1983
- Professional Experience:** Department of Gastrointestinal Surgery of Tongji University, 2009-2011  
Department of Gastrointestinal Surgery of First People's Hospital of Foshan, 1987-2009
- Research Interests:** Minimally invasive surgery of old people  
The relationship between tumor MDR and invasion
- Honors & Awards:** Outstanding achievement award of endoscopy of Ministry of science and technology  
The vice chairman of examination and assessment of surgeon general endoscopic experts committee of The health ministry  
The member of Chinese medical doctor association surgeon branch minimally invasive surgical specialized committee  
The member of standardization of laparoscopic surgery of Chinese cancer society colorectal cancer professional committee  
The member of standardization surgical endocrine of Chinese medical association
- Short Bio:** I have engaged in minimally invasive treatment of gastrointestinal tumors more than ten years, had treated over 1500 cases of gastric bowel cancers. And became one of the most famous laparoscopic gastrointestinal minimally invasive surgery experts in China.

# Kim Nam Kyu

E-mail: namkyuk@yuhs.ac



- Job Title:** Professor, Department of Surgery  
Chairman of board of regent of Korean Society of Clinical Oncology
- Organization:** Yonsei University College of Medicine, Seoul Korea
- Major Field:** Division of Colorectal Surgery
- Education:** Graduated from Yonsei University College of Medicine (M.D.)  
1982-1986 General Surgery Residency, Severance Hospital, Yonsei Univ. (Board of Surgery)  
1992 Graduate school of Yonsei University College of Medicine (Ph.D.)  
1994-1996 Colorectal Surgical research fellowship, Ferguson Clinic, Michigan State University
- Professional Experience:** 1989-1991: Surgical research fellow, Department of Surgery, Yonsei University College of Medicine, Seoul, Korea  
1991-1992: Instructor, Department of Surgery, Yonsei University College of Medicine, Seoul Korea  
1993-1997: Assistant Professor, Department of Surgery, Yonsei University College of Medicine, Seoul Korea  
1998-2002: Associate Professor, Department of Surgery, Yonsei University College of Medicine, Seoul Korea  
2003-present: Professor, Chief of Division of Colorectal Surgery Yonsei University College of Medicine, Seoul Korea  
2005-present: Director, Colorectal Cancer Special Clinic, Severance Hospital, Yonsei University College of Medicine, Seoul Korea  
2004-2006: Editor in Chief, Journal of Korean Society of Coloproctology  
2007-2009: Chair of Scientific Committee of Korean Society of Coloproctology  
2009-2011: Chairman of board of regent of Korean Society of Coloproctology  
2010-present: Chairman of board of regent of Korean Society of Clinical Oncology

- Research Interests:
- Tumor Biology of Colorectal Cancer
  - Chemoradiosensitivity of Rectal Cancer and related molecular biomarkers
  - Surgical treatment of Rectal Cancer
  - Preoperative staging with transrectal ultrasonography, MRI
  - Total mesorectal excision: CRM, specimen quality
  - Local excision with anal sphincter preservation
  - Minimal invasive surgery
  - Liver metastasis related Molecular biomarkers
  - Prognostic molecular classification/ Hereditary Colorectal Cancer Genetics
- Honors & Awards:
- Best Professor of Year, Yonsei Univ. College of Medicine, 1999
  - Distinguished Poster award, Korean Society of Coloproctology, 2001
  - Yuhan Medical Award, 2001
  - Best Distinguished Colorectal surgeons of middle standing, 2001, Donga daily Newspaper
  - Best professor in Clinical activities in Severance Hospital, 2003
  - Best Distinguished Colorectal surgeons, 2003, Donga daily Newspaper
  - Excellent Paper award, Korean Society of Coloproctology, 2003
  - Professor of Excellent Achievement award, Yonsei University, 2005
  - Excellent Paper award, Korean Society of Coloproctology, 2005
  - Excellent Paper award, Department of Surgery Yonsei Univ. College of Medicine, 2006
  - Excellent Poster award, Korean Society of Coloproctology, 2006
  - Best Distinguished Colorectal Surgeons 2006 Chosun Daily Newspaper
  - Excellent Paper award, Korean Society of Coloproctology, 2007
  - Selected as 20 (Colorectal Cancer) EBS (Education Broadcasting System), 2008
  - Advisory board members of Medicine, Korea Broadcasting system, 2009
  - Professor of Best Academic Achievement Award, Yonsei Univ. College of Medicine, 2010

## Local Faculty

### William, Tzu-Liang Chen

wtchen@mail.cmuh.org.tw



Job Title:	Director
Organization:	China Medical University Hospital
Major Field:	Colorectal Surgery
Education:	China Medical University, School of Medicine Taichung, Taiwan 1983-1990 Doctor of Medicine, June, 1990
Professional Experience:	Chai Chairman, Department of Surgery, China Medical University Hospital, Taichung, Taiwan. Director, Minimally Invasive Surgery Center, China Medical University Hospital, Taichung, Taiwan. Chief, Department of Colorectal Surgery, China Medical University Hospital, Taichung, Taiwan.
Research Interests:	Colorectal Cancer Surgery, laparoscopic colorectal surgery, proteomic in colorectal cancer.
Honors & Awards:	Best Surgeon of the Year, 2007, China Medical University Hospital Treasure, Endoscopic and Laparoscopic Surgeon of Asia Board member, Taiwan Society for Endoscopic Surgery
Short Bio:	Dr. William T. Chen is currently the Chief of Department of Surgery at his alma mater, China Medical University in Taichung. After earning his medical degree in Taiwan, he completed a research fellowship in colorectal surgery at the Cleveland Clinic in Florida. Utilizing his training and clinical experiences, he has made notable contributions to literature regarding cutting edge techniques for treating colorectal cancer. Dr. Chen is also a charismatic speaker who has been invited to present at over 20 international conferences. Along with serving as a practitioner and researcher, Dr. Chen enjoys his position as an assistant professor in the Department of Surgery at China Medical University.

## Jeng-Fu You

you3368@adm.cgmh.org.tw

**Job Title:** Visiting staff

**Organization:** Chang Gung Memorial Hospital at Linkou

**Major Field:** Colorectal surgery

**Education:** Taipei Medical College

**Professional Experience:** 1995-1996 Internship, Mackay Memorial Hospital  
1996-1997 General Surgery Residency R1, Shin Kong Memorial Hospital  
1997-2000 General Surgery Residency R1-3, Chang Gung Memorial H  
2000-2003 Fellow, Colorectal Surgery, Chang Gung Memorial Hospital  
2003-2011 Visiting Staff, Chang Gung Memorial Hospital  
2006-2007 Institut National de la Sante et de la Recherche Medicale (INSERM), Centre d'Etude du Polymorphisme Human (CEPH), U762, Paris  
Institut Mutuliste Montsouris Hospital, Paris  
2010-2011 Assistant Professor, Chang Gung Memorial Hospital

**Research Interests:**

**Honors & Awards:**

**Short Bio:**

# Yueh-Tsung Lee, MD.

Email: m0931m@yahoo.com.tw



- Job Title:** Director of Surgical Department
- Organization:** Chang-Hua & Chang-Bing Show Chwan Memorial Hospital, Chang-Hua county, Taiwan  
IRCAD, AITS, Taiwan
- Major Field:** Digestive surgery, Laparoscopic surgery, Endocrine surgery, Breast surgery
- Education:**
1. Candidate of Ph D degree, Department of Life Sciences, National Chung Hsing University, Taichung City, Taiwan
  2. Department of Medicine, China Medical University, Taichung City, Taiwan
- Professional Experience:**
- Resident: Taichung Veteran General Hospital ( 1996-2001 )
- Visiting staff of general surgery: Taichung Veteran General Hospital ( 2001- 2002)
- Visiting staff of general surgery and chief of emergent department, Pu-Li Veteran Hospital ( 2002-2004 )
- Visiting staff of general surgery, Chang-Hua, Show-Chwan Memorial Hospital ( 2004-2006)
- Chief of general surgery, Chang-Bing Show-Chwan Memorial Hospital (2006-2011)
- Research Interests:**
- Laparoscopic surgery
- Breast cancer biology
- Publication:**
- Regulation of androgen receptor and prostate cancer growth by cyclin-dependent kinase 5. Hsu FN, Chen MC, Chiang MC, Lin E, Lee YT, Huang PH, Lee GS, Lin H.J Biol Chem. 2011;286(38):33141-33149.
- Competitive Edge of Laparoscopic Appendectomy Versus Open Appendectomy: A Subgroup Comparison Analysis. Hurng-Sheng Wu, Hung-Wen Lai, Shou-Jen Kuo, Yueh-Tsung Lee, Dar-Ren Chen, Chin-Wen Chi and Min-Ho Huang. Journal of Laparoendoscopic & Advanced Surgical Techniques. 2011;21(3):197-202.
- Esophageal squamous cell carcinoma with intramural metastasis presenting as a pediculated polyp. Sheng-Lei Yan, Ming-Tsung Lai, Yueh-Tsung Lee, Gastrointestinal Endoscopy. 2011 ;73(1):155-156.



## Publication:

Impact of AITS laparoscopic training center on surgeons's preference for appendectomy. Hung-Wen Lai, Shig-Horng Tseng, Yueh-Tsung Lee, Chih-Hung Hsu, Dev-Aur Chou, Hurng-Sheng Wu. *Surg Endosc* 2010. 24:2210-2215.

Life-threatening hemobilia caused by hepatic pseudoaneurysm after T-tube choledochostomy: report of a case. Yueh-Tsung Lee, Ho Lin, Kuan-Yung Chen, Hurng-Sheng Wu, Min-Ho Hwang, Sheng-Lei Yan. *BMC Gastroenterology* 2010, 10:81.

Inverted appendix in an asymptomatic patient without intussusception or previous appendectomy. Sheng-Lei Yan, Yung-Hsiang Yeh, Ming-Tsung Lai, Yueh-Tsung Lee. *Colorectal Dis.* 2010;12(10):e339-340.

Ki-67 expression correlated with lymphovascular invasion in breast cancer. Yueh-Tsung Lee, Ho Lin, Ming-Tsung Lai, Zhen-Chang Guo, Cheng-Te Chen. *The Journal of Physiological Sciences.* 2009, 59: Suppl 1, 541.

Natural orifice transluminal endoscopic surgery-transgastric and transvaginal biliary endosurgery in a porcine model. Hurng-Sheng Wu, Chien-Hua Lin, Min-Chang Hung, Der-Aur Chou, Yueh-Tsung Lee, Chien-Hua Chen, De-Chuan Chan, Chin-Hung Hsu, Meng-Hang Wu, Min-Ho Huang. *Formos J Surg.* 2009; 42:13-19.

Large epidermoid cyst of the breast: report of a case. Yueh-Tsung Lee, Ho Lin, Yu-Tzu Tseng, Min-An Hwang, Chien-Long Kuo, Hurng-Sheng Wu, Min-Ho Hwang. *Formos J Surg.* 2008; 41:221-225.

Primary retroperitoneal mucinous cystadenoma: report of a case and review of the literature. Sheng-Lei Yan, Ho Lin, Chien-Long Kuo, Hurng-Sheng Wu, Ming-Ho Huang, Yueh-Tsung Lee *World J Gastroenterol.* 2008; 14(37):5769-5772.

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Chang SC, Shih JM, Shih YM, Wang PC, Liu HT, Lee HH. Advanced Colorectal Cancer Manifested with Bone Marrow Metastasis and Presented Clinically as Thrombotic Thrombocytopenic Purpura (TTP) J Soc Colon and Rectal Surgeons(Taiwan ) 2006;17:27-31.

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Short Bio:

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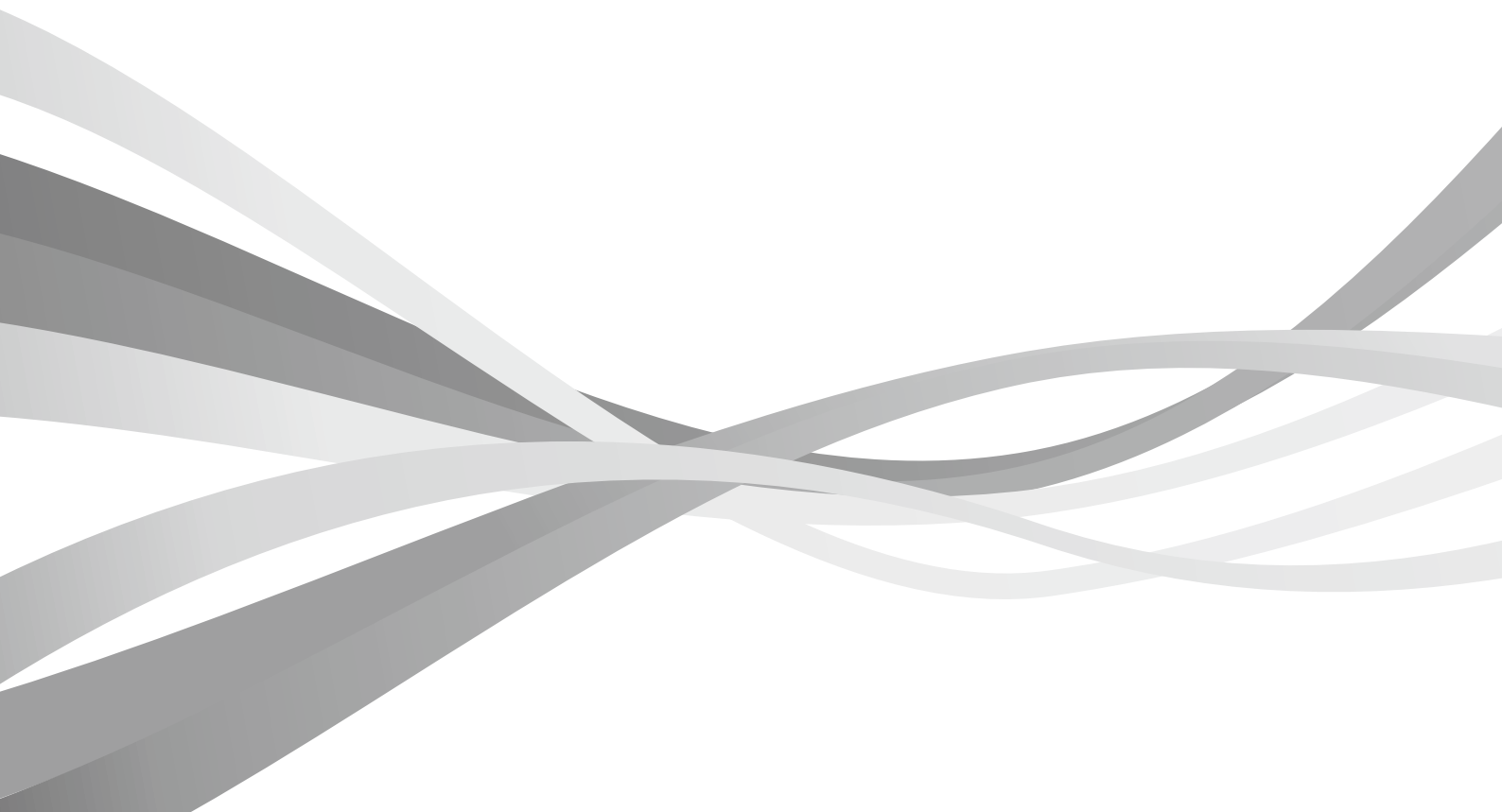
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# **Abstract**

November 05, 2011



## Set up for Starting Laparoscopic Colorectal Surgery

Akiyoshi Kanazawa

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All member of the operation team should have same understanding of the procedure for starting laparoscopic colorectal surgery. In addition, standardized setup leads to shorter setup time and precise operative procedure with minimized stress.

**How we choose the hand instruments?:** Laparoscopic colorectal surgery does not need many types of hand instruments. Important points to choose them are as follows; i) for dissection or for hold the tissues ii) atraumatic or not, iii) make much of grasping power of the tip or not. Then, the standard choice of it will be limited to nature. In addition, we should understand that choices of instruments are also limited by positioning of working port because of the limitation of the angle for vessels and target tissues.

**Monitor position:** We usually use one monitor system. While operator and assistant watch the same monitor together basically, we should put a monitor at the position where it is hard to be in a mirror image besides.

**Energy device:** A great variety of energy devices are developed, but we have to understand the characters of them to manage well. I will show how we manage the devices in our procedure.

**Patient position setting:** The laparoscopic colorectal surgery needs the position with severe angle including head low position at the time of the rectal cancer operation. To avoid troubles such as a fall or the nerve injury by the intraoperative position change, the enough consideration is necessary.

In this part, I would show the tips for instruments selection and device settings in our department with example.



## Ergonomics for Appropriate Trocar Placement

### Abe Fingerhut

Past Chief of Surgery, Centre Hospitalier Intercommunal

The trocar setup for colorectal surgery should allow full and unrestricted exploration of the abdominal cavity, irrespective of the location of the underlying pathology, as well as optimal ergonomics for the procedure necessary including appropriate vision manipulation and dissection, triangulation for suturing, whenever required, and adequate (elevation and azimuth) angles for stapling. In case of previous scars or intestinal dilation, the trocar insertion should be lateral to view the middle of the abdomen and avoiding the previous incisions. The surgeon should stand on the side or between the legs of the patient, opposite the anticipated pathology. The patient [table and equipment] should be positioned in such a way that the surgeon has access to whichever side of the patient is necessary and can move around to gain access to all four quadrants of the abdomen as required. At least one patient arm should be tucked along side to allow the surgeon to access the lower abdomen and pelvis, as necessary. Video monitors should be mobile and moved according to the site of the pathology to keep the [ideal] alignment necessary for optimal ergonomic conditions (eyes, hands of surgeon, target organ and monitor screen aligned). Minimal strenuous or stressful head position and standing stances require appropriate and adapted trocar setup and table position. We always insert our first trocar with the open method, never with the Veress needle. All other trocars are inserted under direct vision. The choice between the less aggressive 5 mm laparoscope should be weighed against the better lighting and view associated with the 10 mm scope. Often, one or more further trocars are necessary to manipulate, palpate, or move viscera for exploration. The surgeon should have both a 0° and a 30° scope at his or her disposal.

Trocar setup should strive for a manipulation angle of 60°, a 45° (30° to 60°) elevation angle, a 90° optical to target and optical target to view axis, as well as a 1:1 intracorporeal/extracorporeal length of instrument shaft ratio, clearly the ideal ergonomic settings. Table tilt and inclination can complement the trocar setup to help accomplish these angles and distances. Direct on-axis (rather than off-axis) vision is best.

Ideal ergonomics are pivotal to minimal stress and maximal efficacy for the surgeons, and optimal safety for the patient.

## **Medial to Lateral or Lateral to Medial Approach for Colectomy**

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The ideal approach to the colon and the vascular structures, leading to safe, effective and appropriately expedient colectomy is still discussed. Most surgeons prefer the medial to lateral approach the advantages of which include pneumodissection, early identification of the ureter and gonadal vessels, initial access to vessels, and up to last minute attachment of colon to parietal structures for optimal exposure (when standing opposite the colon undergoing operation) and minimal manipulation of diseased tissues and structures. Proponents of the lateral to medial approach laud “excellent exposure” to the splenic flexure without need to pull on the colon and thereby preventing iatrogenic splenic injuries, no need to retract the small bowel until later in the operation, facility in avoiding previous scars and consequent adhesions, better dissection of eventual adhesions. Personal reasons for preferring the medial to lateral approach are the ease with which splenic flexure mobilization is accomplished in left sided procedures, the exactness of identification and assessment of the ileo-colic and middle colic pedicles in right sided colectomy, as well as a better overall view of the colonic vasculature, whether on the left or the right.

## **Pushing Back the Frontier of Laparoscopic Surgery for Colorectal Cancer- Taiwan Experience**

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### **Introduction**

In Taiwan, the first case of laparoscopic colon resection was performed in May, 1993 for chronic cecal diverticulitis ; in December of the same year, the first case of laparoscopic resection of colon cancer was done for a T2N0M0 stage sigmoid cancer. At that time, the cost-effectiveness of this novel surgical technique was low and the efficacy of laparoscopic approach for colorectal cancer was still unknown. Beleaguered by these multiple unfavorable factors, Taiwanese colorectal surgeons performed this new approach to treat only a very limited number of benign colorectal lesions, let alone doing laparoscopic surgery for malignancies. However, three or four aspiring colorectal surgeons still toiled over this new surgical technology through porcine or canine model to master the basic dissection, stapling, and anastomosis skills, and even the laparoscopic property. During this period, to learn and to perform laparoscopic colorectal surgery are both very struggling.

The emergence of the Harmonic Scalpel in 1997 provided efficient laparoscopic dissection over anatomical boundaries such as the omentum, mesentery, and even retroperitoneal areolar tissues, and with the introduction of medial-to-lateral laparoscopic no-touch isolation technique, fledgling laparoscopic colorectal surgeons were greatly encouraged to perform this novel technique. Simultaneously, between 1997 and 2000, due to the surgical endeavor of a handful of pioneer surgeons in “centers of excellence” all over the world, the case numbers of laparoscopic resection for colorectal malignancies increased significantly in Taiwan. In 2000, we commenced an annual training workshop on laparoscopic technique for colorectal surgeons. By 2003, more than 500 cases of laparoscopic resection had been performed in National Taiwan University Hospital. From then on, the laparoscopic skill was reckoned as mature, and actually, laparoscopic approaches were widely applied to all of the colorectal diseases that previously had been treated by traditional open surgery. However, there was still lack of<sup>1~5</sup> a randomized trial regarding laparoscopic approach for rectal cancer. Currently, laparoscopic resection of colorectal cancer represents around 80 per cent of the personal series in National Taiwan University Hospital, as

compared to approximately 10 per cent of all cases of colorectal cancer in Taiwan.

Based on the experience from the developmental stage, we feel that the best way to penetrate laparoscopic colorectal surgery is to observe in the field and even work together with well-experienced surgeons. Although the pioneer surgeons mastered laparoscopic skill through the dissection of fresh cadavers, we feel that it is unnecessary for beginners. However, basic skill training on porcine or canine models is still necessary. In our institution, a minimally invasive training center was established since 2005. Till Dec 2010, more than 1,200 laparoscopic colorectal surgeries were performed in the colorectal division of National Taiwan University Hospital. Furthermore, efficient exposure and dissection are based on laparoscopic view of the subtlety of anatomic structures. There are several unique anatomic concepts such as the definition of mesenteric root of distal transverse colon, surgical implications of Gerota fascia, Denonvilliers' fascia, and so on should be re-scrutinized to facilitate a precise laparoscopic dissection.

## **Methods**

Since laparoscopic approach for the treatment of colorectal cancer has been a routine procedure in our institution, we currently apply laparoscopic technique to push back the new surgical frontiers, such as radical lymph node dissection over the surgical trunk of the right colon, lateral pelvis lymphatic basin of the lower rectal cancer, and para-aortic lymph nodes. Moreover, we have also extended the surgical indication of laparoscopic approach to T4 colorectal cancer and pelvic peritonectomy for rectosigmoid cancer with limited peritoneal dissemination. The technical feasibility and the short-term oncologic results are presented below :

## **Results**

### **Oncologic results of laparoscopic versus conventional open surgery for stage II or III left-sided colon cancers: a randomized controlled trial**

In consideration of statistical power up to 90%, 286 eligible patients with curable left-sided colon cancer (Tumor-Node-Metastasis Stage II and Stage III disease) requiring takedown of colonic splenic flexure to facilitate a curative left hemicolectomy were recruited randomly and equally allocated to laparoscopic and open groups. The primary endpoint was time-to-recurrence of tumor. Data was analyzed according to intention-to-treat principle.

Postrandomization exclusion occurred because metastatic disease was detected intraoperatively in 13 patients and due to patient withdrawal from the trial in 4 cases. Therefore, 135 and 134 patients actually comprised the laparoscopic and open groups,

respectively. The median follow-up of patients was 40 months (range: 18-72 months). The oncologic results were similar ( $P = 0.362$ , one-sided log-rank test) in the two groups of patients, with estimated cumulative recurrence rate of 13.2% (9/68) versus 17.2% (11/64) in Stage II disease and 20.9% (14/67) versus 25.7% (18/70) in Stage III disease, respectively. The recurrence patterns were similar between both groups. The open and laparoscopic groups were comparable in the number of dissected lymph node (15.6  $\pm$  3.0 vs. 16.0  $\pm$  6.0,  $P = 0.489$ ), and various demographic and clinicopathologic parameters.

We concluded that the estimated cumulative recurrence rate for the surgery of Stage II or III left-sided colon cancers was the same between laparoscopic and open methods.

### **Oncologic results of laparoscopic D3 lymphadenectomy for male sigmoid and upper rectal cancer with clinically positive lymph nodes**

Many Japanese surgeons routinely perform extended D3 lymph node dissection for the treatment of advanced rectosigmoid cancer with a view to achieving better tumor control. However, the application of a laparoscopic approach to perform D3 lymphadenectomy has been challenging. This phase 2 prospective study aimed to explore the oncologic results of this surgical approach.

The study was conducted during a 6-year period, in consideration of median follow-up time being  $>3$  years. The study subjects were tumor, node, metastasis system stage III rectosigmoid cancer staged by clinical images. The extent of D3 dissection and the postoperative lymph node mapping were according to the guidelines of the Japanese Society for Cancer of the Colon and Rectum. Patients were stratified according to the histopathologically proved highest level of involved lymph nodes and placed into N0, N1, N2, and N3 groups. The primary end points of the study were the estimated time to recurrence and 5-year recurrence rate of cancer after laparoscopic D3 dissection.

The estimated 5-year recurrence rates (20% in the N0 group [ $n = 10$ ]; 25% in N1 [ $n = 44$ ]; 33.3% in N2 [ $n = 30$ ]; and 42.8% in N3 [ $n = 14$ ]), time to recurrence (mean [95% confidence interval] 59.8 [42.6-76.9] months in the N0 group; 56.8 [48.3-65.2] months in N1; 46.8 [37.5-56.1] months in N2; and 43.9 [28.3-59.4] months in N3), and recurrence patterns were without significant difference (all  $P$  values  $>.05$ ) among the N0, N1, N2, and N3 groups. Therefore, by laparoscopic wide anatomic dissection, patients with lymph node involvement could be treated as well as those without lymph node metastasis. Laparoscopic D3 dissection facilitated the collection of more lymph nodes (mean  $\pm$  standard deviation, 27.4  $\pm$  4.2) for histopathologic

examination. Mapping of dissected lymph nodes showed that 18.2% (16 of 88) of patients had skip lymph node metastasis. D3 dissection facilitated upstaging of cancer (from N0 to N3) in five patients (5.1%). However, this procedure resulted in transient voiding dysfunction in 77.5% of patients and loss of ejaculatory function in 91.7%. By laparoscopic approach, the D3 lymph node dissection was safely performed through small wounds, resulting in quick functional recovery and only moderate blood loss (324.8 +/- 44.5 mL), but at the expense of a long operation time (294.4 +/- 34.8 minutes).

In conclusion, the good short-term oncologic results and quick convalescence mean that the laparoscopic D3 dissection may be recommended for patients with stage III rectosigmoid cancer who can accept the genitourinary dysfunction.

### **Technical feasibility of laparoscopic lateral pelvic lymph node dissection for patients with lower rectal cancer after concurrent chemoradiation therapy**

Forty-five procedures of laparoscopic lateral pelvic lymphadenectomy were performed in 34 patients, with dissection over bilateral lateral node foci in 11 patients and dissection over unilateral lateral node station in 23. There were four procedures in which the metastatic node was very close to or even encased the adjacent iliac vessel and therefore the lymphadenectomy was done with a surgical margin of less than 1 mm. The median (range) number of lymph nodes harvested in each lateral station was 6 (2-14). Lympho-adipose tissues from 32 (71.1%, 32/45) lateral node dissections were confirmed by histopathology to harbor metastatic adenocarcinoma. For unilateral lateral pelvic lymph node dissection, median (range) blood loss was 44 (20-240) ml and median (range) operation time was 58 (42-94) min. There was one (2.9%) operative mortality and seven (20.6%) postoperative complications. Postoperatively, most patients presented with mild postoperative pain and quick convalescence. During follow-up (mean 24 months), nine patients (27.3%) developed recurrent disease. Remarkably, all four patients with surgical margin less than 1 mm developed cancer recurrence.

We thus concluded that laparoscopic lateral pelvic lymphadenectomy is technically feasible for some selected patients.

### **Oncologic results of laparoscopic D3 lymphadenectomy for right-sided colon cancer with clinically positive lymph nodes.**

During a 6-year study period, we recruited 122 patients with right-sided colon cancer who were suspected to harbor tumor metastasis over regional lymph nodes and treated by laparoscopic D3 lymphadenectomy, in which the extended lymph node

dissection was performed over the surgical trunk of the right colon. We found that laparoscopic D3 lymphadenectomy could be performed in a very precise way. The median blood loss was 100 ml, and the median lymph node harvest was 28 in number. Pathologic staging showed that N0, N1, N2, and N3 were 21, 33, 44 and 24, respectively. The follow-up time of patients was from 2-8 (median: 5) years. The recurrence rates of N0, N1, N2, N3, and N4 patients were 19.0 % (4/21), 21.2 % (7/33), 43.2 % (19/44), and 58.3 % (14/24). Compared with N0- and N1-staged disease, N2- and N3-staged cancers were significantly poorer in prognosis. However, there was no significant difference between N0- and N1- staged patients, and between N2- and N3- patients. In conclusion, compared with historic data, the oncologic results of laparoscopic D3 lymphadenectomy seem to be similar to those of traditional open surgery. We encourage the application of laparoscopic approach to perform D3 lymphadenectomy for right-sided colon cancer in consideration of adequate oncologic clearance of cancer and minimal invasiveness for patients.

#### **Feasibility of laparoscopic surgery for T4 colorectal cancer**

T4 colorectal cancer has been a relative contraindication for laparoscopic colorectal surgery. However, we endeavored to apply this surgical technique to treat T4 colorectal cancer because laparoscopic approach features preciseness in dissection and quick convalescence of patients. Between January, 2003 and December, 2010, a total of 84 patients with T4 colorectal cancer were treated by laparoscopic surgery and prospectively followed. The patients were analyzed by intention-to-treat method. The pattern of regional organ invasion by the primary colorectal cancer included abdominal wall (n=8), retroperitoneum/Gerota fascia/ureter (n=7), duodenum (n=3), upper jejunum (n=4), ileum (n=17), ileocececum (n=4), transverse colon (n=2), urinary bladder (n=12), ovary and/or uterine tube (n=23), and the uterine cervix (n=4), and the surgical procedures were a standardized colorectal dissection plus abdominal wall excision, Gerota fascia and peri-renal fat excision, wide excision of the retroperitoneum, wedge resection of the duodenum, segmental resection of the jejunum, ileum, ileocececum transverse colon wedge resection of urinary bladder wall, oophorectomy, and hysterosalpingo-oophrectomy, respectively. Pathologic examination shows that 89.2 % (n=75) patients whose tumor could be en-bloc resected with a free circumferential resection margin more than 2 mm. Prospective follow-up of the patients (2-98 months) showed that the recurrence rate was 32.1 % (n=27). In comparison with historic data, we found that the oncologic result of the patients was not compromised by laparoscopic approach and therefore laparoscopic surgery could be applied to the treatment of T4 colorectal cancer in some highly selected patients.

## Feasibility of laparoscopic pelvic peritonectomy for rectosigmoid cancer with clinically suspected tumor peritoneal seeding

Between January, 2003 and December, 2010, we prospectively recruited 56 patients with rectosigmoid cancer with clinically suspected peritoneal seeding over the pelvic peritoneum and/or paracolic gutter, and the patients underwent laparoscopic radical resection of primary rectosigmoid cancer plus pelvic peritonectomy with the intent of curative resection of cancer. Postoperative pathologic examination showed that 4 (7.1%) patients were false positive for peritoneal seeding. The quick convalescence of laparoscopic surgery for patients could be reproduced in this patient subset. Prospective follow-up of the patients (2-98 months) showed that the estimated 5-year survival rate was 42.9 % (24/56). In comparison with historic data, we found that the oncologic result of the patients was not compromised by laparoscopic approach and therefore laparoscopic approach was not a contraindication for the treatment of rectosigmoid cancer with pelvic peritoneal seeding in some highly selected patients.

### Discussion

In summary, the possibilities for using minimally invasive technologies to improve the outcome of patients undergoing colon and rectal surgery will be enormous in the next decade. In our view, the colon and rectal specialist may possess unique skills that put her in an enviable position for a futuristic approach to minimally invasive procedures. We expect that, to facilitate the efficiency of the laparoscopic colorectal surgery and to accelerate and enhance the educational process, equipment such as high-definition laparoscopic video cameras, better energy devices, and increasingly smaller devices incorporating sophisticated technology (single-port device, Da Vinci system), and even the operating theater itself will be subjected to profound changes in the near future.

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## **Green Surgery: Feasibility of Gasless Laparoscopy Assisted Surgery in Colorectal Cancer**

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### **Gasless Laparoscopy Assisted colorectal Surgery**

The laparoscopic approach has been accepted as a therapeutic alternative for the treatment of colorectal cancer. Nonetheless, there have been problems associated with CO<sub>2</sub> pneumoperitoneum (COP), including cardiopulmonary compromise in susceptible patients. Meanwhile, hypothermia and risk of gas embolism have also been reported. In addition, several experiments showed that cancer cell proliferation and metastasis could be facilitated after COP, as such, concerns regarding port site recurrence and peritoneal carcinomatosis existed. Tenting of the abdominal wall by various mechanical devices for laparoscopic surgery, known as gasless laparoscopy (GLL) has potential advantages beyond eliminating the problems with COP. However, there has been no ideal lifting system that can be friendly manipulated and provides adequate exposure for laparoscopic procedures. To overcome this problem, we developed a new lifting system, i.e., the “Laparo-V” GLL system. This system has been modified for several times and used for various colorectal procedures. In a previous study, by using open surgery as a control, we compared COP and GLL-assisted colorectal surgery. We found that Laparo-V GLL approach is feasible in various colorectal procedures. It carries advantages comparable with those of COP; while, the intra-operative hemodynamic was more stable. Therefore, GLL approach using the Laparo-V system could be beneficial to patients with high cardiopulmonary risk. Based on these findings, the number of patients underwent GLL surgery increased substantially, around 200 patients has been collected in this report, the short term and long results will be presented.

## **Laparoscopic Colectomy, Tricks and Tips in Avoiding Complications**

**Jeng-Fu You**

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Laparoscopic colorectal surgery, like any conventional procedure, has associated complications. In general, a higher complication rate was noted during a surgeon's early learning experience. Laparoscopic colorectal procedures require ligation of some major vessels, extensive retroperitoneal dissection, mobilization of long segment of colorectum, and bowel anastomosis. Complications related to the surgical procedure can be divided into intraoperative and postoperative complications. Intraoperative complications (such as bleeding, bowel injury, and ureter injury ) and postoperative complications (such as anastomotic insufficiency, bleeding, and wound infection) are not uncommon during the newly developmental periods. How to prevent and minimize these complications are an important issue for a laparoscopic colorectal surgeon.

## **The Viewpoints for a Laparoscopic Surgeon to Perform Laparoscopic Colectomy**

**Yueh-Tusng Lee<sup>1,2</sup> Hurng-Sheng Wu<sup>1,2</sup> Ming-Ho Huang<sup>1,2</sup> Jöel Leroy<sup>3</sup>**

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Since first described by Dr Jacobs in 1991, laparoscopic procedures have yielded a technique in evolution for treatment of colorectal non-malignant and malignant diseases. Laparoscopy assisted colectomy is complicated procedures because of work in multiple anatomic regions including four quadrants of abdomen, necessitating to divide multiple mesenteric vessels, establishing the bowel continuity and removing a fairly large specimen. Since 1987, while laparoscopic cholecystectomy was introduced, laparoscopic surgery is now the gold standard for many of the digestive operations, transforming surgery over the past 2 decades. Previous limitations such as two-dimensional video, deficient tactile feedback, defect of laparoscopic optics, instruments, certain skills and anesthetic risks were overcome. Fifteen to thirty cases of laparoscopic colectomy experience were suggested by investigations in the learning curve for laparoscopic colectomy. For a general surgeon to perform laparoscopy-assisted colectomy, not only the basic training in residency but also subspecific learning is important. The recent advances in integration of computer sciences, biomechanics and electronic miniaturization and development in Robotic surgery, NOTES, SILS procedures have made it possible to make the laparoscopic surgery less invasive and highly precise. In 2008, with support from IRCAD France (Research Institute Against Digestive Cancer ) and the EITS (European Institute of TeleSurgery) led by Prof. Jacques Marescaux and Show Chwan Health care system President Huang established AITS in Lukang Show-Chwan Health Park in Taiwan. Benefit from the complete same faculty team with the same rigorous scientific and technical qualities that have made IRCAD so popular, AITS will no doubt attract Asia surgeons to learn and overall improve the MIS quality over Asia. We expect Taiwan to become a crucial medical strong hold among Asia, while holding a positive image of medical progress, economical development and growth of interaction with other countries.

## **Laparoscopic Colorectal Surgery –Credentialing of the Technique in Japan–**

**Fumio Konishi**

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In Japan, laparoscopic colectomy for cancer started in 1992. According to the national survey done by the Japanese Society of Endoscopic Surgery (JSES) the number of cases that underwent this procedure steadily increased, and there were over 14000 cases in the year 2009. According to the data of reimbursement the penetration rate of laparoscopic colon cancer surgery in Japanese hospitals was 30 % in 2009. In our department as of August 2011, we had carried out 792 cases of laparoscopic colorectal surgery. In our experienced most of the difficulties and complications were caused either by poor visualization due to various reasons and/or untrained technique. For the purpose of encouraging high level laparoscopic techniques Japanese Society of Endoscopic Surgery established the Endoscopic Surgical Skill Qualification System (ESSQS) in 2004. Assessment was conducted by two reviewers who reviewed unedited videos that were submitted by the applicants. During the past 7 years 560 surgeons applied and 201 have passed the test and are qualified for the colorectal laparoscopic skill. During the period the success rates for the qualification of colon and rectal laparoscopic surgery ranged from 25 to 50% with the mean of 36%. The agreement between the initial two judges (Cohen's weighted kappa values) ranged from 0.25 to 0.39. The operation time, blood loss, the rate of complications and the postoperative hospital stay in the submitted cases were significantly higher in the failed applicants than in the successful applicants. We consider that ESSQS will contribute to the establishment of the high level technical skill in laparoscopic surgery, development of educational system and reduction of complications.

# Optimal Total Mesorectal Excision for Rectal Cancer : Robotic vs. Laparoscopy

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Total mesorectal excision (TME) has gained worldwide acceptance as a standard surgical technique in the treatment of rectal cancer. Ever since laparoscopic surgery was first applied to TME for rectal cancer, penetration rates have been increased, especially in Asia. The oncologic outcomes of laparoscopic TME are known to be comparable to open surgery.

According to the data of our institute, no differences were found between laparoscopic (n=138) and open surgery (n=691) in terms of overall survival, disease-free survival and local recurrence. (3-year OS, stage I: 97.8% laparoscopic, 95.5% open, P=0.42, stage II: 91.8% laparoscopic, 95.7% open, P=0.68, stage III: 92.3% laparoscopic, 81.5% open, P=0.30; 3-year DFS, stage I: 93.8% laparoscopic, 98% open, P=0.42, stage II: 94.2% laparoscopic, 90.6% open, P=0.68, stage III: 67.5% laparoscopic, 77.5% open, P=0.30; local recurrence rate: 1.6% laparoscopic, 3% open, P=0.43) Anastomotic leakage rates in laparoscopic group was higher than open group (4.4% laparoscopic, 1.5% open, P=0.02)

However, an unstable camera platform, the limited mobility of straight laparoscopic instruments, the two-dimensional imaging, and a poor ergonomic position for surgeons have been regarded as limitations. Robotic technology was developed in an attempt to reduce the limitations of laparoscopic surgery. The robotic system has many advantages, including a more ergonomic position, stable camera platform and stereoscopic view, as well as elimination of tremor and subsequent improved dexterity.

However, the evidence is slender for robotic TME up to now. According to the data of our institute, robotic TME has the equivalent short-term results of open and laparoscopic surgery while providing the benefit of minimal invasive surgery. Besides, our data of robotic TME shows the long-term oncologic safety. (n=370; 3-year OS: stage I 99.2%, stage II 97.1%, stage III 90%; 3-year DFS: stage I 93.7%, stage II 79.8%, stage III 69.6%; local recurrence rate 3.6%) Anastomotic leakage rate is 9.3%.

Potential benefits of a robotic system include sharper and more meticulous dissection, and completion of autonomic nerve preservation techniques.

In our study, robotic TME has the advantage of early recovery for urinary and sexual function. IPSS score decreased to the normal more earlier at 3 months and IIEF score returned to normal in robotic group (n=30) at 6 months, compared to laparoscopic group (n=39).

However, we need more concrete evidence regarding the merits for both patients and surgeons, as well as the merits compared to conventional laparoscopic techniques. Currently, the multicenter randomized controlled trial is being conducted in Korea. (COLAR) This is designed to compare robotic versus laparoscopic TME for rectal cancer, and, the study will prove the potential benefits of robot TME for the treatment of rectal cancer.

## Minimally Invasive Anorectal Surgery

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### Experiences of PPH and STARR Procedure in Chia-Yi CGMH

Stapled transanal mucosectomy, firstly aims to treating rectal internal mucosal prolapse and obstructed defecation, was later proposed by Longo for the treatment of hemorrhoids. Subsequently called stapled hemorrhoidopexy or procedure for prolapsed hemorrhoids (PPH), the technique gained a wide popularity due to the low postoperative pain. Almost all studies, with a few exceptions, also found an early return to work.

In 2005, the practice parameters of the American Society of Colon and Rectal commended: Stapled hemorrhoidopexy is a new alternative available for individuals with significant hemorrhoidal prolapse. Meanwhile, exceptionally rare but potentially devastating complications include anovaginal fistula, substantial hemorrhage, fistula, retroperitoneal sepsis, rectal perforation. Even though the documented adverse events happen scattered and presented as case-report, severe complications have been reported world-wide. It did raise the concern about the safety of this new procedure.

Rectal wall resection with a circular stapler was the basis for the development of the stapled transanal rectal resection (STARR) procedure. This procedure consists of a double transanal rectal resection and is aimed at correcting the anatomical disorder of the rectum in patients with rectocele and rectal intussusception causing obstructed defecation. This procedure has quickly gained popularity among surgeons, when encouraging short-term results have been reported after STARR with good to excellent outcome in 91% of patients. Other studies have shown persistence of symptoms in 44% of patients and lack of improvement at mean follow-up of 20 months in 35% of patients and failures and complications have recently been reported.

In the colorectal surgical department of Cha-Yi CGMH, we use stapled hemorrhoidopexy to treat patients with prolapsed hemorrhoids since 2002. More than one hundred cases per year accepted this treatment and the patient number raised gradually. With more experiences about stapled anal surgery, STARR procedure was utilized to treat patients of obstructed defecation syndrome (ODS) since 2007. No severe complication has ever been encountered. We shall share our experiences of these new-adapted procedures, and discuss the tricks to improve the results and to avoid the complications.

## **Management of Fistula in – Ano**

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Management of anal fistula begins with identification of etiology. While most fistulae are cryptoglandular in origin and investigation is usually unnecessary, one should suspect secondary cause in patients with complex fistulae, ie, fistulae with high or multiple tracks (often with multiple external openings), and fistulae which recur after apparently adequate surgery. Blood tests (inflammatory markers) and colonoscopy (with rectal biopsy) should be arranged to confirm or exclude inflammatory bowel disease and other secondary pathologies. MRI is ideal for delineation of the fistula tracks in relation to the sphincteric apparatus. Anorectal manometry is arranged to quantify the baseline anal canal pressures.

Management of most patients with intersphincter fistulae is usually uncomplicated. Extensive preoperative work-up is unnecessary. One-stage fistulotomy, ie, lay-opening of the fistula track, is performed and is usually adequate in most cases. The wound is trimmed in a way that facilitates drainage and healing from inside out. As only part of the internal sphincter is sacrificed, significant incontinence symptoms are infrequent.

Management of complex fistulae is much more complicated, and can turn out to be a nuisance to even the most experienced coloproctologists. Proper investigations should be performed for these fistulae, which are often transsphincteric or supra-sphincteric in type. Extra-sphincteric fistula is very rare and is almost never crypto-glandular in origin. Surgical treatment should follow the stepwise principles: (1) drainage of collection; (2) lay-opening of secondary tracks; (3) definitive treatment of the primary track, the track which communicates with the anal canal (ie, with internal opening). For the primary track, the extra-sphincter portion is often treated with a core-out fistulectomy (unless the external opening is very close to anal verge). Options for treating intra-sphincteric portion include internal sphincterotomy, staged fistulotomy, placement of cutting seton, anorectal advancement flap, use of fibrin glue or anal fistula plug. The LIFT procedure was described 2 years ago in an attempt to preserve the anal sphincter. The efficacy and functional outcomes of these alternatives will be further discussed in the meeting. The best treatment for anal fistula should always be individually tailored to the patient.



## Fibre and Anorectal Disease

Francis Seow-Choen

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Fibre is widely used for the prevention and treatment of constipation<sup>1</sup>. It is even thought to prevent colorectal cancer such that once some patients are diagnosed with colorectal cancer, their carnivorous habits are blamed and thenceforth a strict vegetarian diet is instituted in the belief that fibre will prevent cancer recurrence.

Giving fibre to a constipated patient is akin to adding cars to a congested road to ease traffic flow<sup>2</sup>. Fibre is not called bulky agent or roughage for no reason. In a loaded colon, the addition of bulk makes the constipation much worse. Even in normal individuals, my experience of a fibre free diet is that most if not all patients develop easier motions. Giving bulky agents ie fibre and laxatives together is common practice and is totally illogical as these agents act in opposite ways!

There is no convincing evidence that fibre works in the prevention of colorectal cancer. A much better and sure proof method is the routine use of surveillance colonoscopy in the right age group and at regular intervals. A recent study looking at 61566 people found that that was no apparent protective effect of fibre against colorectal cancer<sup>3</sup>. Fibre did not positively prolong longevity compared with non-vegetarians in another recent study<sup>4</sup>.

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## Application of New Energy Source in Hemorrhoidectomy

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**Background:** Conventional excisional hemorrhoidectomy remains the gold standard for hemorrhoid treatment but search continues for a safe, effective and less painful method.

**Objective:** To evaluate perioperative morbidity and long-term results associated with LigaSure hemorrhoidectomy.

**Patients:** A total of 668 consecutive patients with symptomatic prolapsed hemorrhoids admitted to our institution between June, 2006 and June, 2008 were included.

All patients received LigaSure hemorrhoidectomy.

**Main Outcome Measures:** Main outcomes were patient demographics, operative time, postoperative pain, postoperative analgesic requirement, length of hospital stay, postoperative complications and recurrence. A standardized questionnaire was sent to all patients for long-term results.

**Results:** Patients' mean age was 45.8 (22-77) years; mean operative time 18.7 (9-43) minutes; mean hospital stay 1.5 (1-4) days; mean pain score in first postoperative day 4.1 (2-7). Twelve patients (1.8 percent) experienced urinary retention requiring catheterization. Nineteen patients (2.8 percent) had delayed postoperative bleeding. One patient (0.15 percent) experienced wound infection. Questionnaire was returned by 505 patients (75.6 percent). Mean follow-up was 36.2 (24-49) months. The leading symptom was relieved in 385 patients (76.2 percent), ameliorated in 112 (22.2 percent), unchanged in 8 (1.6 percent). Minor incontinence (flatus) was present in 7 patients (1.4 percent). One patient had late anal stenosis requiring surgical intervention, two received additional excisions for residual skin tags, one developed anal fissure and one developed anal fistula. Nine patients (1.3 percent) had recurrent bleeding. Patients evaluated surgical results as follows: excellent, 328 cases (65 percent); good, 137 cases (27.1 percent); fair, 34 cases (6.7 percent); and unsatisfied, 6 cases (1.2 percent).

**Conclusion:** LigaSure hemorrhoidectomy is a safe, effective surgical alternative for treating symptomatic prolapsed hemorrhoids with low perioperative morbidity. Long-term results demonstrate low recurrence rate and high levels of patient satisfaction.

## **Whitehead-Type Hemorrhoidectomy-A Useful Surgical Procedure in Selected Patients**

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### **Circumferential hemorrhoidectomy**

Circumferentially protruding hemorrhoids are troublesome lesions for both patients and surgeons, and in most cases demand challenging surgical intervention. Walter Whitehead first described his operation for hemorrhoids in 1882. It consisted of excision of the entire hemorrhoid bearing area, with suture of the proximal mucous membrane to the anal skin. The major advantage Whitehead claimed for his operation was that it constituted a radical cure for hemorrhoids, since the entire hemorrhoid-bearing area of the anal canal was excised but his procedure has been neglected by most surgeons because of the feared potential complications, such as stricture, incontinence, ectropion, etc.

This study aimed to describe a Whitehead-type hemorrhoidectomy procedure and to demonstrate its results in patients presenting with extensive circumferential mixed hemorrhoidal disease.

A Whitehead-type hemorrhoidectomy has become the authors' procedure of choice for extensive circumferential prolapsing and bleeding hemorrhoids in acute hemorrhoidal crisis setting, female patients with outlet defecation difficulty due to anterior rectocele who will benefit from concomitantly a transanal rectocele repair, and patients' cosmesis concern. Patients with microvascular disease are relative contraindicated with this form of radical hemorrhoidectomy procedure.

## **Local Anesthetic Techniques for Anal Surgery**

**Manuel Francisco T. Roxas**

Philippine General Hospital

In our institution, the use of local anesthesia for anal surgery has become an integral component of our practice, and is particularly cost-effective. It allows a rapid turn-over of consecutive anal surgery day cases, as well quick post-operative ambulation, thereby facilitating earlier discharge, while avoiding any stay at the recovery room.

Our usually concoction is 10 cc bupivacaine, 10 cc lidocaine, and 0.2 cc. of epinephrine to make at least 20 cc of the local anesthesia to be infiltrated. We sometimes add sodium bicarbonate to neutralize the acidity of the concoction, but have found this unnecessary in most patients. A typical patient will entail a diamond shaped perianal infiltration, at first subdermal, and then intersphincteric. Patients are usually in the left lateral decubitus position, and are awake. For very anxious patients, particularly those with hypertensive cardiovascular diseases, mild sedation may first be introduced prior to the perianal injection. Perianal massage is done afterwards to ensure adequate anesthetic spread in the area. We find that well-motivated patients with thorough informed consent are ideal for this procedure.

We have published two randomized trials on local anesthetic infiltration, one to establish the usefulness of EMLA cream prior to infiltration, the other to compare between the methods of diamond-shaped perianal infiltration and the intra-anal infiltration technique originally proposed by Dr. Santhat Nivatvongs. In both papers we have found the technique of diamond-shaped perianal infiltration using the concoction previously described to be simple and effective.

Recently it has been proposed that the addition of methylene blue to the infiltrate significantly reduces post-operative pain. This is based on its effective use for intractable pruritus ani. A report by Seow-Choen on its use for anal fissures has been published, however there is a dearth in clinical trials for its use in traditional hemorrhoidectomy, which is substantially more painful. We are looking forward to conducting such a trial when the methylene blue preparation becomes available in our country.

For the session, we will be presenting our technique, as well as anal operations that we do under the left lateral decubitus position.

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## Establishment of Anorectal Physiology (ARP) Laboratory

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### Introduction

Establishment of anorectal physiology laboratory would certainly be a *déjà vu* topic to our Western colleagues. However, in Hong Kong and China, it is still in its childhood stage. We need to standardize our technique and also we need to have our own normal data as a start.

### Anorectal Manometry

Water-Perfusion Systems is used in our unit to measure the *Resting pressure* is the mean of the peak and trough pressure at rest. Maximum *Squeeze pressure* records the best effort of the patient with a period of rest in between. *High pressure zone (HPZ)* and *Rectoanal Inhibitory Reflex (RAIR)* can be observed. The volume for the *First Sensation*, *Urge Sensation* and *Maximal Tolerable Volume (MTV)* are recorded. *St. Mark's pudendal nerve stimulating device* is used to measure the pudendal nerve terminal motor latency (PNTML).

### Transit Studies

Metcalf technique using three boluses of 20 *Radio-opaque Markers* each at 24-hour interval is used.

### Endoanal Ultrasonography (EAUS)

The probe has a transducer head of 7 MHz rotating endoanal ultrasound probe. We record the scan at three levels: (1) Upper anal canal marked by the puborectalis muscle, (2) Mid-anal canal where the internal anal sphincter attains its maximal thickness and (3) Lower anal canal marked by the external anal sphincter.

### Defaecation Proctography

This is the best simulation of defaecation and is particularly useful in pelvic floor dysfunction and evacuation disorders e.g. constipation and outlet obstruction. We need a standard *fluoroscopic control* with a *commode* that has to be radiolucent. For *contrast media*, we used barium sulphate thickened with porridge oats for injection.

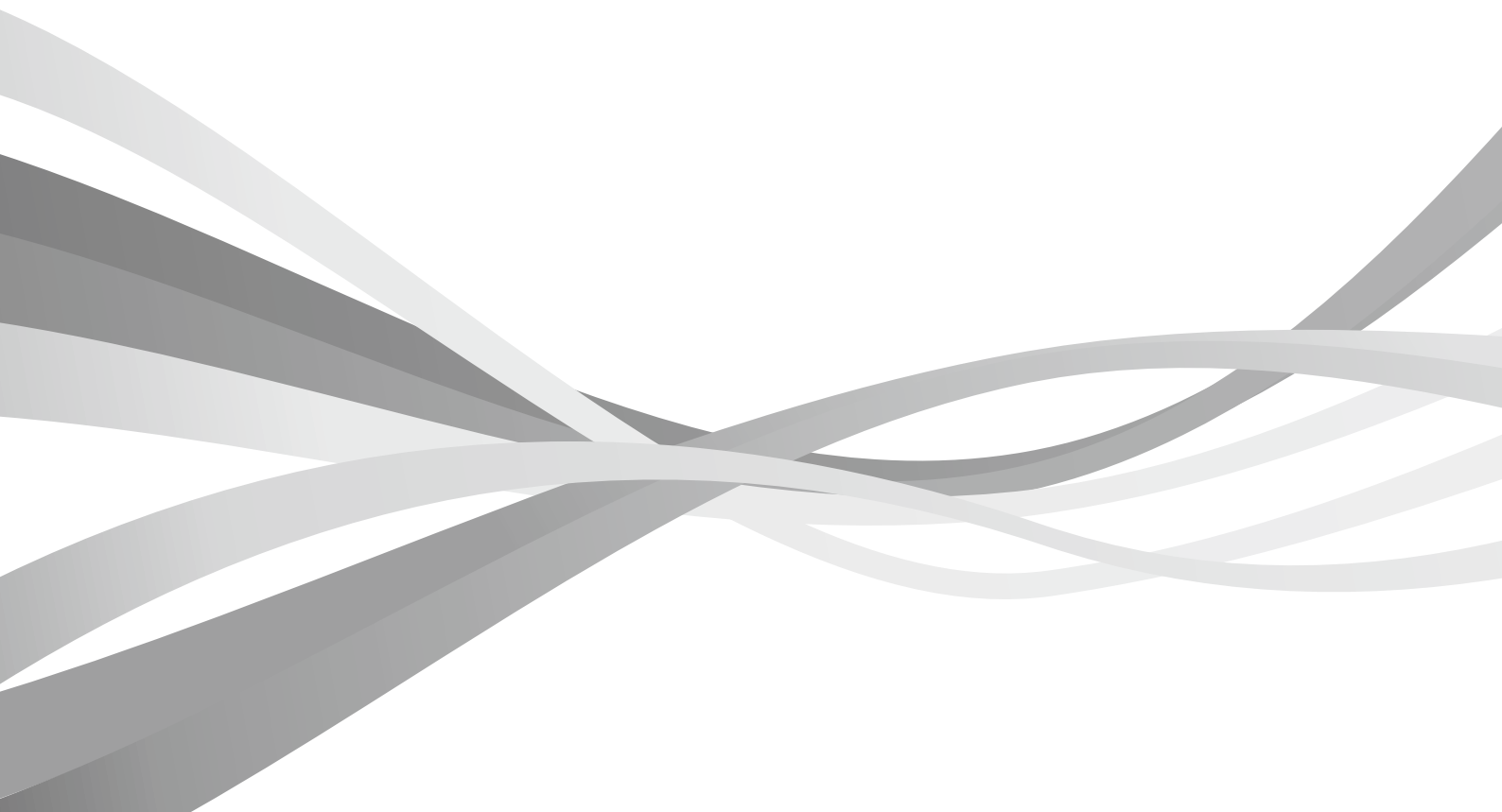
Several measurements to be noted: *Anorectal angle* is the angle between the axis of the posterior rectal wall and the axis formed by the anal canal. *Puborectalis length* is the minimal distance between the antero-superior aspect of the symphysis pubis and the puborectalis notch. *Perineal descent* is the length of a perpendicular dropped from the pubococcygeal line to the anorectal junction.

### Conclusion

Anorectal physiology is no longer viewed as a research tool. It provides objective data in chronic constipation as well as faecal incontinence, ensuring better understanding and hence successful treatment.

# **Abstract**

November 06, 2011



## **Laparoscopic Surgery with Minimal Ports**

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Laparoscopic surgery for colorectal resection is now common place and may be regarded as a routine procedure in many centres around the world. The procedure had been evolving rapidly and interest in the procedure had been driven both by the patient as well as by the fact that the benefits it brings are plainly marvellous.

My own experience with colorectal surgery started in 1987 with the formation of the department of colorectal surgery at Singapore General Hospital. At that time all colorectal resection were attempted via a long mid line. However I had observed some surgeons in the USA and in the UK doing operations like ileal-anal pouches through low supra pubic incisions. This started to interest me greatly and I started to do these sorts of incisions. I found that a long suprapubic incision made for a better recovery and less pain than the classical midline incision. However with time and experience, I found that a short skin crease incision made better sense as the recovery was even faster and the operation was in no way hindered.

When laparoscopic surgery came into the colorectal rectal world we also jumped in and investing the technique thoroughly. Most cases were performed with at least four to five ports and included an extraction site separate from these port incisions. However with the experience of practice and by observation I noted that most cases of laparoscopic surgery may be easily done with three ports only and we have for many years now performed laparoscopic surgery with one camera and two working ports. This technique is applicable to all types of colorectal resection including ultra low anterior resection, total colectomy, ileal anal pouches and right hemicolectomy. The extraction site is performed by extending the umbilical incision.

Recently, with the advent of single incision laparoscopic surgery(SILS), we have also embarked on investing the use and place of this technique in clinical practice. At the present moment, SILS has a limited place in our practice as the instrumentation is still far from ideal although it is possible especially for right sided colectomies. At the present time in order to facilitate SILS, we have used a separate 5 mm trocar for the manipulation of the energy device, a technique that helps SILS greatly without increasing substantially the post-operative pain or morbidity.



## **Inspiration after One Hundred Experiences of Single Incision Laparoscopic Colectomy**

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### **SILS- colectomy**

In recent years, single-incision laparoscopic surgery (SILS) has further reduced the invasive nature of surgical procedures and provided even greater cosmetic benefits than conventional laparoscopic surgery (CLS). In SILS, a single incision is typically made at the umbilicus, and specially developed access devices are used for the introduction of trocars and instruments. In most cases, no other abdominal wounds are required, and the umbilical incision, although larger than that of conventional laparoscopy, is minimally visible once healed. Recent reports have provided accumulating evidence of the feasibility and safety of SILS for gastrointestinal and colorectal procedures, including colectomy, sigmoidectomy, gastrojejunostomy and bariatric surgery. Despite these encouraging reports, challenges remain with SILS. Most commercially available access devices are rigid, and because only one access point is used, instrument crowding can hamper dissection. In addition, because the instruments are parallel to each other, the range of motion is limited, further increasing the difficulty of tissue manipulation and dissection. To overcome these obstacles, relatively costly specially curved instruments are typically used, while some doctors produced novel solutions. In an effort to simplify SILS, we have modified the design of a previously described home-made single incision access device using a commercially available wound protector and surgical glove to make it more suitable for single-incision laparoscopic colorectal surgery. After more than 100 cases of SILS colectomy I hoped to share my experiences and discussed about some difficulties during the procedure with attending guests.

## NOTES

### Yoshihisa SAIDA

Dept. of Surgery, Toho University Ohashi Medical Center, Tokyo, Japan

In 2004, a new approach to perform abdominal surgery was presented. That is called NOTES, a technique via the natural body orifices using endoscopes.

Potential benefits of NOTES are, less postoperative pain, decreased wound-related complications (wound infection, incisional hernia), less invasiveness, less tissue trauma, and improved cosmesis.

The interest and research in this approach has grown very rapidly in spite of the initial skepticism. It was initially demonstrated in animal models, then was move into human beings and now very nearly becomes routine practice in selective area. Amid the excitement for potentially scar-free surgery and abolishment of dermal incision-related complications, the safety and efficacy of this new surgical technology must be evaluated.

In Japan, to develop safe and efficient NOTES procedures, a joint committee organized by the Japan Society for Endoscopic Surgery (JSES) and the Japan Gastroenterological Endoscopy Society (JGES), where several issues such as topics relevant to the development of NOTES have been discussed. And, the JSES and JGES officially formed “Japan NOTES” in 2007. Up to now, 121 institutional members have participated in Japan NOTES, including almost all Medical University Hospitals and National hospitals. According to the registered cases on the Japan NOTES, human NOTES procedures have been already performed in 35 patients (Transvaginal NOTES cholecystectomy, Transvaginal endoscopic local resection of the stomach, Endoscopy-assisted appendectomy, cholecystectomy etc.) in Japan. Also human NOTES related procedures have been performed in 161 patients (Per Oral Endoscopic submucosal Myotomy(POEM), Endoscopy-assisted laparoscopic appendectomy, Lapascopy assisted endoscopic full-thickness resection of stomach, etc). But all procedure needed some laparoscopic combination, so far.

NOTES is a promising new technology that needs fine-tuning before it is safely applied in the clinical setting. This highlights the need for further animal and human studies in well-controlled settings followed by industry trials and case series. The excitement about this new approach should be directed toward more training and more studies before larger clinical applications begin.

This presentation reviews the development of natural orifice transluminal endoscopic surgery (NOTES), its benefits and the hurdles we have not yet to overcome.

## **Update on Transanal Endoscopic Microsurgery (TEM)**

**William MENG**

Department of Surgery, Our Lady of Maryknoll Hospital, Hong Kong.

### **Introduction**

TEM was first put into clinical practice in Hong Kong, China in 1995. We have established the earliest registry of this technique in China. New applications of TEM are also assessed.

### **Rectal Villous Adenoma and Early Rectal Tumour**

For T0, Tis and low risk T1 carcinoma, TEM is the established curative technique. Pre-operative staging by endoanal ultrasonography was used but polyp morphology turned out to be the most practical estimation. For probable benign tumour e.g. villous adenoma or incidental carcinoma *in-situ*, **Submucosal Resection** with using methylene blue saline injection will be used. For probable early malignant tumour, **Full Thickness Resection** will be the routine. Specimens are removed *en bloc* and mounted for pathological review.

### **Rectal Conservation Therapy (RCT)**

Comparison of **TEM with Adjuvant Therapy** and Laparoscopic Low Anterior Resection with Total Mesorectal Excision is in progress. Selected cases included higher risk T1 or more advanced tumours.

### **Natural Orifice Transluminal Endoscopic Surgery (NOTES)**

TEM is the real NOTES established 20 years ago. Currently, we can perform Synchronous Laparoscopic Anterior Resection with TEM Extraction of Specimen.

### **Single Port Access Surgery(SPA)**

TEM Rectoscope is used as a single port at the umbilicus for Endoscopic Cholecystectomy. The articulated instruments are perfectly designed to facilitate the triangulation of optical and working ports in the limited space.

### **Conclusion**

We are paying tribute to late Professor Gerhard Buess and his invention of Transanal Endoscopic Microsurgery (TEM). This technique is picking up its pace in China. The development relies on training courses, careful case selection as well as its new applications.

## How to Perform Colorectal ESD and to Manage Its Complications

**Takeshi Nakajima, Taku Sakamoto, Takahisa Matsuda and Yutaka Saito.**

Endoscopy Division, National Cancer Center Hospital, Tokyo, Japan

Endoscopic submucosal dissection (ESD) for early colorectal neoplasms has become widespread in Japan. ESD was primarily indicated for highly probable lymph-node-negative colorectal neoplasms based on endoscopic findings including magnification chromoendoscopy. Laterally spreading tumors (LSTs), especially >30mm Is+Ia (LST-Granular type) and >20mm LST non-granular type (LST-NG), are good candidates for colorectal ESD. In our institution, National Cancer Center Hospital (Tokyo, Japan), the procedures were performed using a bipolar needle knife (B-knife) and an insulation-tipped knife (IT knife) with carbon dioxide insufflation to reduce patient discomfort. Following injection of 10% glycerol and 5% fructose in normal saline solution and sodium hyaluronate acid into the submucosal layer, a circumferential incision was made using the B-knife and ESD was then carried out using both the B-knife and IT knife. Water jet system and short ST hood are also essential tools for safety colorectal ESD. Until now we performed colorectal ESDs more than 600 cases. In the session, we would like to introduce the concrete ESD method and how to manage its complications in our institution.

## **Endo - Laparoscopic Approach to Obstructing Colonic Cancer**

**C. C. Chung**

Department of Surgery, Pamela Youde Nethersole Eastern Hospital, Hong Kong

Stage by stage, the survival of patients with obstructing colonic cancer undergoing potentially curative resection is generally worse than patients without obstruction. While this difference may be due to the more aggressive nature of these obstructing tumours, it may also reflect inadequate oncological resection under acute emergency setting. It is generally agreed, though with caution, that a single stage procedure with primary anastomosis is feasible for most obstructing tumours proximal to the splenic flexure. However, the optimal treatment in left colonic cancer presenting with acute obstruction is more controversial, as large bowel to large bowel anastomosis is considered at high risk of leakage, often attributed to absence of bowel preparation but compromised blood supply in an oedematous colon may be the genuine underlying factor. Consequently, Hartmann's procedure is still performed in 40 percent of patients with obstructing left colon cancers.

The advent of colorectal stent (SEMS) offers a potential solution in this scenario. First used as a means of non-operative palliation in patients with obstructing irresectable cancers, SMES has subsequently been employed as a "bridge" to definitive surgery. We conducted the first randomized trial comparing **endoscopic** placement of SEMS followed by **laparoscopic** colectomy (which we called **endo-laparoscopic** approach) vs immediate open surgery in the management of malignant large bowel obstruction. The data showed that the endo-laparoscopic group had significantly less cumulative blood loss ( $p=0.001$ ), less wound infection ( $p=0.04$ ), reduced pain ( $p=0.02$ ), and reduced incidence of anastomotic leak and other morbidities. Most importantly, significantly more patients in the endo-laparoscopic group underwent successful one-stage operation ( $p=0.04$ ), and none of the patients in the group were left with a permanent stoma.

In conclusion, this endo-laparoscopic approach makes a one-stage operation more feasible, is associated with reduced risk of stoma creation, and allows patients with acute colonic obstruction to enjoy the full benefits of minimally invasive surgery.

## Self-Expandable Metallic Stent for Colorectal Obstructing Lesions

Yoshihisa SAIDA

Department of Surgery, Toho University Ohashi Medical Center, Tokyo, Japan

Self-expandable Metallic Stent: SEMS treatment has recently seen employed for various disease related to colorectal obstructions, and is generally used as a palliative treatment for malignant strictures of the colon and rectum and bridge to surgery for obstructing colorectal cancers.

Only a few case reports of SEMS for benign disease (anastomotic stenosis and inflammatory disease) was found in Japan.

Palliative treatment: SEMS treatment can eliminate the need for unnecessary palliative and temporary colostomies for patients with colorectal obstructions. We investigated the utility and complications of SEMS for patients with non-resectable malignant colorectal stricture in 102 Japanese cases reports. Primary colorectal cancer comprised half of the cases. The insertion success rate was 100% and the clinical effectiveness rate was 93%. Re-stricture occurred in 12 cases (12%), and half of those cases were treated by stent in stent. Stent migration occurred in 8 cases (8%) and perforation in 2 cases (2%). The range of SEMS insertion duration was 1 to 578 days (median: 142days). There were no deaths related to the procedure. This procedure allows patients to forgo colostomy and is cheap, safe, and effective, with a short treatment time. This procedure is a viable palliative alternative to colostomy for patients with inoperative malignant colorectal stricture. Widespread application of the procedure has been hampered.

Bridge to surgery: Preoperative preparation for obstructive colorectal cancers is not easy. However, it is important because it is closely related to the postoperative mortality and morbidity. To solve these problems we started from November 1993 to insert SEMS under colonoscopic observation and Fluoroscopic control for improvement of the stenosis of colorectal cancer as preoperative preparation in our institution.

The method was performed for 101 patients in our institution until December 2010 and the successful rate of insertion was 91%. The average period during the procedure and operation was 7.7 days. The successful rate of good preoperative preparation was 98%. This method worked well and was useful in order to obtain a good mechanical preoperative preparation. Moreover, bowel proximal to the stenotic tumor was evaluated by barium enema. Improvement of the stenotic symptoms was noted in all cases. This method was noteworthy,

Conclusion: In Japan, SEMS for colorectal stenosis was approved by government last July, and might have been reimbursed by public insurance system coming January. SEMS will be one of the standard treatment for colorectal strictures.



缺



## Delayed Coloanal Anastomosis after TME for Mid to Low Rectal Cancer

Manuel Francisco T. Roxas

Philippine General Hospital

Since 2007, in patients with mid to low rectal cancers where low anterior resection and TME are indicated, but intestinal staplers are not feasible or available, our protocol is to perform a coloanal anastomosis with protecting ileostomy. However we have noticed in these patients an anastomotic dehiscence rate of 25%.

To overcome the problems of anastomotic dehiscence, Remzi et al have proposed the Turnbull-Cutait technique, where the proximal colon was pulled through the anus and left out for 5 to 10 days for tissue adherence, after which the redundant colonic segment was amputated and the anastomosis completed. A protecting ileostomy was still routine, and although they reported a 25 per cent failure rate, they concluded that the procedure was a viable option for patients with complex anorectal conditions that might otherwise require permanent diversion. Furthermore, functional outcomes were comparable to standard coloanal anastomosis.

Jarry et al, in a larger series of 100 patients, also proposed a similar technique of trans-anal pull-through, followed in 6 days by amputation of the redundant colonic segment and delayed coloanal anastomosis. No protecting stoma was created in these patients, and only 3 anastomotic leakages were reported. Good functional outcomes were reported in 73 per cent of patients at 2 years.

We will be presenting our initial experience with the trans-anal pull-through procedure followed by delayed coloanal anastomosis. At present, we have not seen an anastomotic leak even with the absence of a protecting stoma.

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## Laparoscopic Surgery for Rectal Cancer: A Single-Center Clinical Experience and a Retrospective Analysis of 538 Cases

**DING Weixing, LU Liesheng, GONG Jianping, DENG Jianzhong, YANG Ping.**

Department of Gastrointestinal of Shanghai Tenth People's Hospital of Tongji University, Shanghai, China.

**Abstract】 Objective** To evaluate the feasibility and safety of laparoscopic surgery for rectal cancer. **Methods** Clinical data of 538 patients performed laparoscopic rectal resection for cancer from June 2001 to December 2008 were reviewed retrospectively. **Results** 538 cases patients accepted laparoscopic procedure successfully, including 109 cases of Mile's rectomy, 13 cases of Hartman's rectomy and 416 cases of proctectomy. 523 patients accepted radical resection and 15 patients accepted palliative resection. 23 laparoscopic operations were converted to open procedure, conversion rate was 4.27%(23/538). Mean operation time was 180.66±77.81min, mean blood loss was 80 ml, mean numbers of lymph nodes harvested were 12.33±5.02, mean length of assisted incision was 5.34 ±1.65 cm and mean postoperative hospital stay was 9.12±7.93days. 1 patient died from perioperative pulmonary infection, the mortality was 0.19%(1/538). The morbidity of perioperative complications was 15.61%(84/538). Intraoperative complication rate was 2.42%(13/538), the most intraoperative complications were subcutaneous emphysema and hypercapnia. The median follow-up was 29 months(range from 1 to 93 months), 25 cases were lost, so the followed-up rate was 95.35%(513/538). Postoperative death happened to 88 patients, which includes 53 death after radical operation and 47 cancer-related death. There were 10 cases encountered local recurrence (10/513, 1.95%) and 55 metastasis (55/513, 10.72%) after radical operation. Overall survival rate was 82.80%(425/513), 3-year DFS rate after radical operation was 78.0%, 3-year DFS rate after radical operation for stage I, stage II and stage III was 89.0%, 85.0% and 65.0%, respectively. Cox proportional hazards model analysis come of age, stage, number of lymph node dissection, whether chemotherapy are risk factors. **Conclusion** Laparoscopic colorectal resection for cancer is feasible and safe, with a favorable short-term outcome of minimal incision, faster recovery and better cosmetic effect, Our long-term outcome was also satisfactory. **【 Key words 】** Laparoscopy; Colorectal cancer; Colorectomy

## Laparoscopic LAR, ISR

Akiyoshi Kanazawa

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The spread of endoscope surgery for the colon cancer operation is remarkable, but a clinical trial is going in the endoscope surgery for rectal cancer, and do not yet lead to a standard surgical procedure. A correct surgical procedure to rectal cancer has to make due allowance for both improved overall survival with local control of disease and preservation of the sphincter and urinary functions. Laparoscopic approach for rectal cancer has good operative view that has obvious advantage for improvement of operative procedure and education. We addressed standardization of laparoscopic total mesorectal excision (TME) and anastomotic technique.

Operative procedure: We routinely performed autonomic nerve-sparing TME with left colic artery preserving for good blood supply of anastomosis. For the reproducible operation, the important points are as follows: 1) symmetrical five-port system 2) making premeditated operative field with same instruments and same view angle, 3) precise role of assistant, 4) enough rectal mobilization of rectum for cutting distal side of tumor. At first, we show the typical technique to trainee and confirm the understanding about the operation using movie.

Results: Between January 2007 and December 2010, 504 cases of laparoscopic resection (colon:271, rectum:233) performed in our hospital. laparoscopic low anterior resection: 202 cases, Laparoscopic intersphincteric resection: 15 cases, laparoscopic abdominoperineal resection: 16 cases were performed. Two cases of anastomotic leakage were observed. All patients could retain urinary function without catheterization. There was no postoperative mortality in all cases.

Conclusion: Standardized laparoscopic TME technique is feasible and safe. It can be ideal approach to rectal cancer.

## **Sessile Serrated Adenoma of the Colon as a Precursor of Colon Cancer**

**Fumio Konishi, Takafumi Maeda, Kouichi Suzuki, Kazutomo Togashi**

Department of Surgery, Saitama Medical Center, Jichi Medical University

**BACKGROUND:** Recently, the polyps with serrated structure have been classified into several subgroups which included hyperplastic polyp, traditional serrated adenoma, and sessile serrated adenoma (SSA). SSAs show flat, pale, and large in size. Because the genetic changes of SSA are similar to that of microsatellite unstable colorectal cancer, SSA has attracted considerable attention as precursor lesion towards microsatellite unstable cancer. **METHODS:** 61 cases of SSA were analyzed. Out of 61 SSA cases 22 proximal SSAs (pSSAs) and 8 distal SSAs (dSSAs) were recruited for genetic analyses. 22 tubular adenomas (TA) and 66 proximal colon cancers were also used for comparison. **RESULT:** 77% of SSAs were located in the proximal colon, the appearance was mostly flat, elevated or sessile. The mean size was 12mm in diameter. Dysplasia was present in 20% of the cases. There were three intra-mucosal cancer cases, which makes the malignancy rate of 4.9%. All of the three cases were located in the proximal colon and measured more than 10mm in diameter. The genetic analyses showed that BRAF mutation ( $p=0.007$ ) and CIMP ( $p=0.012$ ) were significantly more frequent in pSSAs than in dSSAs. TAs did not demonstrate BRAF mutation. All SSAs, TAs, and 42 proximal colon cancers were microsatellite stable (MSS). 24 proximal colon cancers showed MSI. MSI cancer demonstrated more frequent BRAF mutation ( $p<0.001$ ), hMLH1 methylation ( $p<0.001$ ) and CIMP ( $p<0.001$ ) than MSS cancer. KRAS mutation was more frequent in MSS cancer ( $p=0.01$ ). When MSI cancers were stratified by BRAF status, higher correlation with CIMP was observed in MSI cancer harboring BRAF mutation ( $p=0.032$ ). **CONCLUSION:** Proximal SSA shared similar genetic and epigenetic features with proximal MSI colon cancer, suggesting pSSA could be a precursor lesion of proximal MSI cancer. The histological changes of SSA suggested the necessity of endoscopic resection when the size of the lesions is larger than 1cm.

## Short Term Result of Inter-Sphincteric Resection for Low Rectal Cancer

**PO-LI WEI MD PHD, YAN JIUN HUANG MD, LI-JEN KUO MD**

Division of General Surgery, Department of Surgery, Taipei Medical University Hospital, Taipei Medical University

**Introduction:** Colorectal cancer is one of the most common diagnosed malignancies in the world and there were around 40% patients with cancer located in the rectum. Furthermore, one third of the patients have cancer at low rectum where the successful eradication of disease and preservation of normal anal sphincter function are two conflicting aims. Although it is not standard procedure, transanal intersphincteric resection (ISR) was introduced by Schiessel et al since 1994 and has been increasingly performed as an ultimate surgical treatment for extremely low rectal cancer. **Materials and Results:** From Jan. 2010 to June 2011, there were 24 patients with low rectal cancer receiving intersphincteric resection and coloanal anastomosis in Taipei medical university hospital. 12 patients had diverting colostomy or ileostomy and the other had not. The operation time was slightly longer in the patients with diverting stomy, but not significantly. The length of post-operative hospital stay was not significantly different. The post-operative anal function was also evaluated with anal manometry and questionnaire. The pathologic examination was also evaluated for the oncologic result. However, the long term prognosis is still not available at present time. **Conclusion:** With the initial result, the intersphincteric resection is an alternative way for the properly selected patients with low rectal cancer to achieve both successful eradication of disease and preservation of anus.

## **Surgical Ego, the Good, the Bad and the Ugly**

### **Abe Fingerhut**

Past Chief of Surgery, Centre Hospitalier Intercommunal

Ego can be defined in many ways but all definitions underline the thinking, the feeling, and/or the willingness to distinguish oneself from others. It is the “part of the psychic apparatus that experiences and reacts to the outside world and thus mediates between the primitive drives of the id and the demands of the social and physical environment”. It can also be defined as “egotism”, “conceit”, “self-importance”, “self-esteem” or “self-image”. All have their share in what I will call the surgical ego.

The good side of Ego is that it helps us set goals, and constitutes a driving force in surgery as in many facets of life. Strong ego is necessary to have confidence in what we do as doctors, to make decisions, sometimes undauntedly, without much time for reflection, as in the emergency setting or when faced with acute problems or a complication during or after an operation.

Ego, can, however be bad. Examples include “institutional ego” (i.e. believing that your institution is the best, because you call it the “referral center”, the institution where publications laud the “largest” series of its kind or the “first report”), “departmental” or “turf” ego (that compels surgeons of one department or specialty to think they can do a specific operation better than a surgeon from another), “mentor ego” (conflict between the head or teacher and the paramedics, nurses and junior officers), “academic ego” (leading to false or erroneous publications), “actor ego” (the surgeon thinks he or she is on stage).

Ego is particularly ugly when surgeons behave poorly, are boisterous, yelling and shouting orders at all, disdain the operation room nurse or accusing the assistant or anesthesiologist for all problems or complications that arise intraoperatively or postoperatively. All these types of ego all too often spark verbal arguments and physical fights that disgrace our profession.

Combatting stress has been cited as an excuse for ego problems, but the problem is certainly more complex.

## **The Ethics of Innovation in Colorectal Surgery**

**Francis Seow-Choen**

Seow-Choen Colorectal Centre PLC, Singapore

Surgeons are innovation doctors. Each situation we meet on a daily basis requires on the stop innovation to overcome the difficulties and to secure healing for the patient. Such innovativeness must be based on a background of adequate scientific training in the medical sciences as well on on a desire to better the health of the patient in question.

First and foremost the surgeon's responsibility is to the patient under his charge and on the operating table right under his nose at the particular time. The safety and well being of that patient is the prime concern and focus of the surgeon. There is no excuse to compromise the safety of that particular patient so that mankind in general will benefit or so that the next patient will benefit or worse so that the surgeon or someone else will benefit.

A lot of harm had been done to people in the past and indeed continues in places in the name of medical progress. Witness the horrific medical experiments of the third reich and in more recent times in Africa and even in the US with experiments on unwilling and uninformed subjects with the ultimate results accepted and published by respectable medical journals. Advancing medical science is not an excuse for experimenting on people nor is it moral just because the next patient will benefit even if this one dies or suffers.

Surgeons have to recognise that innovatiosn in surgery must take place otherwise there will not be advancements made in surgical sciences. However each modification large or small must be made with the utmost respect for that particular patient under his charge. Each step must be made with due consideration to the scientific and moral basis of that particular execution for the better health of the patient. This is the moral obligation of every surgeon.

## Early Experience with Robotic Surgery

Manuel Francisco T. Roxas

Philippine General Hospital

For developing countries like the Philippines, the entry of the Da Vinci Robotic System is transforming the surgical landscape in ambivalent directions. The robot was initially designed to overcome the limitations of laparoscopy, providing the surgeon 3 dimensional magnification and precise, ergonomic micro-movements. According to current literature, robotic surgery for rectal cancer is comparable to laparoscopic surgery in terms of safety, short-term surgical outcomes, and oncologic outcomes, particularly total mesorectal excision (TME). It has also been shown to be superior in terms of visualization, dexterity and pelvic nerve preservation. In our initial experience with the robot for TME, we have seen that it works best in tight, narrow spaces such as the pelvis, providing the surgeon with direct control of the camera, as well as untiring retraction and movement. However, there is still insufficient randomized controlled trials and cost-effectiveness studies comparing robotic colorectal surgery versus laparoscopy. Certainly this technology comes at greater cost, highlighting the widening gap in health care delivery between economic classes, particularly since the robot is found only in private hospitals, while government hospitals suffer from a perennial lack of funds. Questions have also been raised on whether present surgical training programs are relevant and adaptable to the rapidly changing technological tools of modern surgery; and whether the robot can realistically be incorporated into the curriculum. For the lecture, we will be presenting the current literature on robotic colorectal surgery, as well as our initial experience with the technology. We will also raise some of the issues about the robot, particularly within the context of a developing country such as the Philippines.

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## **The Application of Endo - Laparoscopic Approach to Laparoscopic Colorectal Surgery**

**C. C. Chung**

Department of Surgery, Pamela Youde Nethersole Eastern Hospital, Hong Kong

The endoscopic era in 1970's was followed by the laparoscopic era in the last 2 decades. Laparoscopic surgery and endoscopy are now considered as 2 subsets under minimally invasive surgery (MIS) in the 21<sup>st</sup> century. Despite advancement in technology and maturation in competency and skill, both laparoscopic and endoscopic approaches have their inherent limitations. For instance, endoscopic procedure is not suitable for large, near circumferential lesion, and is technically difficult for lesions behind the flexures or mucosal folds. Likewise, laparoscopic procedure is limited by lack of tactile sensation and hence the inability to identify small mucosal lesions. In the modern MIS concept, both endoscopic and laparoscopic surgery have their distinctive roles and they should be considered complementary (instead of competitive) of each other, ie, they are not mutually exclusive. Surgeons who are liberal to apply both techniques simultaneously to patients - and this combined endo-laparoscopic approach is best practiced in a well-designed endo-laparoscopic operating suite with universal plug-and-play design and energy platforms – will find lots of application in colorectal surgery. Examples include: (1) endoscopic inspection of staple line for hemostasis and integrity after anastomosis; (2) endoscopic identification of small lesions (or sessile polyps not amendable to endoscopic resection) during a planned laparoscopic segmental colectomy; (3) laparoscopic-assisted ESD (+/- laparoscopic repair); (4) laparoscopic-assisted TEO (+/- laparoscopic repair); (5) laparoscopic assisted peritoneal lavage, fecal diversion, and endoscopic colonic irrigation for patients with anastomotic leakage following colorectal resection. Of course, endo-laparoscopic approach needs not be simultaneous; staged endo-laparoscopic approach has been described for patients with acute malignant large bowel obstruction. Endoscopic placement of stents in these patients helps relieve obstruction, buy time for investigation, and allow patients to undergo definite surgery laparoscopically under full mechanical bowel preparation and optimal condition. This approach not only allows these patients to enjoy the full benefits of minimally invasive surgery, but also prevents poor risk patients and patients with incurable disease to undergo unnecessary exploratory laparotomy. Finally, a hybrid NOTES technique which abolishes the mini-laparotomy for specimen retrieval will be described in the lecture.

## Challenging and Critical Issues in Surgery for Low Rectal Cancer

Nam-Kyu Kim

Department of Surgery Yonsei University College of Medicine Seoul, Korea

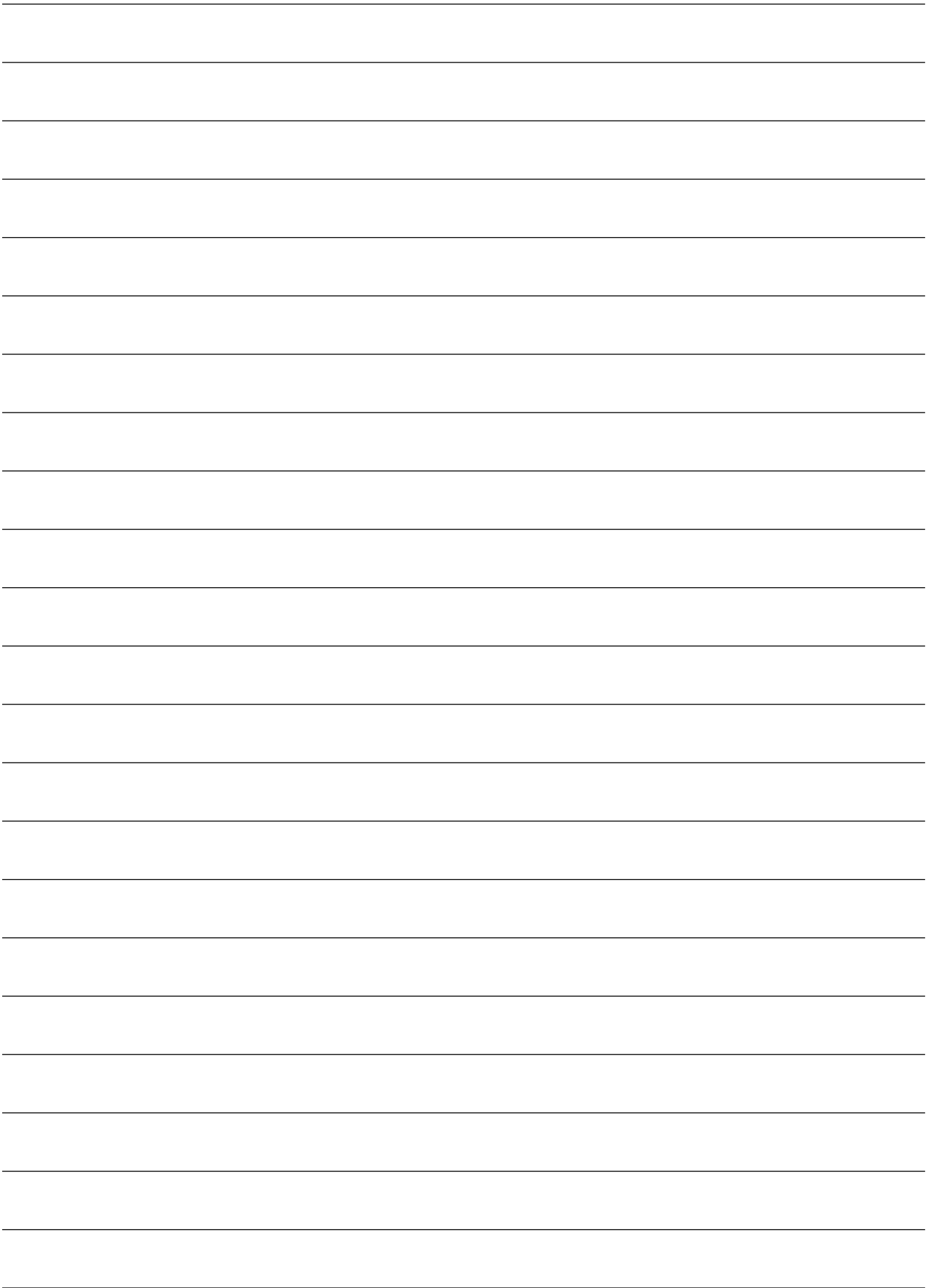
Characteristics of low rectal cancer have been known to be as following issues; difficult to stage for local tumor, high rate of local recurrence, high chance of sphincter invasion, difficult to get safe CRM, high risk of damage of nerve affecting sexual and voiding function. For example, Even though there have been some controversies about poor oncologic outcomes in low rectal cancer who underwent APR, Resected APR specimen showed higher incidence of positive CRM than low anterior resection. I would like to address a couple of issues in surgical treatment of low rectal cancer.

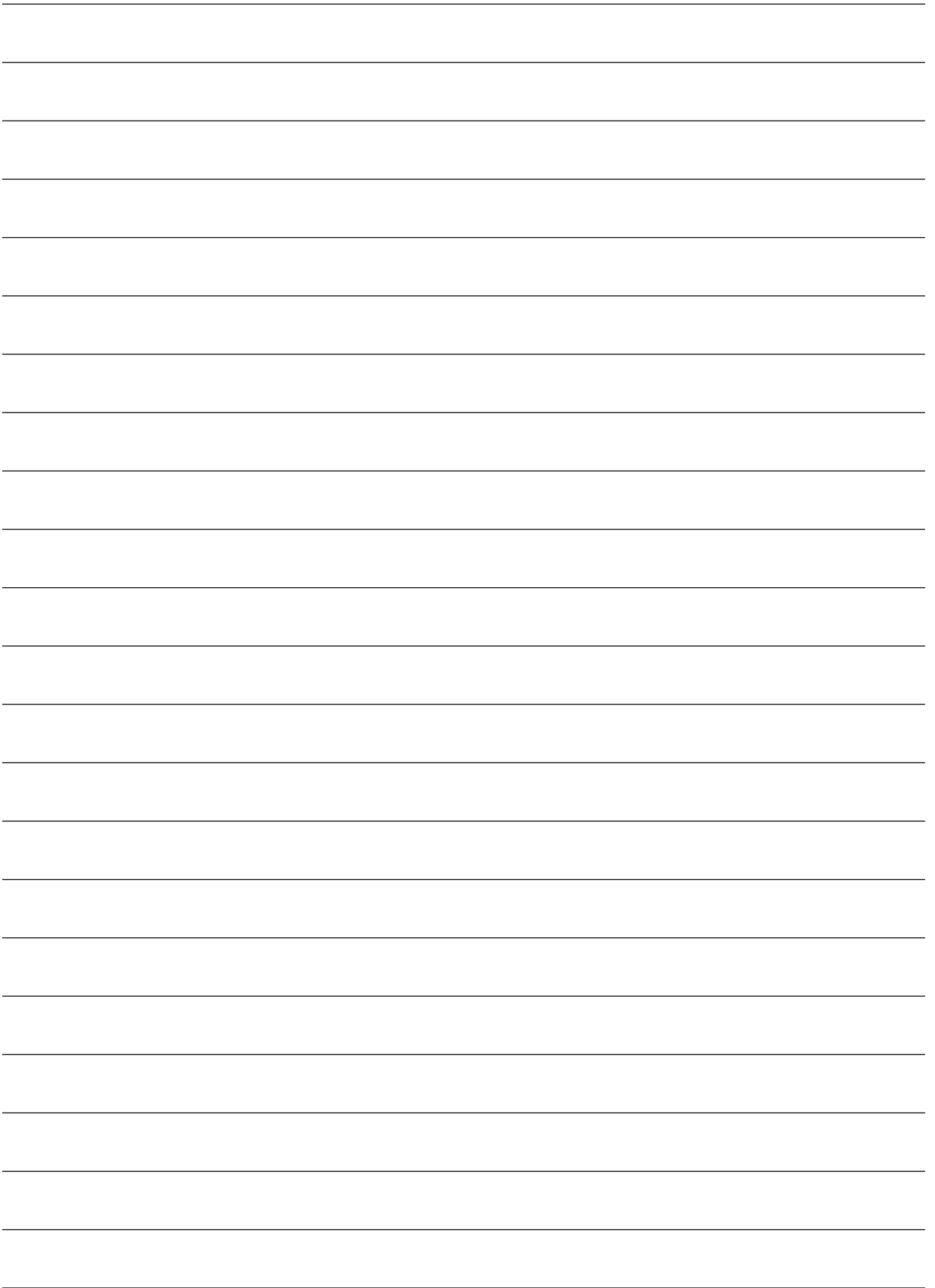
Total mesorectal excision (TME) is a standard surgical technique in the treatment of rectal cancer. However, the frequency of CRM involvement for APR has not diminished with TME. CRM involvement in APR specimens is related to the removal of less tissue at the level of the tumor in an APR. The extended APR can be the solution for problem of conventional APR. The extended posterior perineal approach in APR has a low risk of bowel perforation, CRM involvement.

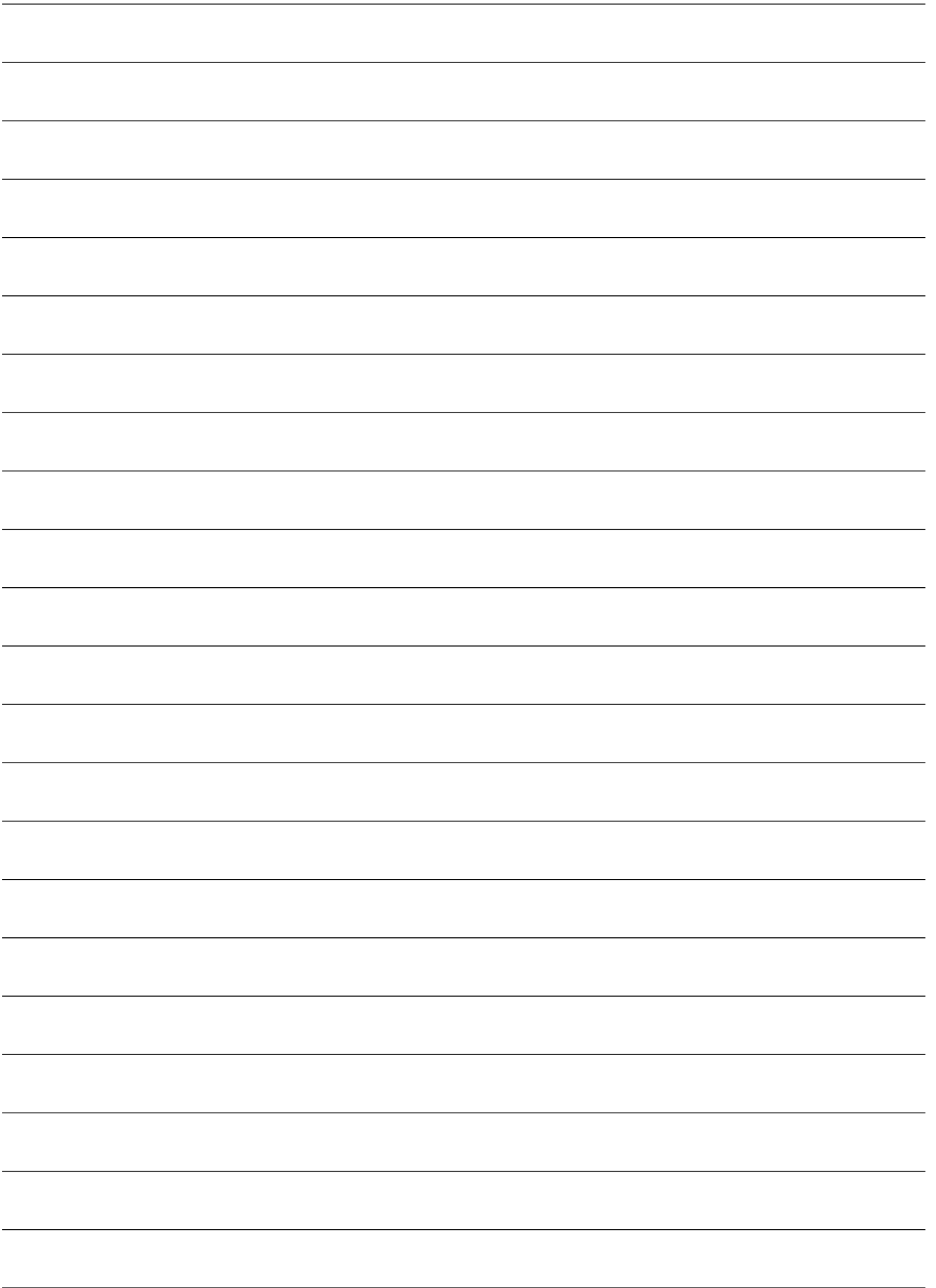
Considerable portion of patients with distal rectal cancer who have been considered as candidates for APR can undergo sphincter preservation following preoperative CRT. Ultralow anterior resection/Intersphincteric resection with coloanal anastomosis can be alternative APR in terms of oncologic and functional outcomes. Recent literatures showed ISR could be alternative APR in terms of oncologic and functional outcomes and definite sphincter complex invasion case (preop. CRT plus APR) has more superior oncologic outcomes than APR. Besides Preoperative CRT can provides the chance for investigator to use the local excision or observation in patients who show a good clinical tumor response.

One of critical point for low rectal resection is known to be an anastomotic leakage. There are several methods against leakage. Our studies show the numbers of linear endostapling in intracorporeal anastomosis closely related to anastomotic leakage. Therefore, endostapler must be applied to the rectum perpendicularly as can as possible and try to reduce the number of endostapler. In addition to that, reinforcement stitch at the corner can decrease the anastomosis leakage rate. The reinforcement stitch can be easily performed by high degree of freedom of robotic arm.

Surgery for low rectal cancer requires careful consideration for the oncologic and technical safety. Multidisciplinary approach is mandatory for tailored therapy of low rectal cancer.









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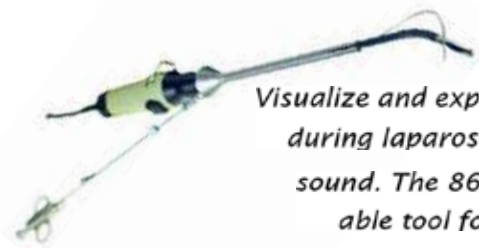
台灣總代理  
**惠興股份有限公司**  
TEL:(02)8665-0070

**STORZ**  
KARL STORZ — ENDOSKOPE



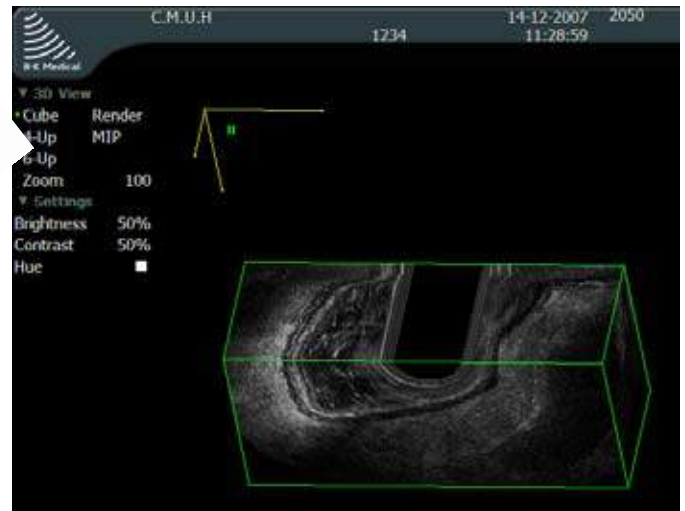


Choose from a wide range of transducers designed for preoperative, intraoperative and post-operative phases of patient care. With input from leading surgeons and OR staff, our transducers are designed specifically for the unique demands of surgery. Percutaneous, laparoscopic and intraoperative transducers enable you to scan anywhere and conduct interventional procedures with confidence.



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**2202 Pro Focus UltraView**



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**Designed to suit the OR**  
Position the UltraView exactly where you need it in your OR - it's compact, agile and mobile. Look at both your laparoscopic and ultrasound images simultaneously - with Picture-in-Picture you can see two imaging modalities at the same time.



# Campto-based Regimens + Target Therapy

## 為mCRC的標準治療之一



處方說明 抗癌妥靜脈輸注濃縮液 CAMPTO Conc. Solution For I.V. Infusion / 本藥限由醫師使用

### 成分含量

CAMPTO 小瓶含有 40 mg、100 mg 或 300 mg 的 irinotecan hydrochloride trihydrate。

### 適應症

晚期性大腸直腸癌之第一線治療藥物

- 與 5-FU 和 folinic acid 合併，使用於未曾接受過化學治療之患者。
- 單獨使用於曾接受 5-FU 治療無效之患者。
- 與 cetuximab 併用，治療曾接受含 irinotecan 之細胞毒性療法治療失敗且具有表皮生長因子接受體 (EGFR) 表現型 KRAS 野生型轉移性大腸直腸癌患者。
- 與 5-fluorouracil、folinic acid 及 bevacizumab 合併治療，做為轉移性大腸癌或直腸癌患者的第一線治療藥物。
- 與 capecitabine 合併治療，做為轉移性大腸直腸癌患者的第一線治療藥物。

### 建議劑量

- 單方藥物治療 (已接受過化學治療之患者)：  
CAMPTO 的建議劑量為 350 mg/m<sup>2</sup>，靜脈輸注 30 至 90 分鐘，每三週給藥一次。
- 合併藥物治療 (未曾接受過化學治療之患者)：  
CAMPTO 加 5FU/FA，每二週給藥一次  
CAMPTO 的建議劑量為 180 mg/m<sup>2</sup>，每二週給藥一次，靜脈輸注 30-90 分鐘，然後輸注 folinic acid 和 5-fluorouracil。

### 特殊群體

- 肝功能不全的患者：膽紅素在正常範圍上限值 (ULN) 的 1.5 倍以內時，CAMPTO 的建議劑量為 350 mg/m<sup>2</sup>。當患者的膽紅素在正常範圍上限值的 1.5-3 倍時，CAMPTO 的建議劑量為 200 mg/m<sup>2</sup>。應該每週監測一次血球計數。
- 腎功能不全的患者：尚未對此群體進行研究。
- 老年人：應謹慎選擇劑量並密切監視其病情。

### 禁忌

- 慢性發炎性腸道疾病及/或腸阻塞
- 對 irinotecan hydrochloride trihydrate 或任何一種 CAMPTO 的賦形劑有嚴重過敏反應之病史
- 懷孕與授乳期
- 膽紅素 > 3 倍正常範圍上限值
- 嚴重骨髓功能衰竭

- WHO 體能狀態評分 > 2
- 與聖約翰草 (St John's Wort) 併用  
關於 cetuximab 或 bevacizumab 或 capecitabine 的其他使用禁忌，請參見這些產品的產品資訊。

### 警語及特殊使用注意事項

#### 延遲性腹瀉

應充分告知患者，在給予 CAMPTO 之後 24 小時至下一個治療週期開始之前，可能會發生延遲性腹瀉。發生延遲性腹瀉時，應儘快告知醫師，並且立即給予適當的治療。目前建議的抗腹瀉治療是高劑量的 loperamide (第一次服用 4 mg，然後每 2 小時服用 2 mg)，應持續到最後一次液狀糞便出現之後 12 小時，但不可以連續使用超過 48 小時也不可以少於 12 小時。當腹瀉伴有嚴重的嗜中性白血球減少症時 (嗜中性白血球計數 < 500 個/mm<sup>3</sup>)，除了抗腹瀉治療之外，也要給予廣效抗生素作預防性之治療。

#### 血液學

在 CAMPTO 治療期間，建議每週做全血球計數監測。合併發燒之嗜中性白血球減少症 (體溫 > 38°C，而且嗜中性白血球計數 ≤ 1,000 個/mm<sup>3</sup>) 應該緊急住院，並以靜脈注射廣效抗生素治療。患者若有嚴重腹瀉須做全血球計數檢查。

#### 噁心與嘔吐

每次使用 CAMPTO 治療之前，建議預防性使用止吐藥。患者若同時有嘔吐與延遲性腹瀉，應儘快住院接受治療。

#### 急性膽鹼激素性症候群

如果發生急性膽鹼激素性症候群，除非有臨床禁忌存在，否則應投予 atropine sulphate (0.25 mg 皮下注射)。氣喘患者應格外小心。患者若發生過急性且嚴重的膽鹼激素性症候群，建議在隨後的 CAMPTO 治療週期時使用 atropine sulphate 作為預防性治療。

#### 不良反應

延遲性腹瀉、噁心、嘔吐、與 CAMPTO 及/或 loperamide 治療有關的便秘、嗜中性白血球減少症及貧血。

#### 容器材質與容量

5 ml 棕色藥瓶級聚丙烯小瓶，以鹵化丁基橡膠瓶塞，塑膠蓋及鉛帶密封。

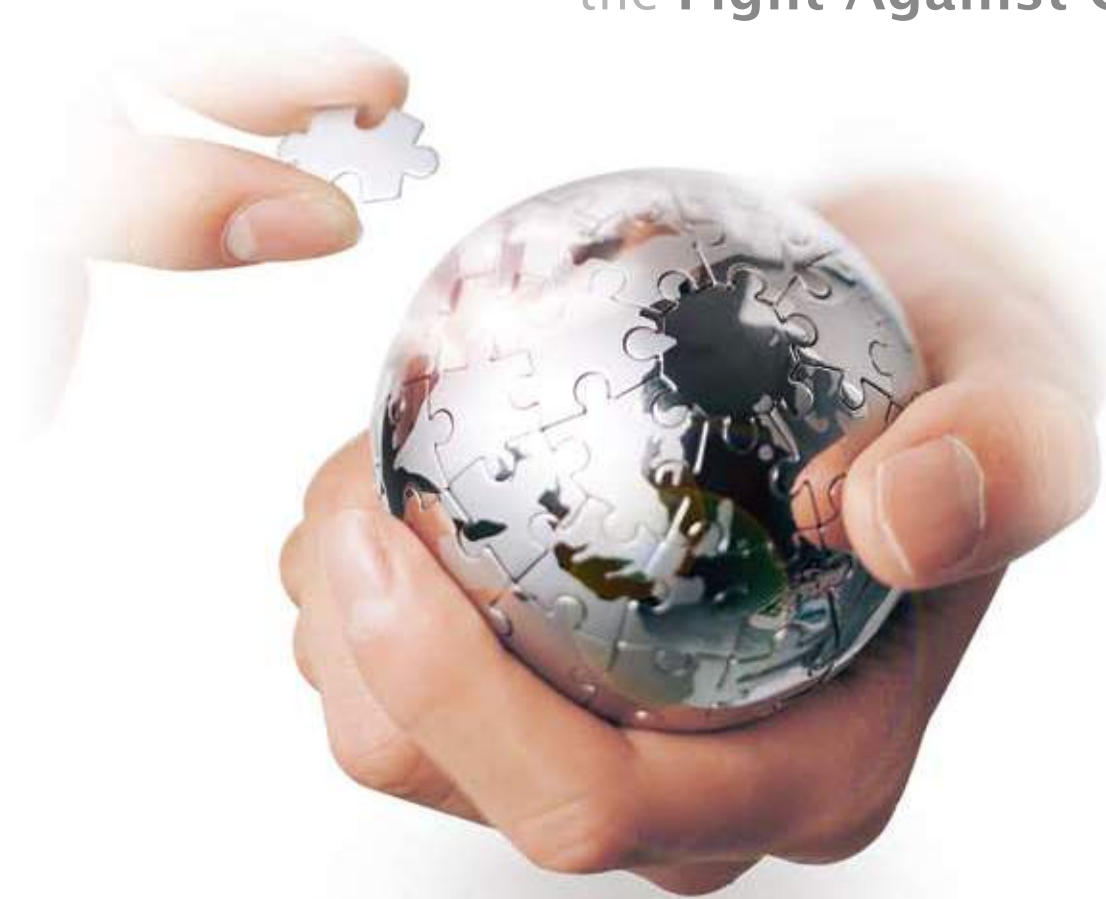
參考資料：1. 抗癌妥中文仿單：France LPD 20090828-3 (+CDS 6.4)；2. NCCN Guideline – v.2.2011; Colon cancer.

詳細處方資料備索

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# 科云生醫科技股份有限公司

## Bio-medical Carbon Technology

*Wound Care We Care*

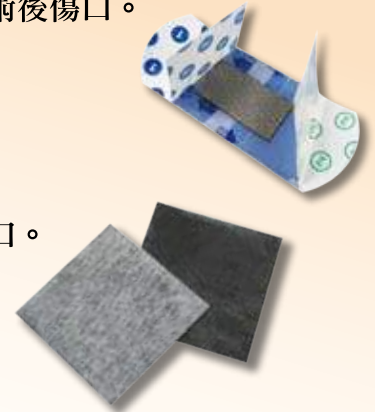


### 科云抗菌敷料功能

1. 特殊材質微孔洞表面可有效吸收組織滲液，並吸附水氣維持適當濕潤環境。
2. 專利活性碳設計可吸附傷口周圍細菌，破壞細菌繁殖達到抗菌效果、可抑制發炎反應。
3. 消除異味。
4. 釋放遠紅外線、可促進組織血液循環，促進傷口癒合、減少疤痕組織。
5. 阻隔紫外線、避免傷口組織部位黑色素沉澱。
6. 不須移除敷料即可進行X光檢查。

### 科云抗菌敷料適用範圍

1. 一般手術及微創手術後傷口。
2. 一、二級燒燙傷。
3. 一般割傷、擦傷。
4. 褥瘡。
5. 糖尿病患傷口。
6. 取皮或植皮區域傷口。



#### 沸水燙傷傷口：

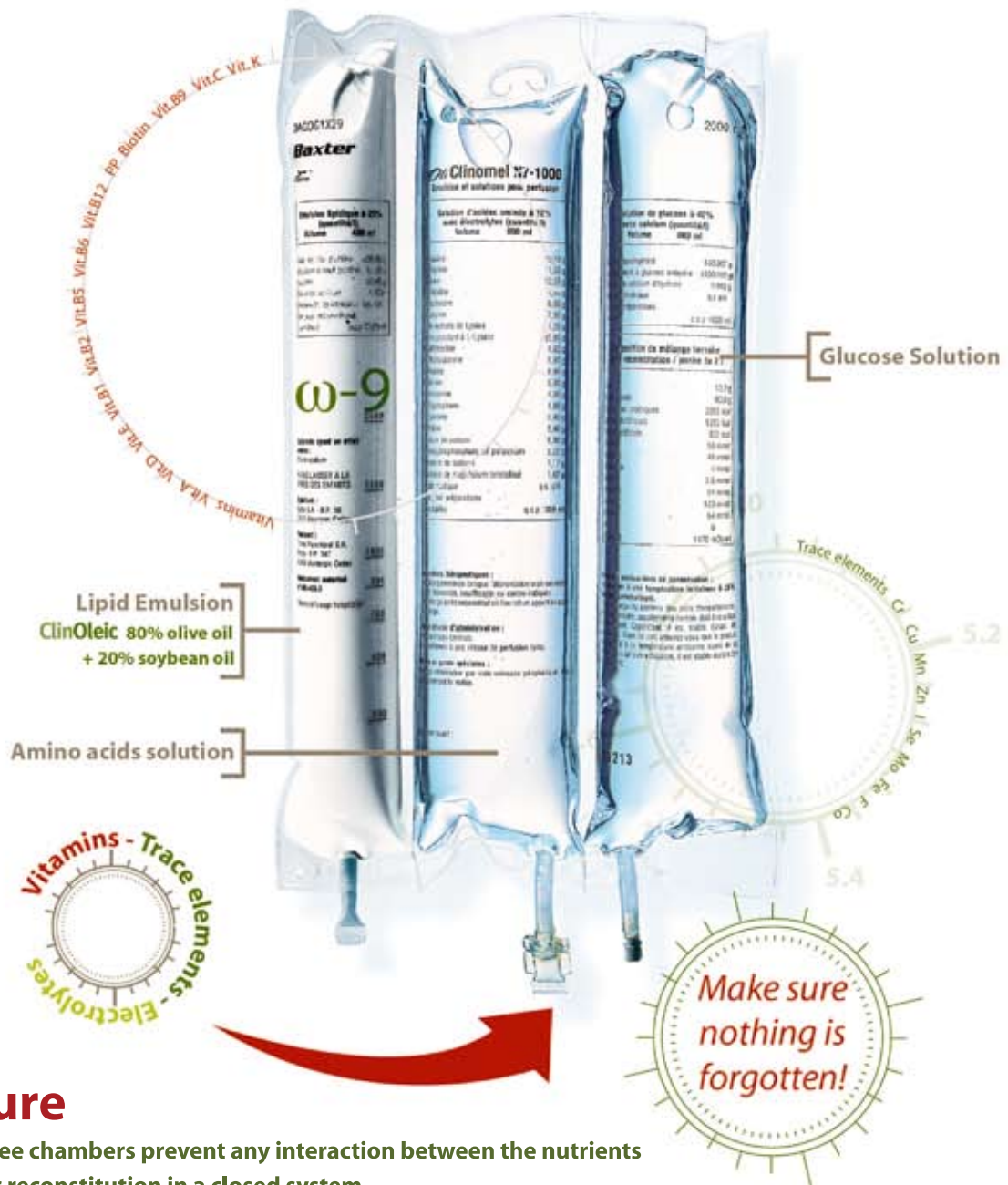
89歲男性、糖尿病齡15年以上，被熱水燙傷、傷口長15~20 cm寬5 cm，使用科云傷口敷料後第8天傷口結痂、丹毒造成的紅腫現象消失。

#### 糖尿病患感染傷口：

59歲男性、傷口約6個月無法癒合，黃色為患者原使用中藥粉末、使用科云抗菌敷料後停用任何藥物。分別為使用前、16天、32天傷口復原情形。

# OliClinomel

Containing ClinOleic 20%



## Secure

- The three chambers prevent any interaction between the nutrients
- Aseptic reconstitution in a closed system
- The use of closed vs open IV fluid containers (semi-rigid or glass) has been shown to be associated with a reduction of central venous catheter-associated blood stream infection between 61%<sup>1</sup> and 64%<sup>2</sup>

## Simple

- Easy to operate and to handle
- Storage :
  - can be stored at room temperature
  - once activated stability has been demonstrated for seven days (between + 2°C and 8°C) followed by a maximum of 48 hours at room temperature
  - 24 months shelf life in the undamaged overwrap, and prior to activation

## Effective

- Balanced ternary mixtures adapted to recommended daily amount
- In a German ICU, the use of OliClinomel has shown a cost reduction of 22% when compared to the multibottle system<sup>3</sup>

REF. 1. Epidemiol Infect. 2009 Jul;137(7):1041-8  
 2. Rosenthal VD, Maki DG. Am J Infect Control. 2004;32(3):135-41.  
 3. Menne R, et al.JPEN 2008 ; 32(6) : 606-12.



FEEL THE CONNECTION.

**echelonflex™**  
ENDOPATH® STAPLER

#### NATURAL ARTICULATION

ECHELON FLEX™ has natural articulation that enables the surgeon to focus on the line of transection and place the anvil exactly where needed. It removes the guesswork regarding how far to articulate when compared to traditional lever-based, two-handed endocutters.

#### SYSTEM-WIDE COMPRESSION

Enhanced system-wide compression available in Echelon™ ENDOPATH® Staplers combines a precision-machined anvil with 3-point gap control to provide uniform, consistent stapler formation for hemostasis in a wide range of tissue thickness

#### ONE-HANDED OPERATION

ECHELON FLEX™ is the first articulating mechanical stapler/cutter that can be operated with only one hand.

## ECHELON FLEX™ ENDOPATH® STAPLER, THE ARTICULATING ENDOCUTTER WITH TRUE ONE-HANDED OPERATION

#### EASY TISSUE POSITIONING AND MANIPULATION

ECHELON FLEX™ has wider proximal-to-distal jaw aperture than the Endo GIA™.\*

#### SHORTER GRIP SPAN

ECHELON FLEX™ features a shorter grip span than previous Ethicon Endo-Surgery endocutters for greater comfort and ease of use.

#### VALUE ARTICULATION

With ECHELON FLEX™, articulation is built into the instrument. This means customers pay for articulation once per case with ECHELON FLEX™, compared to once per reload with the Endo GIA™.

#### INVENTORY REDUCTION

Surgeons can perform the same procedures with 6 codes plus cartridges (15 codes) instead of up to 30 codes plus cartridges (39 codes) you may have ordered before.

\* ECHELON FLEX™ = 45° Endo GIA Roticulator™ Stapler = 36°  
ECHELON FLEX™ = 22.6mm Endo GIA™ = 21mm  
Endo GIA Roticulator™ Stapler is a trademark of Covidien Ltd.

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# Efficacy

**INVANZ® – The Group 1 Carbapenem  
Appropriate for Initial Empiric Therapy  
in Patients upon Hospital Admission**

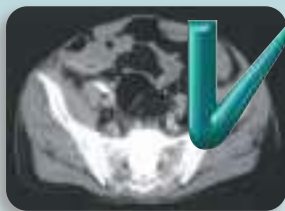
**INVANZ – HIGHLY EFFECTIVE**  
Indicated for treatment of infections where  
*Pseudomonas aeruginosa* is not suspected



**Community-Acquired  
Pneumonia**



**Complicated  
Intraabdominal  
Infections**



**Acute Pelvic  
Infections**



**Complicated Skin  
and Skin Structure  
Infections**



**Complicated Urinary  
Tract Infections including  
pyelonephritis**

\* INVANZ may be used for the treatment of infections in adult patients with renal insufficiency. In patients whose creatinine clearance is  $>30$  mL/min/1.73 m<sup>2</sup>, no dosage adjustment is necessary. Adult patients with advanced renal insufficiency (creatinine clearance  $<30$  mL/min/1.73 m<sup>2</sup>) and end-stage renal insufficiency (creatinine clearance  $<10$  mL/min/ m<sup>2</sup>) should receive 500 mg daily. There are no data in pediatric patients with renal insufficiency.

When adult patients on hemodialysis are given the recommended daily dose of 500 mg of INVANZ within 6 hours prior to hemodialysis, a supplementary dose of 150 mg is recommended following the hemodialysis session. If INVANZ is given at least 6 hours prior to hemodialysis, no supplementary dose is needed. There are no data in patients undergoing peritoneal dialysis or hemofiltration. There are no data in pediatric patients on hemodialysis.

The usual dose of INVANZ in patients 13 years of age and older is 1 gram (g) given once a day. The dose of INVANZ in patients 3 months to 12 years of age is 15 mg/kg twice daily (not to exceed 1g/day). INVANZ is not recommended in infants under 3 months of age as no data are available.

There are no adequate and well-controlled studies in pregnant women. INVANZ should be used during pregnancy only if the potential benefit justifies the potential risk to the mother and fetus. Ertapenem is excreted in human milk. Caution should be exercised when INVANZ is administered to a nursing woman.

## 使用前請詳閱說明書、警語、注意事項

INVANZ is indicated for the treatment of patients with moderate to severe infections caused by susceptible strains of microorganisms, as well as initial empiric therapy prior to the identification of causative organisms in the following infections: Complicated Intra-Abdominal Infections, Complicated Skin/Skin Structure Infections, Community Acquired Pneumonia, Complicated Urinary Tract Infections including pyelonephritis, Acute Pelvic Infections including postpartum endomyometritis, septic abortion and postsurgical gynecologic infections.

Methicillin-resistant staphylococci are resistant to INVANZ. Many strains of *Enterococcus faecalis* and most strains of *Enterococcus faecium* are resistant. *Clostridium difficile* is resistant to INVANZ.

INVANZ is contraindicated in patients with known hypersensitivity to any component of this product or to other drugs in the same class or in patients who have demonstrated anaphylactic reactions to beta-lactams.

In clinical studies the most common drug-related adverse experiences reported during parenteral therapy in patients treated with ertapenem were diarrhea (4.3%), infused vein complication (3.9%), nausea (2.9%), and headache (2.1%). Drug-related adverse experiences were reported in approximately 20% of patients treated with ertapenem. Ertapenem was discontinued due to adverse experiences thought to be drug related in 1.3% of patients.



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