



2014

何鴻燊博士醫療拓展基金會 醫學研討會

Dr Stanley Ho Medical Development Foundation Symposium

何鴻燊博士醫療拓展基金會總部
澳門友誼大馬路555號澳門置地廣場9樓
Headquarter, Dr. Stanley Ho Medical Development Foundation
9/F., Macau Landmark, 555 Avenida Da Amizade, Macau

二零一四年一月十八日 下午一時至六時半

18th January 2014, 1:00pm - 6:30pm

二零一四年一月十九日 上午九時半至下午二時半

19th January 2014, 9:30am - 2:30pm



何鴻燊博士醫療拓展基金會
Dr. Stanley Ho Medical Development Foundation

聯合主辦
Jointly organized by



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The Chinese University of Hong Kong

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18th JAN 2014 (SATURDAY) • 二零一四年一月十八日 (星期六)

- 12:45pm 入席登記 Registration
- 1:15pm 開幕致詞 Opening address
Chairpersons: 胡錦生教授 Prof Woo Kam Sang
張德洪醫生 Dr Cheong Tak Hong
- 1:30pm 司徒卓俊教授 Prof CC Szeto
Update on Screening and Treatment of Chronic Renal Failure
- 2:00pm 馬青雲教授 Prof Ronald CW Ma
Advances in the Management of Type 2 Diabetes
- 2:30pm 許樹昌教授 Prof David SC Hui
H7N9 & Middle East Respiratory Syndrome
- 3:00pm 王彥暉教授 Prof Wang Yan Hui
Treatment Strategies and Efficacy of Traditional Chinese Medicines in Depressive Disorders
- 3:30-4:00pm 休息時間 Tea Break
Chairpersons: 謝孟雄教授 Prof Shieh Mung Shiung
黃家星教授 Prof Lawrence Wong
- 4:00pm 鄭振耀教授 Prof Jack CY Cheng
Updates on the Aetio-pathogenesis and Management of Adolescent Idiopathic Scoliosis
- 4:30pm 梁德楊教授 Prof TY Leung
Antenatal Screening Model in the 21st Century
- 5:00pm 林翠華教授 Prof Linda CW Lam
Pharmacological and non-pharmacological Treatment for Dementia
- 5:30pm 廖士程教授 Prof Liao Shih Cheng
Update on Treatment of Psychoneurotic and Manic-depressive Disorders:
A Focus on Major Depression
- 6:30pm Welcome Dinner (invited guests)

19th JAN 2014 (SUNDAY) • 二零一四年一月十九日 (星期日)

- Chairpersons: 吳兆文教授 Prof Simon Ng
霍文遜醫生 Dr Manson Fok
- 9:30am 王國憲副教授 Prof Wang Kuo Hsien
Recent Advances in the Management of Psoriasis: A Major Chronic Dermatological Disease
- 10:00am 吳少君教授 Prof SK Ng
Diagnostic and Therapeutic Endoscopy of Salivary Glands
- 10:30am 趙偉仁教授 Prof Philip WY Chiu
Advances in the Management of Gastroesophageal Reflux Disease
- 11:00am 吳兆文教授 Prof Simon SM Ng
An Update on Robotic Colorectal Surgery
午膳及休息時間 Tea Break & Lunch
Chairpersons: 胡志遠教授 Prof Justin Wu
陳泰業醫生 Dr Chan Tai Ip
- 12:30pm 陳健教授 Prof Chen Jian
Uses of Vitamin D Supplementation for the Elderly
- 1:00pm 黃國柱教授 Prof George KC Wong
Recent Advance in the Management of Intracranial Aneurysms
- 1:30pm 甄秉言教授 Prof Bryan PY Yan
Advances in Endovascular Intervention for Critical Limb Ischemia
- 2:00pm 吳志輝教授 Prof Anthony CF Ng
Recent Advances in the Management of Benign Prostatic Hyperplasia
- 2:30pm 閉幕禮 Closing Address



Welcome to Symposium 2014.

In 2005, Dr. Stanley Ho Medical Development Foundation (Foundation) was set up with the full support and co-operation of The Chinese University of Hong Kong (CUHK). This co-operation continues to this day, and is evidenced by the establishment of The Stanley Ho Center for Emerging Infectious Diseases at CUHK in 2006, the setting of the Dr. Stanley Ho Professorship of Respiratory Medicine in 2011, and the support for the establishment of The Big Data Decision Analytics Research Center at CUHK in 2013.

During the past year, our Foundation mainly engaged in the following projects:

1. The Big Data Decision Analytics Research Center

Our Foundation made a one-off donation to CUHK last year for the purpose of setting up The Big Data decision Analytics Research Center (Big Data Center), which focuses on the development of a new paradigm in data-intensive research discovery, targeting at knowledge creation and insight extraction from massive datasets using data mining techniques and operations research methods. Currently, the researchers focus on three healthcare-related researches including Public Health and Genomics Research, Biostatistics Research, and Climate Change Research which include a project on Air Pollution and Cardiovascular Death.

The successful implementation of these projects will provide the following potential benefits:

- (1) to predict of disease patterns and change in epidemiology of diseases in Macau, Hong Kong, and the Pearl River Delta Region.
- (2) to identify the bottlenecks in the medical service delivery and suggest ways for improvement together with Health Bureau of Macau.
- (3) to shed light on the genomics of diseases in Southern China and develop personalized medicine for patients in the region.

2. Personalized Medicine Center

Our Foundation supports the St Anne's College of Oxford University to set up The Center for Personalized Medicine (the Center). The Center will bring together key individuals and groups to facilitate cross-disciplinary dialogue and collaboration, in order to provide expertise and leadership in the field of personalized medicine. Some potential benefits of the Center can bring to Macau and Pearl River Delta are:

- (1) The Center will share its knowledge and expertise with local clinicians, researchers, students and the public. A website will be established as the starting point by the Oxford groups. It will facilitate the dissemination of materials to the academics and professionals in the medical and healthcare communities in Macau, Hong Kong, and Pearl River Delta region, with the Foundation as the channel.
- (2) The education strategy of the Center will include a series of seminars across the 2013/2014 academic year primarily at the medical students. An international conference to be held in Macau in partnership with our Foundation and the development of a programme will also be organized for the professionals in personalized medicine.

3. Promotion of develop advanced medical studies in Macau

In 2013, our Foundation sponsored a research on "The Needs and the Values of Establishing Medical Education in Macau". Using a scientific research approach, the research concludes that it is essential for Macau to have its own medical school in order to meet the medical needs of Macau citizens and improve the quality of the medical service. The establishment of the medical school can also enhance economic diversification of Macau with the development of medical tourism.

To explore the possibility of future collaboration in basic biomedical science research and also the building of a medical school in Macau, in November 2013, our Foundation's representatives, together with a team of key academics from the University of Macau (UM) and CUHK paid a visit to the following US institutes:

- MD Anderson Cancer Center
- Cleveland Clinic and Medical School
- Baylor College of Medicine
- University of Pittsburgh Medical Center.

These medical centers have made significant contributions to improve the quality of healthcare for their citizens. Moreover, the cities where they are located have achieved economic diversity through the development of medical tourism and the healthcare industry. The success of these US medical centers is based largely on the following common components:

- A strong faculty in clinical medicine
- Variety of governance models
- Different strengths in biomedical science and capacity in translational research
- International collaboration
- Job opportunities

We believe the establishment of a medical school is a tremendous but essential project for Macau. With the support of UM and CUHK, our Foundation will continue to work on this development.

4. Alzheimer's Disease

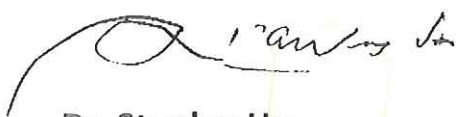
The growing impact of the Alzheimer disease was highlighted by the Chief Executive of Macau in the recent policy address. Our Foundation will continue to support the research for earlier diagnosis and better treatment of those unfortunate patients who are suffering from this terrible disease.

Our Foundation will also continue to support Macau Alzheimer's Disease Association (MADA) which has, since its establishment in 2010, spent tremendous efforts in educating the community about the Alzheimer disease. Our Foundation encouraged and supported the setting of MADA in 2010. In April 2013, The Council of Alzheimer's Disease International (ADI) approved, during a meeting in Taipei, Taiwan, the application of MADA to become a full member of ADI. The collaboration with ADI will enable MADA to enhance the services for the people in Macau as well as bridging the gaps between the medical and social service organizations in the Pearl River Delta.

In December 2013, our Foundation sponsored MADA to organize the 16th Asia-Pacific Conference of Alzheimer Disease International in Macau. Many internationally acclaimed scholars joined the conference and shared with us their updates of the Alzheimer disease. The conference served as the starting point of our work as the bridge. We hope that medical practitioners in Macau can eventually be united to form a working group making use of the MADA platform to continue doing research, education and publicity on the Alzheimer disease.

This year we have invited more renowned experts from the CUHK, the Prince of Wales Hospital, as well as from Taiwan and Mainland China to give speeches and exchange ideas on a wide range of interesting topics. We are confident that with your unfailing support, this Symposium will continue to serve as a key link between the medical and healthcare professionals of Macau, Hong Kong, the Pearl River Delta region, Taiwan and other parts of Mainland China.

I wish to take this opportunity to express my gratitude to our sponsor and staff who have helped to make this Symposium yet another very successful event. Thank you and I wish everyone a healthy and prosperous 2014.



Dr. Stanley Ho

Chairman

Dr. Stanley Ho Medical Development Foundation

歡迎辭 WELCOME MESSAGE



Chairman, distinguished guests and speakers, ladies and gentlemen, I am very pleased and honored to welcome you all to the Tenth Dr. Stanley Ho Medical Development Foundation Symposium, organized by the Foundation and The Chinese University of Hong Kong. On behalf of the Faculty of Medicine, The Chinese University of Hong Kong, I would like to extend our warmest welcome to all speakers and participants of the symposium which will undoubtedly enhance the application of advances in medicine for the management of many important local diseases.

The Dr. Stanley Ho Medical Development Foundation was established in January 2005. Its objective is to provide a platform for medical practitioners in Macau to acquire advanced professional knowledge. To achieve this objective, the Foundation has in the past years organized a series of activities including healthcare courses, collaborative research projects, the Outstanding Achievement Awards scheme for healthcare workers, establishment of Healthland for health exhibition, and the foundation of Macau Alzheimer's Disease Association. The annual medical symposium is the highlight of this series. All these activities have attracted tremendous interest and support from medical practitioners and other healthcare workers in Macau, Hong Kong and Mainland. The enthusiastic participation of the young healthcare professionals has been particularly overwhelming.

As in past years, today's Symposium covers a wide variety of medical advances including management of chronic renal failure, diabetes, acute respiratory syndrome, adolescent idiopathic scoliosis, dementia, manic depressive disorders, psoriasis, salivary glands disorders, gastroesophageal reflux, intracranial aneurysms, critical limb ischemia, prostatic hyperplasia, robotic colorectal surgery, vitamin D supplementation in the elderly and use of traditional Chinese medicine for depression. We are very fortunate to have many distinguished speakers to share their precious experience with us. Their support of the Symposium is most appreciated.

We are very grateful to the Dr. Stanley Ho Medical Development Foundation for its staunch support of life-long continuing medical education. The Chinese University of Hong Kong is very fortunate and proud to be associated with the Foundation in promoting this great initiative. I would also like to take this opportunity to express my appreciation and gratitude to members of the Organizing Committee for their time and effort in putting together today's programme. I wish you all a very enjoyable and fruitful symposium.

Professor Fok Tai Fai

Pro-Vice-Chancellor

The Chinese University of Hong Kong



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慢性腎功能衰竭的普查和治療

Update on Screening and Treatment of Chronic Renal Failure

司徒卓俊教授 Prof CC Szeto

香港中文大學 內科及藥物治療學系 腎臟科教授

*Professor, Division of Nephrology, Department of Medicine & Therapeutics,
The Chinese University of Hong Kong*

Chronic kidney disease (CKD) is a major burden to the health care system. CKD patients are at risk of progress loss of renal function, resulting in dialysis-dependent renal failure. In addition, many CKD patients die of cardiovascular diseases before they require dialysis. In this lecture, I shall discuss the latest recommendations on the screening, assessment, and management of patients with chronic kidney disease. I shall focus on the appropriate methods of measuring kidney function, target of blood pressure control, assessment of CKD complications, and practical issues faced by primary care physicians in the management of CKD patients.



2 型糖尿病管理的新發展

Advances in the Management of Type 2 Diabetes

馬青雲教授 Prof Ronald CW Ma

香港中文大學 內科及藥物治療學系 內分泌及糖尿病科教授

Professor, Division of Endocrinology, Department of Medicine & Therapeutics,
The Chinese University of Hong Kong

There is an epidemic of diabetes in Asia. The latest figures estimate that there are 382 million individuals with diabetes globally, of which approximately half remain undiagnosed. In Asian subjects, diabetes often develops at a younger age, and is characterized by early beta-cell dysfunction in the setting of insulin resistance, with many of them requiring early insulin treatment. The increasing proportion of young-onset diabetes and childhood type 2 diabetes is posing a particular threat, with these subjects being at increased risk of diabetic complications. In addition to cardiovascular-renal disease, cancer is emerging as the other main cause of mortality. Several other important co-morbidities including diabetes-related distress and depression will also impact on glucose control and outcome. Several new agents for the treatment of type 2 diabetes has emerged over recent years, though long-term outcome data is still awaited for some of these agents. The latest treatment guidelines has moved from a more prescriptive to a more individualized approach, and the risks of hypoglycaemia need to be balanced against the benefits of intensive blood glucose control. Structured management targeting multiple risk factors is needed in order to improve patient outcome.

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2. Diabetes and co-morbidities- where East Meets West, Kong AP, Xu G, Brown N, So WY, Ma RC, Chan JC. Nat Rev Endocrinol 2013, May 28
3. Type 2 Diabetes in East Asians: similarities and differences with populations in Europe and the United States., Ma RC, Chan JC. Ann N Y Acad Sci 2013; Apr 1281(1): 64-91



H7N9 及中東急性呼吸病症候 H7N9 & Middle East Respiratory Syndrome

許樹昌教授 Prof David SC Hui

香港中文大學 何鴻燊呼吸內科教授 何鴻燊防治傳染病研究中心主任
內科及藥物治療學系 呼吸系統科主任

Stanley Ho Professor of Respiratory Medicine, Head of Division of Respiratory Medicine,
Department of Medicine & Therapeutics, Director of Stanley Ho Center for Emerging Infectious
Diseases, The Chinese University of Hong Kong

Avian influenza H7N9 first emerged in Shanghai in Apr 2013. Closure of live poultry markets from mid Apr to June 2013 in Zhejiang and Shanghai resulted in stopping of disease transmission but new cases have emerged since Oct in Zhejiang, Guangdong and Shenzhen. By the end of Dec 2013, more than 140 cases have been confirmed with a case fatality rate over 30%. In contrast to avian influenza H5N1, the patients are older with male predominance and many have co-morbid illness. Contact with poultry or contaminated environment has been reported in 70% of cases whereas infected poultry has no symptoms. Most of the virus isolates are sensitive to neuraminidase inhibitors. Limited human-human transmission has occurred in small family clusters.

The Middle East Respiratory Syndrome Coronavirus (MERS-CoV) first emerged in 2012 in a patient who died of severe pneumonia in Saudi Arabia. Retrospective analysis of a cluster of hospital outbreaks dated back to Apr 2012 in Jordan also confirmed MERS-CoV as the cause. Most of the cases confirmed so far in the Middle East have been sporadic with an unknown source of infection, but limited human-to-human transmission has occurred in healthcare settings and household settings. A small fragment of sequence identical to the EMC/2012 MERS-CoV has been detected in a *Taphozous perforatus* bat captured in KSA, whereas dromedary camels in Oman and the Canary Islands have been found to have cross-reactive antibodies to MERS-CoV. However the source of the virus and the mode of disease transmission remain unknown. Between April 2012 and Dec 2013, over 160 MERS-CoV cases have been confirmed in 9 countries with a case fatality rate over 40%. Overall, the median age of MERS-CoV patients is 50 years whereas 63.9% are male. The majority (about 63%) of patients experienced severe respiratory failure while 30% suffered from mild disease, including 18 asymptomatic cases. About 74% of patients have at least one co-morbid illness whereas the most commonly reported comorbid conditions include chronic renal failure, diabetes, and heart disease. The clinical presentation of MERS-CoV infection ranges from asymptomatic to very severe pneumonia with the acute respiratory distress syndrome, septic shock and multi-organ failure resulting in death. Common laboratory findings include leucopenia and lymphopenia. Co-infection with other respiratory viruses (e.g., influenza A(H1N1)pdm09, parainfluenza, influenza B, rhinovirus, herpes simplex) was noted in some cases whereas secondary bacterial infections (*Klebsiella pneumoniae*, *Staphylococcus aureus*, *Acinetobacter* sp., *Candida* sp.) have been reported in patients who required mechanical ventilation. Clinical management is mainly supportive although there are in vitro data that interferons \pm ribavirin, cyclosporin A, and mycophenolate may inhibit the MERS-CoV.



傳統中藥對治療抑鬱症的策略和療效 Treatment Strategies and Efficacy of Traditional Chinese Medicines in Depressive Disorders

王彥暉教授 Prof Wang Yan Hui

廈門大學 醫學院副院長

Professor & Vice Dean of Medical College, Xiamen University, Xiamen

抑鬱症是一種心境障礙，表現為情緒低落、興趣減退、思維遲緩以及言語動作減少的一種常見症，具有較高的發病率，嚴重影響患者身體健康和生活品質。

抑鬱症的中醫藥防治具有較好的效果，辨證主要分寒熱虛實，常見證型為膽鬱痰擾證和心神失養證，治療用溫膽湯和養心湯。對有家族史的正常人群，中醫體質調理，可以有效減少發病率。

Depression is a medical illness that causes a constant feeling of sadness and lack of interest. It may also cause slow thoughts and lack of words and moves. Depression has a high morbidity. It seriously influences the victims' health and quality of life.

TCM is quite effective in preventing and curing depression. Syndrome differentiation is mainly based on deficiency, excess, cold and heat. Stagnated gallbladder qi with disturbing phlegm and malnutrition of heart blood are 2 regular syndromes. Relevant prescriptions are Wendan decoction and Yangxin decoction. For someone who has family history, TCM can reduce the morbidity by adjusting the habitus.





青少年特發性脊柱側凸病因學研究及 治療的新進展

Updates on the Aetio-pathogenesis and Management of Adolescent Idiopathic Scoliosis

鄭振耀教授 Prof Jack CY Cheng

香港中文大學 矯形外科 及 創傷學系系主任

Chairman, Department of Orthopaedics and Traumatology, The Chinese University of Hong Kong

Adolescent Idiopathic scoliosis is the most common form of deformity of the spine. In the past four decades, considerable progresses have been made in the understanding of the clinical behavior and the pathoanatomy of adolescent idiopathic scoliosis (AIS). Significant advances in the treatment and surgical instrumentation have also been observed. However, the definite etiology is still unclear and thus the current treatments are at best treating the complications of AIS rather than the direct underlying cause. The objective of this overview is to update our knowledge on the epidemiology, natural history of AIS, discuss a number of advances in the research related to the etiology of AIS and present a brief summary of the current concept of management.



21 世紀的產前檢查模式 Antenatal Screening Model in the 21st Century

梁德楊教授 Prof TY Leung

香港中文大學 婦產科學系系主任

Chairman, Department of Obstetrics & Gynaecology, The Chinese University of Hong Kong

With the advances in ultrasound and biochemical technologies, it is now possible to screen and diagnose various major fetal and maternal complications more accurately as early as in the first trimester.

Fetal aneuploidies screening has already switched from 2nd trimester biochemical screening to a more accurate and earlier 1st trimester combined ultrasound (nuchal translucency) and biochemical (PAPP-A + fbhCG) screening, which gives a sensitivity of 90% at a false positive rate of 5%. Recently, the use of massively parallel sequencing for maternal circulating cell-free fetal DNA allows further improvement to 99% sensitivity with less than 1% false positive rate.

The significant improvement of ultrasonic imaging has made detail fetal morphological screening feasible as early as 12-13 weeks gestation, when the crown-rump length is just 6-8cm long. The detection rate for major malformations is up to 80%. Early detection of major fetal anomalies allows more time for further genetic / genomic testing, counseling and treatment.

Pre-eclampsia is conventionally diagnosed by blood pressure measurement and urine checking for proteinuria in the second half of the pregnancy. By measuring the uterine arterial blood flow and maternal serum levels of PlGF in the 1st trimester, it is now possible to predict the subsequent occurrence of pre-eclampsia. Early aspirin prophylaxis for high risk women is shown to be effective in reducing the chance of developing pre-eclampsia.

Uterine cervical length measurement before 22 weeks of gestation also predicts the chance of subsequent preterm delivery. The shorter is the cervix, the higher is the risk of preterm delivery, which may now be reduced by prophylactic measures such as progesterone or cervical pessary.

Screening for other diseases and high risk factors will be covered in the lecture. As ultrasound and biochemical assessments are more readily available because of their reducing costs, their clinical application will revolutionize the future antenatal care model.



認知障礙症（痴呆症）治療方案 Pharmacological and non-pharmacological Treatment for Dementia

林翠華教授 Prof Linda CW Lam

香港中文大學 精神科學系系主任

Chairperson, Department of Psychiatry, The Chinese University of Hong Kong

Population Ageing is a global trend. Advanced age is associated with high prevalence of dementia and major neurocognitive disorder. Dementia is associated with significant cognitive, behavioral, neuropsychiatric and functional impairments. The continuous deterioration leads to substantial morbidity and shortened survival. The high cost of medical and social care creates a heavy burden to the public health care system. A stage specific multi-dimensional management model should be carefully considered and evaluated.

For cognitively healthy and asymptomatic older adults, scientific evidence suggested that active lifestyles and maintenance of good physical health are modulators of cognitive decline. Public health promotional strategies should pay special attention on strategies that maintain cognitive health for the older population.

At the early symptomatic (mild cognitive impairment or minor neurocognitive disorder) phase, assessments with high sensitivity and specificity should be available for early disease identification. Approved pharmacological treatment for prevention of clinical disease is not available. Phase 3 clinical trials on disease modifying agents are still underway. Intensive and structured cognitive and physical activity may help to maintain cognitive function and possibly modulate the trajectory of decline. Aggressive chronic disease management, especially on cerebrovascular conditions, should also be emphasized.

For people suffering from clinical dementia, pharmacological treatments should be optimized for symptom control in different dimensions. It is also important to consider psychological and social support for caregivers. This would include functional training, behavioral management, respite and long-term care. As disease progresses into advanced phase, special attention should be paid to management of physical co-morbidity and end-of-life care.

To minimize impact of dementia to the individual, it is important to follow the clinical course of illness and offered multi-modality intervention to fit different needs at different phase of illness. Early treatment would be the key.



精神官能疾患以及情感性精神病之治療新進展： 以重度憂鬱症為例

Update on Treatment of Psychoneurotic and Manic-depressive Disorders: A Focus on Major Depression

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精神官能疾患以及情感性精神病，傳統上稱為常見精神疾患 (common mental disorder)，是重要的公共衛生問題。在這些常見精神疾患當中，重度憂鬱症 (major depressive disorder) 是造成人類失能排名第二的疾病。心理治療或精神藥物治療是重度憂鬱症在醫療常規當中的治療選項。然而，僅有 50% 的病患對於啟始治療有足夠的反應，而且有相當比例的個案演變成難治型憂鬱症 (treatment resistant depression)。除了電氣痙攣治療法 (electroconvulsive therapy) 外，近年來針對難治型憂鬱症的生物性非藥物治療蓬勃發展，包括經顱磁刺激術 (transcranial magnetic stimulation)、迷走神經刺激術 (vagal nerve stimulation)、以及深層腦刺激術 (deep brain stimulation)。即使有快速進步的生物性治療，在台灣以及部分亞洲國家的社區當中，僅有不到 30% 的重度憂鬱症個案尋求專業協助，這個數字在美國大約是 50%。考量重度憂鬱症的高失能與低就醫，對於早期發現與積極治療方面，學界仍有很大的努力空間。

關鍵詞：常見精神疾患、重度憂鬱症、生物性治療

Psychoneurotic and manic-depressive disorders, traditionally classified as common mental disorders (CMDs), are important public health problem. Among CMDs, major depressive disorder (MDD) is the second leading cause of human disability. The typical treatments of MDD include psychotherapeutic and psychopharmacological treatments. However, only 50% of patients with MDD have adequate response to the initial treatment and some of them eventually become cases of treatment resistant depression (TRD). Electroconvulsive therapy (ECT) is one of the conventional treatment for TRD. The non-pharmacological somatic therapies for TRD is rapidly evolving recently. These new therapies include, transcranial magnetic stimulation (TMS), vagal nerve stimulation (VNS) and deep brain stimulation (DBS). Despite rapid progress in biological treatment, in Taiwan and some Asian communities, less than 30% of MDD cases sought help, whereas the corresponding figure was about 60% in the US. The pattern of low help-seeking behavior and profound functional impairment indicates much room for improvement in the early detection of and intervention in MDD in this population.

Keywords: Common mental disorder, major depressive disorder, biological treatment



乾癬（銀屑病）的最新治療進展

Recent Advances in the Management of Psoriasis: A Major Chronic Dermatological Disease

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Psoriasis is a chronic inflammatory skin condition that is often associated with systemic manifestations. It affects millions of people in the Greater China region, and can significantly impact quality of life. The etiology includes genetic and environmental factors. Diagnosis is based on the typical erythematous, scaly skin lesions, often with additional manifestations in the nails and joints. Plaque psoriasis is the most common form. Other forms include guttate, pustular, erythrodermic, and inverse psoriasis. Psoriasis is associated with several comorbidities, including cardiovascular disease, diabetes, lymphoma, and depression. Topical therapies such as corticosteroids, vitamin D analogues, and tazarotene are useful for treating mild to moderate psoriasis. More severe psoriasis may be treated with phototherapy, or may require systemic therapy. Recent and future advances in the systemic treatment of psoriasis involve the biologic therapies, such as inhibitors of tumor necrosis factor and molecules targeting interleukins in the Th17 pathway, which play pivotal roles in the pathogenesis of psoriasis. These biologic agents are more convenient and efficacious than most traditional therapies while regular monitoring of potentially adverse effect profiles is required. In summary, management of psoriasis has evolved to a new horizon thanks to the progress of molecular medicine. Patients with psoriasis now have more choices and enjoy better life qualities than before, although treatment that can offer long-term efficacy or even cure of the disease remains to be investigated.



內窺鏡診斷及治療涎腺疾病的應用 Diagnostic and Therapeutic Endoscopy of Salivary Glands

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Besides neoplasms, obstructive ductal problems (e.g. stones and strictures) form another big group of salivary gland diseases. Yet, this condition is much less recognized. Patients suffering obstructive salivary ductal diseases typically present with recurrent salivary gland swelling, often precipitated by meals. Sometimes, they present with acute bacterial salivary gland infection, wrongly labeled as mumps.

In the past, the diagnosis of these conditions relies almost exclusively on various imaging techniques including plain X-ray, contrast sialogram, ultrasound, CT scan, etc. Except for stones, the sensitivity and accuracy of these techniques in picking up the obstruction and diagnosing the underlying cause is unsatisfactory.

On the therapeutic side, conventionally, except for stones located close to the ductal orifices that are amenable to simple transoral extraction, deeper lying stones or other causes of obstruction are usually treated by removal of the entire gland. This entails risk of surgery which would be increased by previous infections. Interestingly, this treatment strategy involves sacrificing the secretory parenchyma when the main problem in fact lies at the duct.

The advent of sialendoscopy has greatly improved our capability in managing these conditions both in terms of diagnosis and treatment. This technique involves passing a very thin and sophisticated endoscope into the ducts via their natural orifices. With this new technique, the luminal conditions of the salivary ductal system can be directly examined. More than that, fine instruments can be introduced through this endoscope to treat the obstructive lesion directly or to assist a more targeted external approach, making it a truly minimally invasive surgery for treating this group of patients.



胃食道反流治療的新進展

Advances in the management of Gastrointestinal Reflux Disease

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In the past decade, there is an increasing prevalence of gastroesophageal reflux disease (GERD) in Hong Kong and China. While proton pump inhibitors (PPI) remained an effective treatment for patients with GERD, cessation of PPI may result in up to 70% recurrence of symptoms especially for those with erosive esophagitis. Surgery is considered as an alternative treatment for GERD, and the commonest procedure performed is fundoplication. Fundoplication can be classified into anterior partial, posterior partial and complete Nissen fundoplication. Meta-analysis confirmed that laparoscopic fundoplication achieved better perioperative outcomes as compared to open approach. Meanwhile, partial fundoplication can achieve lower postoperative dysphagia when compared to Nissen fundoplication. However, partial fundoplication resulted in higher rate of recurrence of GERD. There was no study comparing Nissen against anterior fundoplication for treatment of GERD in Chinese. Our group conducted a prospective randomized trial comparing laparoscopic Nissen against anterior partial fundoplication for treatment of GERD. A total of 60 patients were recruited, and the preliminary results showed that the overall rate of symptomatic control was 83.3% at 24 months after surgery. There was a slightly higher rate of dysphagia in patients who received Nissen fundoplication, while those who received anterior partial fundoplication sustained a slightly higher rate of symptomatic recurrence. The development of LES stimulator device (EndoStim) aimed to stimulate lower esophageal sphincter and improve its pressure through electric pulses. Currently, our institution is conducting an international multicenter study on the use of EndoStim for treatment of GERD. Preliminary results showed significant improvement in LES pressure after implantation of EndoStim.



機器人結直腸手術的最新進展 An Update on Robotic Colorectal Surgery

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One of the most significant technical advances in the field of minimally invasive colorectal surgery in recent years is the introduction of the *da Vinci* Surgical System (Intuitive Surgical, Inc., Sunnyvale, CA, USA). The robotic system provides a stable camera platform with magnified 3D view, and intuitively transfers movements from the master handles in the console to the tip of the wristed instruments with tremor filtering. The robotic surgical system can essentially overcome the technical disadvantages of conventional laparoscopic surgery for rectal cancer in terms of visualization and maneuverability, which may enable colorectal surgeons to perform precise total mesorectal excision (TME) easily even within the narrow pelvis, with better preservation of the pelvic autonomic nerves.

Robotic surgery in Hong Kong began with the installation of the first *da Vinci* Surgical System at Prince of Wales Hospital (PWH) in 2005. The first case of robotic-assisted laparoscopic abdominoperineal resection in Hong Kong and China was performed at PWH in August 2006.¹ Today six hospitals in Hong Kong have already installed the *da Vinci* Surgical System, and a few other hospitals are planning to purchase the system. Besides PWH, two other colorectal units are currently performing robotic colorectal surgery on a regular basis, including Queen Mary Hospital and Pamela Youde Nethersole Eastern Hospital. Factors that favor the development of robotic colorectal surgery in Hong Kong include the high uptake rates (70%) of laparoscopic colorectal surgery among our colorectal surgeons, the ample opportunity to observe world experts performing live robotic surgeries in surgical conferences held in Hong Kong, and the fact that all cases of robotic TME will be financially reimbursed by the Hong Kong Government. Randomized controlled trials are currently underway in Hong Kong to compare the outcomes of robotic and laparoscopic surgery for rectal cancer.

At PWH, we have designed a specific robotic colorectal surgery training program for our trainees, which is a step-up process with a lot of emphasis placed on practice and proctoring led by colorectal surgeons. The training program starts with accumulation of skills in laparoscopic colorectal surgery and knowledge on robotic colorectal surgery, followed by participation in console surgeon certificate course, and finally hands-on practice in the operating room under close supervision. Thereafter, the 'fully trained' surgeons (who have performed at least 20 cases of robotic colorectal surgery) are encouraged to undertake continuous training by actively participating in robotic conferences and research, and doing overseas attachment to further broaden their horizon in robotic colorectal surgery.

Recently, a few active robotic surgeons from various specialties in Hong Kong have decided to form the Hong Kong Society of Robotic Surgery, which aims to share robotic knowledge and skills across different specialties, to set guidelines for training and credentialing, to provide assistance to those who wish to start robotic surgery, and to collaborate with key counterparts in Asia and worldwide in research and training.

¹ Ng SS, Lee JF, Yiu RY, Li JC, Hon SS. Telerobotic-assisted laparoscopic abdominoperineal resection for low rectal cancer: Report of the first case in Hong Kong and China with an updated literature review. *World J Gastroenterol* 2007; 13: 2514-2518.



老年人補充維生素 D 的應用 Uses of Vitamin D Supplementation for the Elderly

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是一組脂溶性維生素 D，負責加強腸道吸收的鈣和磷酸鹽。它可以發現在少量幾食物，包括富含脂肪的魚類，如鯷魚、鯖魚、沙丁魚和金槍魚。對於人類來說，最重要的化合物在這組維生素 D3 和維生素 D2。提供更多的維生素 D，它被添加到乳製品、果汁、麥片、然後說「富含維生素 D」。但大多數維生素 D - 80% 到 90% 的身體得到什麼——是通過接觸陽光。維生素 D 也可以在實驗室醫學。

維生素 D 是用來預防和治療佝僂病，一種疾病，是由於沒有足夠的維生素 D。維生素 D 也可以用於治療骨質疏鬆、骨痛，骨質流失狀況的人稱為甲狀旁腺功能亢進，和一種遺傳疾病，骨質尤其脆弱，容易破碎。它也用於預防跌倒和骨折的人患骨質疏鬆症的風險，和防止低鈣和骨質流失（腎骨營養不良）患者腎功能衰竭。維生素 D 是用於心臟和血管條件，包括高血壓和高膽固醇。它也用於糖尿病、肥胖、肌肉無力、多發性硬化症、風濕性關節炎、慢性阻塞性肺疾病 (COPD)，哮喘，支氣管炎，經前綜合症 (PMS)，和牙齒和牙齦疾病。它也用於增強免疫系統，預防自身免疫性疾病，預防癌症。

Vitamin D is a group of fat-soluble secosteroids responsible for enhancing intestinal absorption of calcium and phosphate. It can be found in small amounts in a few foods, including fatty fish such as herring, mackerel, sardines and tuna. In humans, the most important compounds in this group are vitamin D3 and vitamin D2. To make vitamin D more available, it is added to dairy products, juices, and cereals that are then said to be “fortified with vitamin D.” But most vitamin D – 80% to 90% of what the body gets – is obtained through exposure to sunlight. Vitamin D can also be made in the laboratory as medicine.

Vitamin D is used for preventing and treating rickets, a disease that is caused by not having enough vitamin D. Vitamin D is also used for treating weak bones, bone pain, bone loss in people with a condition called hyperparathyroidism, and an inherited disease in which the bones are especially brittle and easily broken. It is also used for preventing falls and fractures in people at risk for osteoporosis, and preventing low calcium and bone loss (renal osteodystrophy) in people with kidney failure. Vitamin D is used for conditions of the heart and blood vessels, including high blood pressure and high cholesterol. It is also used for diabetes, obesity, muscle weakness, multiple sclerosis, rheumatoid arthritis, chronic obstructive pulmonary disease (COPD), asthma, bronchitis, premenstrual syndrome (PMS), and tooth and gum disease. It is also used for boosting the immune system, preventing autoimmune diseases, and preventing cancer.



顱內動脈瘤的治療最新進展 Recent Advance in the Management of Intracranial Aneurysms

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Rupture of intracranial aneurysm has the highest mortality and morbidity among all type of stroke. The field of neuro-endovascular treatment (AKA Endovascular Neurosurgery or Interventional Neuroradiology) has now evolved from use of detachable balloons, detachable coils, bioactive coils, balloon test occlusion, balloon-assisted technique, stent-assisted technique, and flow-diverting stent. Microsurgical treatment has also improved recently with the application of intraoperative ICG angiography and minimally invasive approaches. We here review the evolution and current status of intracranial aneurysm treatments.





血管內介入治療嚴重下肢缺血新發展 Advances in Endovascular Intervention for Critical Limb Ischemia

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Critical limb ischemia (CLI) due to severe blockages of leg arteries is a major cause of foot ulcers, gangrene and major amputations in Hong Kong, especially among diabetics, leading to significant physical, emotional and social disability. Re-establishing blood flow is essential for wound healing and limb salvage. Over the past decade, endovascular revascularization has rapidly become the preferred primary treatment strategy and is a less invasive option to traditional bypass surgery for critical limb ischemia (CLI), especially for the treatment of below-the-knee (BTK) disease. Advances in percutaneous devices and techniques have expanded the spectrum of patients with CLI who are deemed candidates for revascularization. Although endovascular therapy is internationally accepted as the preferred treatment for CLI, major amputation remains the most common primary treatment for CLI in Hong Kong. Many patients are precluded from this limb saving procedure and suffer unnecessary limb loss leading to excessive suffering, morbidity, mortality and economic cost to the health care system.



前列腺增生治療的新發展 Recent Advances in the Management of Benign Prostatic Hyperplasia

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Benign prostate hyperplasia (BPH) is a common condition in middle age to elderly male and has significant negative impact on the physical health and quality of life of patients. With the advancement of medical and surgical therapy, the condition can now be effectively managed with minimal side effects to the subjects. The advancement in the alpha-adrenergic receptor blockers (AR) design, both in the receptor selectivity and also sustained release formulation, has significantly decreased the incidence of adverse cardiovascular effect. The combination of AR with other agents, such as 5-alpha-reductase inhibitors (5ARI), anti-cholinergic agents etc, has also allow a better control of the obstructive and voiding symptoms. The improve understanding of the natural history of BPH has allowed the selective use of 5ARI in the prevention of disease progression, which in turn decrease the incidence of adverse complications and surgical intervention. The recent introduction of phosphodiesterase inhibitors in the management of BPH has improved the management of patients suffered both BPH and erectile dysfunction. Moreover, the improvement in energy sources for transurethral prostatectomy, including bipolar energy and different laser systems, has significantly improved the management of patients with more severe BPH. These new energy devices have leaded to decrease in complications related to surgery, even in patients with more serious medical co-morbidities.