

大林慈濟醫院腸胃內科

主 題：消化系同好會暨國際研討會實作工作坊/大林慈濟醫院

日 期：2019 年 11 月 9 日(六) 08:30-12:30，共 4 小時。

地 點：大林慈濟醫院 內視鏡檢查室、換水大腸鏡學習中心

主辦單位：大林慈濟醫院腸胃內科

Time	Theme	Speaker	Moderator	Venue
08:30-08:50	報到			換水大腸鏡學習中心
08:50-09:00	Opening	曾國枝 部長 (大林慈濟醫院)		
09:00-09:30	Colorectal cancer (CRC) screening, adenoma detection rate (ADR) and interval cancer (IC)	Felix W. Leung (Professor of Medicine in Residence, UCLA)	曾國枝 部長 (大林慈濟醫院)	
09:30-10:00	Water exchange colonoscopy workshop	胡志棠 主任 (花蓮慈濟醫院) 謝毓錫 醫師 曾志偉 主任 (大林慈濟醫院)	Felix W. Leung (Professor of Medicine in Residence, UCLA)	內視鏡檢查室
10:00-10:20	以前瞻隨機分組比較換水法與二氧化碳充氣法大腸鏡檢查對右側大腸腺瘤型息肉與增生型息肉漏檢率的影響	鄭吉良 醫師 (中壢長榮醫院)	曾志偉 主任 (大林慈濟醫院)	換水大腸鏡學習中心
10:20-10:30	Coffee Break			
10:30-11:00	換水法大腸鏡技術 搭配帽蓋的經驗	胡志棠 主任 (花蓮慈濟醫院)	洪宗興 主任 (大林慈濟醫院)	換水大腸鏡學習中心
11:00-11:30	Water exchange colonoscopy workshop	胡志棠 主任 (花蓮慈濟醫院) 謝毓錫 醫師 曾志偉 主任 (大林慈濟醫院)	Felix W. Leung (Professor of Medicine in Residence, UCLA)	內視鏡檢查室
11:30-11:50	Decrease the cecal intubation time in water-exchange method	曾志偉 主任 (大林慈濟醫院)	謝毓錫 醫師 (大林慈濟醫院)	換水大腸鏡學習中心
11:50-12:20	Q & A			
12:30	Closing			

Organizer: 大林慈濟醫院 肝膽腸胃科

Workshop Registration Website: <https://app.tzuchi.com.tw/tchw/onlineregister/act.aspx>

Contact Person : 鄭小姐 05-2648000-3240、E-mail:dog70401@gmail.com

大林慈濟醫院

消化系同好會暨國際研討會實作工作坊

時間：2019年11月9日(六) 08:30-12:30。

地點：大林慈院內視鏡室

講者：Felix W. Leung

講題：Colorectal cancer (CRC) screening, adenoma detection rate (ADR) and interval cancer (IC)

摘要：CRC is one of the 5 most common cancers in the U.S. The risk of getting CRC in a life time is 4.2%. CRC mortality and incidence have been on the decline. Mortality has decreased by >50% due to improved treatment; earlier detection; and decreased incidence. Among U.S. adults ≥ 50 years, CRC incidence has declined by >45% since its peak in the mid-1980s. The 2016 USPSTF Guideline recommended screening of average-risk individual between the ages of 50 and 75. The benefit risk ratio decreases after age 75. Lifestyle factors associated with risk reduction include: consuming more fruits, vegetables and whole grains; eating less red and processed meats; limiting or avoid alcohol and smoking; minimizing overweight particularly in men with large waistlines; and an active, non-sedentary lifestyle. Some risk factors are unavoidable, which include family history of inherited syndromes, IBD, race and ethnicity. For those high risk subjects, starting colonoscopy screening earlier than 50 is advised.

In one RCT of colonoscopy versus FIT, the data showed that higher proportion of subjects participated in screening in the FIT arm. Number of subjects in whom CRC was detected were similar in the 2 arms, but more adenomas were identified by colonoscopy.

Polypectomy does provide long-term prevention of CRC deaths. Zauber et al. reported that the expected deaths in the cohort based on Surveillance, Epidemiology, End Results (SEER) registry was 25, the observed number was only 12, a significant reduction after patients underwent polypectomy. However, colonoscopy is not perfect. In the VA colonoscopy co-op study, of the initial 3121, 1193 were followed up at 5.5 years. There were 8 interval cancers (IC), which is defined as diagnosed within 3 to 5 years after colonoscopy, and 40 advanced adenomas, which is defined as those ≥ 10 mm in diameter, >25% villous features or has high-grade dysplasia. One of the most important quality indicators for colonoscopy is adenoma detection rate (ADR, proportion of patients with at least one adenoma of any size). In a Kaiser study of 223,842 patients, 8.2% (n=712) of all CRC were IC; and each 1.0% increase in ADR was associated with 3.0% decrease in IC risk. Another report showed that 52% of ICs were probably the results of missed lesions. Therefore methods to increase ADR would have the greatest potential impact on reducing IC and advanced neoplasia.

The importance of the missed lesions prompted the development of many new devices and accessories, including the full spectrum endoscope, the retroview scope, cap, Endocuff, Endoring, balloon endoscope and retroscope, etc. The 2015 ASGE Technology Report indicated that the evidence was insufficiently robust; and more studies were needed. Three years later, there was still no reproducible data that these tools and accessories add to adenoma detection.

The GIE Editorial Board 2018 top 10 topics in advances in GI endoscopy picked methods to increase ADR as the number 1 topic. The choice was based on the following. Network meta-analyses showed water exchange (WE) yielded the highest ADR compared with other methods. WE (38.9%) had significantly higher ADR than air (26.7%) in propofol-sedated patients. Low quality evidence suggests Endocuff and cap increase ADR. After standard withdrawal, both a second forward view and retroflexed view of the right colon increase right colon ADR. WE entails water infusion in lieu of air, and near-complete suction of gas, water and debris to minimize distension and elongation during

insertion. The exchange of water during insertion decreases pain and promoted salvage cleaning. Practice is required to achieve near-complete suction of infused water on arrival to the cecum.

In 2017, three RCTs from China, Taiwan, and Europe consistently showed WE increased ADR compared with AI. Based on the analysis of combined data of the above 3 RCTs, WE also significantly increased right colon ADR (22.4%) compared with AI (15.7%). An even more important end point for improving adenoma detection is uncovering the advanced adenoma. It is a surrogate biologic marker of colorectal cancer risk and used to stratify patients for closer surveillance. A recent JAMA report linked advanced adenomas to increased incidence of CRC during follow up. A combined analysis of all WE RCTs to date showed WE significantly increased advanced ADR (5.9%) compared with air/CO₂ insufflation (4.6%).

Higher ADR could translate into fewer missed lesions. Increase ADR by WE shown above would likely be associated with fewer missed lesions (lower adenoma miss rate, AMR). In an abstract accepted for presentation at the 2019 Digestive Diseases Week, WE reduced AMR from 34% to 18% in the right colon, and from 29% to 16% in the proximal colon.

In conclusion, WE improves over ADR, right colon ADR and advanced ADR and reduces AMR. The impact of WE on ICs deserves to be studied.

講者：鄭吉良

講題：以前瞻隨機分組比較換水法與二氧化碳充氣法大腸鏡檢查對右側大腸腺瘤型息肉與增生型息肉漏檢率的影響

摘要：Colonoscopy is widely practiced, generally safe, accurate for detecting and prevention of colorectal cancer (CRC), but is not perfect. A substantial number of neoplastic lesions are missed, according to tandem air insufflation colonoscopy studies. The adenoma miss rates (AMRs) in the right colon ranged from 23% to 33%. It has been reported that about 60% of postcolonoscopy CRCs (PCCRCs) were attributed to missed lesions. PCCRCs were 2.4 times more likely to arise in the proximal than in the distal colon. Inadequate bowel preparation, lesions located behind folds or having a nonpolypoid shape, incomplete colonoscopy, a short withdrawal time, and suboptimal inspection techniques contributed to missed neoplasias. For performance improvement, approaches that increase adenoma detection rate (ADR) conceivably could reduce AMR.

Water exchange (WE) colonoscopy is characterized by gasless insertion into the cecum in clear water and has been shown to facilitate the completion of colonoscopy and significantly increase bowel cleanliness, even in the right colon. WE with near-complete removal of infused water during insertion improved the right colon ADR compared with those of air insufflation. In our previous retrospective observational report, WE has been shown to significantly reduce the right colon AMR and combined AMR and hyperplastic polyp miss rate (HPMR) compared with those of CO₂ insufflation. A prospective randomized controlled trial comparing CO₂ insufflation and WE in terms of right colon combined AMR and HPMR by tandem inspection is then carried out in our institution since April 2019. The interim analysis of the study will be presented during this meeting.

講者：胡志棠

講題：換水法大腸鏡技術搭配帽蓋的經驗

摘要：在台灣，換水法大腸鏡尚未普遍，其中原因包括內視鏡醫師習慣使用傳統的灌氣法與使用麻醉注射。然而，有些病患因罹患慢性肺部或心臟疾病、不適合接受無痛麻醉、或者因灌氣法造成病患腸道拉長及增加困難度，在臨床上，換水法大腸鏡提供了傳統大腸鏡檢查之外的另一個選擇。

花蓮慈濟醫院使用換水法大腸鏡已經七年，這項源自美國的技術，在台灣已經有非常多的病人使用過，病患評價極高，講者已有執行超過兩千次的臨床經驗，加上近期使用帽蓋的經驗，發現換水法大腸鏡必須搭配觀察腸道紋路的技術及壓迫肚子的技術。加上帽蓋很明顯的會加快完成的速度，講者將透過本次研討會，將過去多年來的經驗與各位臨床醫師分享，希望讓大家能在實際操作及臨床實務上，對病患及對醫師、技術員的操作更順暢。

講者：曾志偉

講題：Decrease the cecal intubation time in water-exchange method

摘要：Water exchange (WE) method can decrease the discomfort of the patients undergoing colonoscopy. It also provides salvage cleansing and improves adenoma detection, but a longer intubation time is required. There are several potential methods to reduce the cecal insertion time during WE. We could increase the experience of the endoscopist and improved the bowel preparation of the patients. By attaching a transparent plastic cap to the tip of a colonoscope, the cecal intubation time of WE could be shorten. Using the high flow rate pump and could decrease the cecal intubation time. With several new designed endoscopies that integrated a separate water jet channel for infusing water, infusing and suctioning of water can be done with separate channels at the same time. The Two-Channel method could avoid dirty water recycle and short the cecal intubation time. We will share our experiences in this speech.

講師簡歷

一、Felix W. Leung

現職

2013 - present Full-time Diagnostic and Therapeutic Endoscopist, West Los Angeles VAMC, VAGLAHS
1986 - present Full-time Gastroenterologist, Sepulveda VAMC, VAGLAHS

學歷

Yale College, New Haven, Connecticut, B.S. Administrative Sciences, 1974
Yale Medical School, New Haven, Connecticut, Doctor of Medicine, 1978

經歷

2002 - present Specialized in unsedated colonoscopy
2013 - present Full-time Diagnostic and Therapeutic Endoscopist, West Los Angeles VAMC, VAGLAHS
2010 - present Diagnostic and Therapeutic Endoscopist (part-time), Gastroenterologist, Physician, West Los Angeles VAMC, VAGLAHS
2006 - 2010 Diagnostic and Therapeutic Endoscopist, Gastroenterologist, Physician, Sepulveda Ambulatory Care Center & Nursing Home (ACCNH), VAGLAHS
1999 - 2010 Medical and Gastroenterology/ Endoscopy Attending, West Los Angeles VAMC
1998 - present Consultant Gastroenterology Attending, VA Bakersfield Outpatient Clinic
1998 - present Consultant Gastroenterology Attending, VA Santa Barbara Outpatient Clinic
1997 - present Chief of Gastrointestinal Motility, VA Sepulveda ACCNH
1996 - present Chief of Gastroenterology and Endoscopy, VA Sepulveda ACCNH
1995 - present Professor of Medicine in Residence, David Geffen School of Medicine at UCLA
1990 - present Member/Investigator, Center for Ulcer Research and Education (CURE)/UCLA Digestive Disease Research Center
1986 - present Principal Investigator, Gastrointestinal Blood Flow Research Laboratory, Sepulveda VAMC/ UCLA San Fernando Valley Program (SFVP)
1986 - 2006 Diagnostic and Therapeutic Endoscopist, Gastroenterologist, Physician, Sepulveda VAMC/UCLA SFVP
2001 - 2005 Chief, Hepatitis C Evaluation and Treatment Clinic, VA Sepulveda ACCNH
1994 - 1996 Acting Chief of Gastroenterology and Endoscopy, Sepulveda VAMC
1994 - 1996 Acting Director, Division of Gastroenterology, UCLA SFVP
1989 - 1995 Associate Professor of Medicine in Residence, UCLA School of Medicine
1988 - 1994 Member, Inflammatory Bowel Disease Center, UCLA
1986 - 1999 Diagnostic and Therapeutic Endoscopist, Gastroenterologist, Physician, Olive View Medical Center/UCLA SFVP
1986 - 1990 Investigator, CURE, UCLA
1984 - 1989 Assistant Professor of Medicine in Residence, UCLA School of Medicine
1983 - 1986 Affiliate Investigator, CURE, UCLA

專長

2004 - 2018 Water exchange colonoscopy

二、鄭吉良 醫師(Chi-Liang Cheng)

服務單位：中壢長榮醫院肝膽腸胃科

職稱：主治醫師

Education

1987- 1994 Chung Shan Medical University, Taichung, Taiwan, M.D.

Postgraduate Education

1993-1994 Internship in Chang Gung Memorial Hospital, Taipei, Taiwan

1996-1999 Residency in Internal Medicine, Chang Gung Memorial Hospital, Taipei, Taiwan

1999-2001 Clinical Fellowship in Gastroenterology/Hepatology, Chang Gung Memorial Hospital, Taipei, Taiwan

2003-2004 ERCP research Fellowship in Gastroenterology, Indiana University Medical Center, Indianapolis, Indiana, United States of America

Academic Appointment

2001-2011 Attending physician, Department of Gastroenterology/Hepatology, Chang Gung Memorial Hospital, Taipei, Taiwan

2005-2006 Lecturer, Chang Gung Memorial Hospital, Taipei, Taiwan

2006-2011 Assistant Professor, Chang Gung Memorial Hospital, Taipei, Taiwan

2007-2011 Assistant Professor, Department of Medicine, Chang Gung University, Taoyuan, Taiwan

Employment Record

1996-1999 Residency in Internal Medicine, Chang Gung Memorial Hospital, Taipei, Taiwan

1999-2001 Clinical Fellowship in Gastroenterology/Hepatology, Chang Gung Memorial Hospital, Taipei, Taiwan

2001-2011 Attending physician, Division of Digestive Therapeutic Endoscopy, Department of Gastroenterology/Hepatology, Chang Gung Memorial Hospital, Taipei, Taiwan

2011-Present Chief, Division of Gastroenterology and Hepatology, Evergreen General Hospital, Taoyuan City, Taiwan.

Board Certification

1995 Taiwanese Board of Medicine

2000 Taiwanese Board of Internal Medicine

2002 Taiwanese Board of Gastroenterology

2003 Taiwanese Board of Digestive Endoscopy

2006 Taiwanese Board of Ultrasonography in Gastroenterology

2013 Educational Commission for Foreign Medical Graduate (ECFMG) Certificate (USA)

Research Interests

1. Pancreatobiliary diseases, diagnostic and therapeutic
2. Acid related gastrointestinal disorders
3. Application of double balloon enteroscopy in the small bowel diseases and pancreaticobiliary diseases
4. Quality improvement on colonoscopy examination

三、胡志棠 醫師

現職

- 1996- 花蓮慈濟醫院肝膽腸胃科主治醫師
2005- 花蓮慈濟醫院研究部肝病研究中心主持人
2017- 花蓮慈濟醫院內科部肝膽腸胃研究中心主任
2019- 慈濟大學醫學系內科教授

學歷/研習

- 1984-1991 台北醫學大學醫學士
1998-2004 英國劍橋大學分子生物學博士
2018-2018 中國醫藥大學針灸研習班，並取得針灸專科醫師證書。

經歷

- 1991-1994 台北馬偕醫院內科部住院醫師
1994-1996 台北醫學大學附設醫院腸胃肝膽科研究員、總醫師
1997-2004 慈濟大學醫學系醫學系腸胃肝膽科講師
1998-2001 英國劍橋大學附設醫院 (Addenbrooke's Hospital) 分子肝膽暨肝移植中心研究員
2002-2005 花蓮慈濟醫院內科部副主任
2003-2004 美國國家衛生院 (National Institutes of Health) 肝病研究中心博士後研究員
2004-2017 花蓮慈濟醫院肝膽腸胃科主任
2004-2005 慈濟大學醫學系腸胃肝膽科臨床助理教授
2005-2010 慈濟大學醫學系腸胃肝膽科助理教授
2006-2011 慈濟大學醫學系腸胃肝膽科主任
2010-2019 慈濟大學醫學系內科副教授
2013-2014 花蓮慈濟醫院肝膽腸胃科及消化系功能檢查室主任
2013-2019 台灣消化系內視鏡醫學會理事

專長

一般胃腸肝膽科、慢性肝炎、肝硬化、肝癌、分子生物學、分子遺傳學、遺傳病及癌症的分子醫學診斷、經鼻內視鏡 (2006 年起)、換水法大腸鏡 (2012 年起)、腹部超音波

四、曾志偉 醫師

現職

- 2010- 大林慈濟醫院內科部胃腸科主治醫師
- 2018- 慈濟大學助理教授
- 2018- 大林慈濟醫院內科部副部長
- 2017- 大林慈濟醫院腸胃內科主任

學歷

1994/06 至 2001/06 國立陽明大學大學醫學系學士

經歷

- 2008-2010 台北榮民總醫院內科部住院醫師
- 2006-2008 台北榮民總醫院腸胃肝膽科總醫師
- 2008-2010 嘉義榮民醫院內科部主治醫師
- 2008-2010 國立陽明大學兼任講師
- 2011-2017 慈濟大學兼任講師
- 2013-2017 大林慈濟醫院一般內科主任

專長

一般胃腸肝膽科、慢性肝炎、治療性內視鏡、內視鏡超音波