



[www.fmshk.org](http://www.fmshk.org)

THE HONG KONG 香港醫訊  
*MEDICAL DIARY*

VOL.15 NO.2 FEBRUARY 2010



*From Bariatric to Metabolic*



# Contents

## Editorial

- **From Bariatric to Metabolic - The Use of Gastrointestinal Surgery to Treat Type II Diabetes Mellitus** 2  
*Dr. Wilfred LM MUI*

## Medical Bulletin

- **Management of Obesity - From Life Style Modification to Weight Reduction Surgery** 5  
*Dr. WB CHAN*
- **MCHK CME Programme Self-assessment Questions** 7
- **Obesity in Hong Kong - Risk and Burden** 9  
*Dr. Gary TC KO*
- **Surgical Treatment of Obesity** 13  
*Dr. Simon KH WONG*  
*Dr. Wilfred LM MUI*
- **Body Contouring - Post-bariatric Massive Weight Reduction** 16  
*Dr. Peter PANG*
- **Liposuction for Body Sculpture and Obesity** 19  
*Dr. Chun-on MOK*

## Dermatological Quiz

- **Dermatological Quiz** 22  
*Dr. Lai-yin CHONG*

## Life Style

- **Life Style** 23  
*Prof. Philip WY CHIU*
- **My Road to Driving & Road Safety** 26  
*Dr. Hoi-keung MONG*

## Word from the President

- **Food and Health Bureau Consultation Paper on Advance Directives** 29

## Society News

## Federation News

## Medical Diary of February

## Calendar of Events

- **Meetings** 33

# The Cover Shot



The concept of "beauty" is subjective. For a baby, a rounded figure is considered as "cute" and "healthy". The same applies to our appreciation on other creatures such as pandas and penguins. A fat penguin appears confident and proud so one can imagine what impression we may have on a thin penguin. In certain cultures, an obese figure has long been a symbol of wealth and power. However, with our modern day advocates on healthy living, the conventional body image of adults gradually changes from chunky to slim, to an extent that the pendulum now swings to the emaciated extreme for some people. After all, grace and beauty should not be confined to the body figure and a balanced view has to be adopted.



**Dr. Godfrey CF CHAN**  
LMCHK, MD, DMD, MSc,  
FHKAM, FHKCPaed, FRCP(Edin),  
FRCPC(UK)  
*Clinical Associate Professor  
Department of Paediatrics &  
Adolescent Medicine,  
Li Ka Shing Faculty of Medicine,  
The University of Hong Kong*



**Published by**  
The Federation of Medical Societies of Hong Kong

**EDITOR-IN-CHIEF**

Dr. MOK Chun-on  
莫鎮安醫生

**EDITORS**

Dr. CHAN Chi-fung, Godfrey  
陳志峰醫生 (Paediatrics)

Dr. CHAN Chun-hon, Edmond  
陳振漢醫生 (General Practice)

Dr. KING Wing-keung, Walter  
金永強醫生 (Plastic Surgery)

Dr. YU Kong-san  
俞江山醫生 (Orthopaedics & Traumatology)

**EDITORIAL BOARD**

Dr. CHAN Chi-wai, Angus  
陳志偉醫生 (General Surgery)

Dr. CHAN, Norman  
陳諾醫生 (Diabetes, Endocrinology & Metabolism)

Dr. CHIANG Chung-seung  
蔣忠想醫生 (Cardiology)

Dr. CHIM Chor-sang, James  
詹楚生醫生 (Haematology)

Dr. CHONG Lai-yin  
莊禮賢醫生 (Dermatology & Venereology)

Dr. FAN Yiu-wah  
范耀華醫生 (Neurosurgery)

Dr. FOO Wai-lum, William  
傅惠霖醫生 (Oncology)

Dr. FONG Ka-yeung  
方嘉揚醫生 (Neurology)

Prof. HO Pak-leung  
何栢良醫生 (Microbiology)

Dr. KWOK Po-yin, Samuel  
郭寶賢醫生 (General Surgery)

Dr. LAI Kei-wai, Christopher  
賴奇偉醫生 (Respiratory Medicine)

Dr. LAI Sik-to, Thomas  
黎錫滔醫生 (Gastroenterology & Hepatology)

Dr. LAI Yuk-yau, Timothy  
賴旭佑醫生 (Ophthalmology)

Dr. LAM Tat-chung, Paul  
林達聰醫生 (Psychiatry)

Dr. LAM Wai-man, Wendy  
林慧文醫生 (Radiology)

Dr. LEE Man-piu, Albert  
李文彪醫生 (Dentistry)

Dr. LO, Richard  
羅光彥醫生 (Urology)

Dr. LO See-kit, Raymond  
勞思傑醫生 (Geriatric Medicine)

Dr. MAN Chi-wai  
文志偉醫生 (Urology)

Dr. MOK, Mo-yin  
莫慕賢醫生 (Rheumatology)

Dr. TSANG Wai-kay  
曾偉基醫生 (Nephrology)

Dr. TSE Tak-fu  
謝德富醫生 (Cardiology)

Prof. WEI I, William  
韋霖醫生 (Otorhinolaryngology)

Dr. WONG Bun-lap, Bernard  
黃品立醫生 (Cardiology)

**Design and Production**

A-PRO MULTIMEDIA www.apro.com.hk

## From Bariatric to Metabolic - The Use of Gastrointestinal Surgery to Treat Type II Diabetes Mellitus

### Dr. Wilfred LM MUI

FRCS FRACS FHKAM

Medical Director of the Hong Kong Bariatric and Metabolic Institute

#### Editor



Dr. Wilfred LM MUI

We are facing an expanding pandemic of Type II diabetes mellitus which is closely associated with obesity worldwide. It is estimated that 240 million people are affected by type II diabetes currently and the number will shoot up to 380 million by the year 2025.<sup>1</sup> The situation is even sterner in Asia. Asians have a higher risk of developing diabetes and cardiovascular diseases than the western population with the same BMI. Moreover, the economic burden to the society and health care system is expected to escalate exponentially in the coming near future. We need a more effective and efficient way to combat and prevent complications of the disease.

Type II diabetes mellitus is a deadly chronic illness and tight glycaemic control minimises microvascular and macrovascular complications. Life style modification and strict compliance to diet and drug regimen are paramount in treating diabetes. However, optimal control or remission of the disease in the long run is rare in the majority of patients. Progressively deterioration of the disease severely affects the quality of life of patients and is typical in almost every individual. Despite great improvements on pharmacotherapy, outcome of current therapies are still far from ideal.

### Developing a New Surgical Subspecialty

"Who would have thought it? An operation proves to be the most effective therapy for adult-onset diabetes mellitus." reported 15 years ago in the *Annals of Surgery* by Walter Pories, MD, a bariatric surgeon at East Carolina University in Greenville, is the first group of researchers who suggest bariatric surgery may be useful in the treatment of Type II diabetes mellitus even in non-morbid obese patients. They reported that gastric bypass patients not only experienced significant weight loss, but that 83 percent of the patients with diabetes had normal blood sugar control after 14 years of follow-up.<sup>2</sup>

Subsequent studies echoed his results. A 2004 *JAMA* study showed diabetes resolved in 76.8 percent of patients and in 2009 the *American Journal of Medicine* study found that 86.6 percent of patients improved or resolved their Type II diabetes after bariatric surgery in the long-term.<sup>3-4</sup> In 2008, a *JAMA* study found that 73 percent of gastric-banded patients resolved their Type II diabetes.<sup>5</sup> Recent publications in the *New England Journal of Medicine* papers have confirmed the safety and effectiveness of bariatric surgery on diabetes. The impact of surgery is significant and prolongs survival in this group of patients.<sup>6-7</sup> Therefore, ADA issued its annual recommendations on diabetic treatment in 2009 and stated that "bariatric surgery should be considered for adults with BMI >35 and type II diabetes".<sup>8</sup> However, at the present moment at least in Asia, many clinicians and patients are still unaware of this recommendation and the utilisation of surgery to treat obese diabetes is not popular.

In view of the excellent results of bariatric surgery on obese diabetes, clinicians start to wonder whether surgery is equally effective in less heavy patients. Clinicians initially thought that bariatric "cures" diabetes because of the effect of surgery on weight loss. However,



recent studies revealed that bariatric surgery has specific anti-diabetic (metabolic) effects and can ameliorate diabetes even before significant weight loss has been achieved.<sup>9-11</sup> Typically, gastric bypass patients have their diabetes disappears in days to weeks after surgery and now several mechanisms have been discovered, namely gastric, foregut, hindgut and intestinal gluconeogenesis theories. Although the exact details are unknown, very likely all the above theories come into play. Bariatric surgery is beyond weight loss and has specific metabolic effects on diabetes. Most obesity surgical societies have now included "Metabolic" in their names and surgical manipulation of the gastrointestinal tract is a novel way to treat diabetes and more and more patients are requesting such approach.

In order to clear up the confusion and state down consensus for the use of gastrointestinal surgery to treat diabetes in a proper and regulated way, experts from different professional bodies gathered together in Rome in 2007 (1<sup>st</sup> Diabetic Surgery Summit) and led by Dr. Rubino, pioneer in diabetic surgery to discuss the evidence and the role of surgery at the present moment. In its position statement, the Diabetes Surgery Summit said "surgery should be considered for the treatment of type II diabetes in patients with a body mass index (BMI) of 35 kg/m<sup>2</sup> or more." In addition, consensus was made that "diabetes surgery may also be appropriate for treatment of people with mild to moderate obesity (BMI 30-35 kg/m<sup>2</sup>) who are inadequately controlled by lifestyle and medical therapy", which went beyond parameters established by the National Institutes of Health (NIH) for bariatric surgery in 1991 and the ADA recommendations in 2009. At least 5 international bodies which represent endocrinologists, internists, and obesity scientist (Diabetes UK, T.O.S. and I.A.S.O) and surgeons and bariatric-allied health care professionals (A.S.M.B.S., I.F.S.O., and Brazilian Society of Bariatric and Metabolic Surgery) have already endorsed the position statement and the paper was published recently in the *Annals of Surgery*.<sup>12</sup>

Asians have a higher fat content and different indications for bariatric surgery as compared to the western population. In response to DSS in Rome, the first Asia Consensus Meeting on Metabolic Surgery, endorsed by the Asia Pacific Bariatric and Metabolic Surgical Society was held at Trivandrum in India in 2008 to discuss the situation in Asia. Most experts agreed that Asians are more prone to develop diabetes at a lower BMI and early consensus for the use of metabolic surgery to treat Type II diabetes mellitus in Asia was laid and stated as the following:

1. Bariatric/Gastrointestinal Metabolic surgery should be considered as a treatment option for obesity in people with Asian ethnicity with a BMI more than 35 kg/m<sup>2</sup> with or without co-morbidities.
2. Bariatric/Gastrointestinal Metabolic surgery should be considered as a treatment option for obesity in people with Asian ethnicity above a BMI of 30 if they have central obesity (waist circumference more than 80 cm in females and more than 90 cm in males) along with at least two of the additional criteria for metabolic syndrome: raised triglycerides, reduced HDL cholesterol levels, high blood pressure and raised fasting plasma glucose levels or Type II diabetes mellitus patients who are inadequately controlled by life-style and medical therapy.

3. A surgical approach may also be appropriate as a non-primary procedure alternative to treat Type II diabetes mellitus patients with BMI >27 and central obesity (waist circumference more than 80 cm in females and more than 90 cm in males) who are inadequately controlled by life-style and medical therapy.
4. Any surgery performed on diabetic patients with a BMI less than 30 or any novel technique performed on type II diabetic patients should be done only under IRB-approved study protocol with an informed consent from the patient.

The indications for metabolic surgery should not and are not merely an extension of indications of bariatric surgery. In the future, as more evidence and results from clinical trials are being released, BMI may not be the most important criterion for such surgery. Disease-specific end-points may be more important in deciding the indications and we are expecting a very rapid change in this field in the coming near future.

## Conclusions and Impact

Most clinicians and patients at present are not aware of the option of surgery for treating Type II diabetes. Increasing evidences demonstrate that gastrointestinal surgery including current bariatric surgery has a specific and independent effect on the disease. The impact of this approach is tremendous and offers new hopes to patients. Although the exact indications and mechanisms are still evolving, more and more patients are requesting surgical therapy for Type II diabetes. Future studies are urgently required to define the exact role and we are seeing an exciting sub-specialty (metabolic surgery) developing in Surgery.

## References

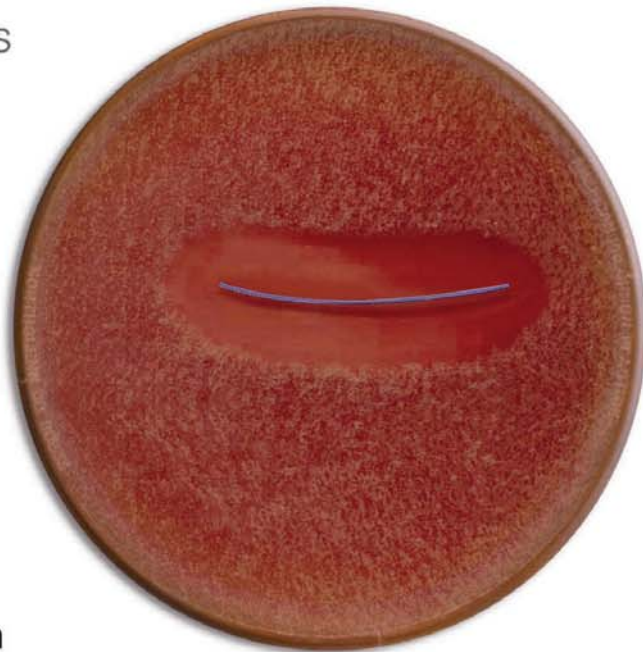
1. Zimmet P. The Burden of type 2 diabetes: are we doing enough? *Diabetes Metab.* 2003;29(4 pt 2):6S9-18.
2. Pories WJ, Swanson MS, Macdonald KG, et al. Who would have thought it? An operation proves to be the most effective therapy for adult-onset diabetes mellitus. *Ann Surg.* 1995;222:339-350;discussion 350-332.
3. Buchwald H, Avidor Y, Braunwald E, et al. Bariatric surgery: a systematic review and meta-analysis. *JAMA.* 2004;292:1724-1737.
4. Buchwald H, Estok R, Fahrbach K, et al. Weight and type 2 diabetes after bariatric surgery: systematic review and meta-analysis. *Am J Med.* 2009 mar;122(3):248-256.e5.
5. Dixon JB, O'Brien PE, Playfair J, et al. Adjustable gastric banding and conventional therapy for type 2 diabetes: a randomized controlled trial. *JAMA.* 2008;299:316-323.
6. Adams TD, Gress RF, Smith SC, et al. Long-term mortality after gastric bypass surgery. *N Engl J Med.* 2007;357:753-761.
7. Sjostrom L, Narbo K, Sjostrom CD, et al. Effects of bariatric surgery on mortality in Swedish obese subjects. *N Engl J Med.* 2007;357:741-752.
8. American Diabetes Association. Standards of medical care in diabetes-2009. *Diabetes Care* 2009;32(suppl 1):S13-S61.
9. Rubino F, Gagner M, Gentileschi P, et al. The early effect of the Roux-en-Y gastric bypass on hormones involved in body weight regulation and glucose metabolism. *Ann Surg* 2004;240:236-242.
10. Rubino F, Forgione A, Cummings DE, et al. The mechanism of diabetes control after gastrointestinal bypass surgery reveals a role of the proximal small intestine in the pathophysiology of type 2 diabetes. *Ann Surg* 2006;244:741-749.
11. Thaler JP, Cummings DE. Hormonal mechanisms of diabetes remission after gastrointestinal surgery. *Endocrinology* 2009;150:2518-2525.
12. Rubino F, Kaplan LM, Schauer PR, Cummings DE; On Behalf of the Diabetes Surgery Summit Delegates. The Diabetes Surgery Summit Consensus Conference: Recommendations for the Evaluation and Use of Gastrointestinal Surgery to Treat Type 2 Diabetes Mellitus. *Ann Surg* 2009 Nov.

# Plus SUTURES

## ANTIBACTERIAL SUTURES

### ANOTHER LEVEL OF ASSURANCE

Plus Antibacterial Sutures kill bacteria and inhibit bacterial colonization of the suture<sup>1-3</sup>



[www.PlusSUTURES.com](http://www.PlusSUTURES.com)



Customer Service Hotline: (852) 2738 6080

**ETHICON, INC.**  
a Johnson & Johnson company

**SUTURES Plus**  
Antibacterial Suture

References: 1. Storch ML, Rothenburger SJ, Jacinto G. Experimental efficacy study of coated VICRYL plus antibacterial suture in guinea pigs challenged with *Staphylococcus aureus*. *Surg Infect (Larchmt)*. 2004;5:281-288. 2. Ming X, Nichols M, Rothenburger S. In vivo antibacterial efficacy of MONOCRYL plus antibacterial suture (poliglecaprone 25 with triclosan). *Surg Infect (Larchmt)*. 2007;8:209-213. 3. Ming X, Rothenburger S, Nichols M. In vivo and in vitro antibacterial efficacy of PDS plus (polydioxanone 25 with triclosan) suture. *Surg Infect (Larchmt)*. 2008;9:451-457.

# Management of Obesity - From Life Style Modification to Weight Reduction Surgery

**Dr. WB CHAN**

*Clinical Director, Qualigenics Diabetes Centre*



Dr. WB CHAN

*This article has been selected by the Editorial Board of the Hong Kong Medical Diary for participants in the CME programme of the Medical Council of Hong Kong (MCHK) to complete the following self-assessment questions in order to be awarded one CME credit under the programme upon returning the completed answer sheet to the Federation Secretariat on or before 28 February 2010.*

Obesity is a growing global epidemic affecting almost all parts of the world. The proportion of obesity has increased by around 50% in USA from the early 90s to the late 90s.<sup>1</sup> In Hong Kong, around 40% of the population are either overweight or obese according to the WHO Asia-pacific criteria.<sup>2</sup> The problem not only occurs in adults, but also in children and teenagers. The body mass index of students has increased by more than 3 units in average over the last 30-40 years.<sup>3</sup> Furthermore, a significant proportion of children are either overweight or obese. Although genetic factors do contribute to obesity, the large increase in prevalence is most likely caused by environmental factors and behavioural factors.<sup>2</sup> A rather high prevalence of unhealthy eating habit,<sup>4</sup> with only a small proportion of subjects having the regular habit of exercise,<sup>5</sup> and with the advance of technology, less physical activity being required in daily living and work; all these, in various degrees, contribute to the development of obesity in our population.

The development of obesity, especially severe obesity, has a major impact on health, both at the personal level, as well as the population level. Obesity contributes to the development of hypertension, diabetes and dyslipidaemia, which are collectively known as cardiovascular risk factors.<sup>6</sup> These risk factors in turn lead to the development of cardiovascular diseases, namely myocardial infarction and stroke, hence causing increase in morbidity and mortality. Furthermore, a recent large scale case control study suggests that obesity, especially central obesity has an independent impact beyond the associated risk factors.<sup>7-8</sup> Apart from cardiovascular diseases, obesity is also associated with the development of various malignancies, especially gastrointestinal malignancies, breast cancer and ovarian cancer.<sup>9</sup> Obesity contributes to the development of sleep apnoea, osteoarthritis, and polycystic ovarian syndrome etc.<sup>10</sup> These diseases together lead to a poorer quality of life, increased medical expenses and increased sick leaves in obese subjects.<sup>11-12</sup> Because of its high prevalence and various impacts on general health, obesity in fact poses a major threat on public health.

Assessment of an obese subject will include the degree of obesity, obesity-related medical problems, important secondary causes, and life style of the subject. The degree of obesity can be assessed by body mass index which is derived from dividing body weight in

kilogram by the square of the body height in metre. According to the WHO Asia-pacific criteria, a BMI of 18.5 to 23 is regarded as normal, 23-25 as overweight, 25 to 30 as grade I obesity and > 30 as grade II obesity.<sup>13</sup> It should be noted that more stringent criteria have been adopted compared with the international criteria due to differences in body built and an increased tendency to accumulate visceral fat at a lower BMI<sup>14</sup>. Apart from the degree of obesity, the waist circumference also serves as another index for abdominal obesity, which is also associated with cardiovascular events.<sup>8</sup> Obesity causes a large variety of medical problems as mentioned above. Therefore, the assessment of these problems will at least include plasma glucose, lipid profile and blood pressure. Further assessments of vascular diseases, joint problems, sleep apnoea, and polycystic ovarian syndrome (PCOS) will depend on clinical suspicion and should be individualised. The secondary causes of obesity include hypothyroidism, Cushing Syndrome, hypothalamic diseases and drugs including steroids, anti-depressants, anti-convulsants, etc. A detailed clinical history is important in this regard. The most important cause for the development of obesity is often an unhealthy life style and hence a detailed assessment of life style is very important. These will include diet history emphasising on portion size, diet content and frequency of dining out, frequency and duration of exercise, daily activities especially the need for physical activity. Dietetic input is often of large help in this regard.

Life style modification is the safest method for weight reduction. Clinical trials including Diabetes Prevention Programme, Diabetes Prevention Study and the recent LOOK AHEAD trial all showed the effectiveness of life style modification.<sup>15-17</sup> An average of sustainable 4-5% weight reduction can be achieved in these programmes. Usually these programmes will include calorie restriction, increased vegetable and fruit intake, encouraged physical activity up to at least 30 min per day at 4 times per week.<sup>18</sup> These programmes have been shown to reduce the risk of diabetes by approximately 60%, an improved lipid profile and blood pressure control.<sup>19-20</sup> In fact, the LOOK AHEAD trial demonstrated an improvement of reaching goals in HbA1c, blood pressure, but not in LDL-C.<sup>15, 17</sup> The success of these programmes will heavily rely on the compliance of the patients in the programme. It should be noted that all these programmes not only include



physician's consultation, but also extensive paramedical support including dietetic consultation, exercise programme etc.<sup>18</sup> The usual clinic-based consultation by a physician in fact serves as the control group rather than the active treatment group. Therefore, the implementation of these programmes in reality remains a major challenge. Furthermore, short term weight reduction programmes have also demonstrated to reduce blood pressure and prevent the development of hypertension in pre-hypertensive subjects. Meta-analysis showed that weight reduction has a modest effect on the prevention and treatment of hypertension with systolic blood pressure and diastolic blood pressure reduction of around 1.05 mmHg and 0.92mmHg per kilogram weight loss respectively. In fact, the effects of weight reduction are least in the reduction of low density cholesterol. It has been estimated that for every kilogram reduction in body weight, the LDL-C can be reduced by 0.02 mmol/l only<sup>21</sup>. Furthermore, whether the change in life style will eventually lead to the reduction in mortality and cardiovascular events has not yet been confirmed by clinical trials.

Since life style modification can usually bring about 5% weight reduction only, more severe degrees of obesity can hardly be normalised by life style modification alone, although they can still benefit from weight reduction programmes. Quite often, weight reduction drugs are necessary to bring about a larger degree of weight loss. Currently, there are only 2 properly assessed weight reduction drugs in the market, namely Orlistat and Sibutramine. Orlistat acts by inhibiting the intestinal lipase, hence reducing the fat absorption. Meta-analysis showed that it can induce a further 2.9 kg weight reduction compared with placebo. The main side effects are mainly gastrointestinal, namely oily faeces, oily spotting etc. Though fat soluble vitamin deficiency has been of concern initially, it is not sustained by later studies. Furthermore, apart from weight reduction, it can reduce LDL-C by 10% and has been shown to prevent diabetes in obese subjects.<sup>22-25</sup> However, the main problem with Orlistat is patient's compliance. One survey showed that as low as 6% of the patients taking Orlistat will continue with the treatment at one year, possibly partly due to its inconvenience<sup>26</sup>. The other drug, Sibutramine, is a noradrenaline and 5-hydroxytryptamine reuptake inhibitor which acts by inhibiting the appetite and increasing the rate of metabolism.<sup>27</sup> Meta-analysis showed that it can induce a weight reduction of ~ 4.2 kg, slightly better than Orlistat.<sup>24</sup> The main side effects are mainly an increase in blood pressure, palpitation, constipation and central nervous side effects including insomnia, restlessness etc.<sup>24</sup> It is contraindicated in patients with psychiatric illnesses and known cardiovascular diseases. Apart from weight reduction, Sibutramine can raise HDL-C and lower triglyceride.<sup>28</sup> In clinical trials, Sibutramine combined with casual consultation can result in a weight reduction of 11% over 2 years and can be conveniently applied in the general practice settings.<sup>29</sup> However, the rise in blood pressure is still worrying in the long run. A large clinical trial called SCOUT which studies the effects of Sibutramine on a few thousand patients with either vascular diseases or at high risk of vascular events are on the way and will probably cast light on the cardiovascular safety and effectiveness of Sibutramine once it is released.

Bariatric surgery has become more popular in the last decade because of both improved safety and its known effectiveness. Bariatric surgery can be broadly classified into restrictive surgery and bypass surgery, the details of which are beyond the scope of this discussion. The two most commonly performed operations are gastric banding and Roux-en-Y gastric bypass. Bariatric surgery in general can produce a reduction of 40-60% excessive body weight, much more marked compared with medical therapy.<sup>30</sup> Surgical complication rate is generally less than 10% in the first month and surgery-related mortality is less than 5/1000.<sup>31</sup> Diabetes resolves in the first year in approximately 70-80% of diabetic subjects, and the number of antihypertensive medications are markedly reduced.<sup>31,32</sup> Its effect on diabetes is especially impressive as a significant proportion of subjects have marked improvements in glycaemic control soon after the bypass operation, well before the effects of weight reduction.<sup>33</sup> This phenomenon will hopefully lead to a deeper understanding of the pathophysiology of Type 2 diabetes and hence more effective treatment. Furthermore, longitudinal studies showed a reduced mortality and incidence of cancer in severely obese subjects having undergone bariatric surgery<sup>34</sup>. However, there are still no long term randomised controlled trials to confirm its efficacy. Furthermore, data on subjects with lesser degrees of obesity are less extensive. Since the Oriental population has different criteria for obesity, that how to apply the international criteria for bariatric surgery in our local population is still empirical and controversial. The Asia-Pacific Bariatric Surgery Group (APBSG) so far has recommended bariatric surgery in Asian patients with BMI >37, or >32 with diabetes or two other obesity-related co-morbidities. However, these criteria are bound to change in the foreseeable future as more research data become available<sup>35</sup>. Since bariatric surgery is meant to be irreversible, one should discuss with the patient in detail about the pros and cons of surgery before embarking on surgical treatment.

Management of obesity will include not only weight reduction, but also a proper assessment and treatment of obesity-related problems. Life style modification is still the corner stone of weight reduction. However, for patients who have failed life style modifications or more severe degrees of obesity, the choice of treatment including medical treatment and bariatric surgery should be individualised and jointly made with the patient.

## References

1. Flegal, K.M., et al., Prevalence and trends in obesity among US adults, 1999-2000. *JAMA*, 2002. 288(14): p. 1723-7.
2. Chow, C.C., Dietary habits, physical activity and obesity in Hong Kong residents. *Obes Rev*, 2008. 9 Suppl 1: p. 104-6.
3. Fu, F.H. and X. Hao, Physical development and lifestyle of Hong Kong secondary school students. *Prev Med*, 2002. 35(5): p. 499-505.
4. Ko, G.T., et al., Associations between dietary habits and risk factors for cardiovascular diseases in a Hong Kong Chinese working population--the "Better Health for Better Hong Kong" (BHBHK) health promotion campaign. *Asia Pac J Clin Nutr*, 2007. 16(4): p. 757-65.
5. Fu, F.H. and L. Fung, The cardiovascular health of residents in selected metropolitan cities in China. *Prev Med*, 2004. 38(4): p. 458-67.
6. Lee, Z.S., et al., Obesity and cardiovascular risk factors in Hong Kong Chinese. *Obes Rev*, 2002. 3(3): p. 173-82.



7. Yusuf, S., et al., Effect of potentially modifiable risk factors associated with myocardial infarction in 52 countries (the INTERHEART study): case-control study. *Lancet*, 2004. 364(9438): p. 937-52.
8. Yusuf, S., et al., Obesity and the risk of myocardial infarction in 27,000 participants from 52 countries: a case-control study. *Lancet*, 2005. 366(9497): p. 1640-9.
9. Calle, E.E., et al., Overweight, obesity, and mortality from cancer in a prospectively studied cohort of U.S. adults. *N Engl J Med*, 2003. 348(17): p. 1625-38.
10. Bray, G.A., Medical consequences of obesity. *J Clin Endocrinol Metab*, 2004. 89(6): p. 2583-9.
11. Thompson, D., et al., Lifetime health and economic consequences of obesity. *Arch Intern Med*, 1999. 159(18): p. 2177-83.
12. Moreau, M., et al., Obesity, body fat distribution and incidence of sick leave in the Belgian workforce: the Belstress study. *Int J Obes Relat Metab Disord*, 2004. 28(4): p. 574-82.
13. W.H.O.-WPR. The Asia-Pacific perspective: redefining obesity and its treatment. 2000; Available from: [www.wpro.who.int/internet/resources.ashx/NUT/Redefining+obesity.pdf](http://www.wpro.who.int/internet/resources.ashx/NUT/Redefining+obesity.pdf).
14. Wildman, R.P., et al., Appropriate body mass index and waist circumference cutoffs for categorization of overweight and central adiposity among Chinese adults. *Am J Clin Nutr*, 2004. 80(5): p. 1129-36.
15. Tuomilehto, J., et al., Prevention of type 2 diabetes mellitus by changes in lifestyle among subjects with impaired glucose tolerance. *N Engl J Med*, 2001. 344(18): p. 1343-50.
16. Knowler, W.C., et al., Reduction in the incidence of type 2 diabetes with lifestyle intervention or metformin. *N Engl J Med*, 2002. 346(6): p. 393-403.
17. Pi-Sunyer, X., et al., Reduction in weight and cardiovascular disease risk factors in individuals with type 2 diabetes: one-year results of the look AHEAD trial. *Diabetes Care*, 2007. 30(6): p. 1374-83.
18. The Diabetes Prevention Program (DPP): description of lifestyle intervention. *Diabetes Care*, 2002. 25(12): p. 2165-71.
19. Lindstrom, J., et al., The Finnish Diabetes Prevention Study (DPS): Lifestyle intervention and 3-year results on diet and physical activity. *Diabetes Care*, 2003. 26(12): p. 3230-6.
20. Ratner, R., et al., Impact of intensive lifestyle and metformin therapy on cardiovascular disease risk factors in the diabetes prevention program. *Diabetes Care*, 2005. 28(4): p. 888-94.
21. Dattilo, A.M. and P.M. Kris-Etherton, Effects of weight reduction on blood lipids and lipoproteins: a meta-analysis. *Am J Clin Nutr*, 1992. 56(2): p. 320-8.
22. Ballinger, A., Orlistat in the treatment of obesity. *Expert Opin Pharmacother*, 2000. 1(4): p. 841-7.
23. Muls, E., et al., The effects of orlistat on weight and on serum lipids in obese patients with hypercholesterolemia: a randomized, double-blind, placebo-controlled, multicentre study. *Int J Obes Relat Metab Disord*, 2001. 25(11): p. 1713-21.
24. Padwal, R., S.K. Li, and D.C. Lau, Long-term pharmacotherapy for obesity and overweight. *Cochrane Database Syst Rev*, 2004(3): p. CD004094.
25. Torgerson, J.S., et al., XENical in the prevention of diabetes in obese subjects (XENDOS) study: a randomized study of orlistat as an adjunct to lifestyle changes for the prevention of type 2 diabetes in obese patients. *Diabetes Care*, 2004. 27(1): p. 155-61.
26. Padwal, R., et al., Long-term persistence with orlistat and sibutramine in a population-based cohort. *Int J Obes (Lond)*, 2007. 31(10): p. 1567-70.
27. Stock, M.J., Sibutramine: a review of the pharmacology of a novel anti-obesity agent. *Int J Obes Relat Metab Disord*, 1997. 21 Suppl 1: p. S25-9.
28. Dujovne, C.A., et al., Effects of sibutramine on body weight and serum lipids: a double-blind, randomized, placebo-controlled study in 322 overweight and obese patients with dyslipidemia. *Am Heart J*, 2001. 142(3): p. 489-97.
29. Wadden, T.A., et al., Randomized trial of lifestyle modification and pharmacotherapy for obesity. *N Engl J Med*, 2005. 353(20): p. 2111-20.
30. Leff, D.R. and D. Heath, Surgery for obesity in adulthood. *BMJ*, 2009. 339: p. b3402.
31. Tice, J.A., et al., Gastric banding or bypass? A systematic review comparing the two most popular bariatric procedures. *Am J Med*, 2008. 121(10): p. 885-93.
32. Nguyen, N.T., et al., A Prospective Randomized Trial of Laparoscopic Gastric Bypass Versus Laparoscopic Adjustable Gastric Banding for the Treatment of Morbid Obesity: Outcomes, Quality of Life, and Costs. *Ann Surg*, 2009.
33. Clements, R.H., et al., Hormonal changes after Roux-en Y gastric bypass for morbid obesity and the control of type-II diabetes mellitus. *Am Surg*, 2004. 70(1): p. 1-4; discussion 4-5.
34. Adams, T.D., et al., Long-term mortality after gastric bypass surgery. *N Engl J Med*, 2007. 357(8): p. 753-61.
35. Lee, W.J. and W. Wang, Bariatric surgery: Asia-Pacific perspective. *Obes Surg*, 2005. 15(6): p. 751-7.

## MCHK CME Programme Self-assessment Questions

Please read the article entitled "Management of Obesity-From Life Style Modification to Weight Reduction Surgery" by Dr. WB CHAN and complete the following self-assessment questions. Participants in the MCHK CME Programme will be awarded 1 CME credit under the Programme for returning completed answer sheets via fax (2865 0345) or by mail to the Federation Secretariat on or before 28 February 2010. Answers to questions will be provided in the next issue of The Hong Kong Medical Diary.

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

1. In our region, a subject with BMI of 29kg/m<sup>2</sup> is regarded as obese.
2. The problem of obesity only happens in the adult population in Hong Kong.
3. Anti-obesity drugs are the most effective method for weight reduction in subjects with morbid obesity.
4. The drug compliance to Orlistat is excellent in the obese population.
5. Obesity only affects cardiovascular health.
6. Weight reduction by lifestyle modification has not yet been proved to reduce mortality and cardiovascular events.
7. Lifestyle modification can prevent diabetic in subjects with impaired glucose tolerance.
8. Lifestyle modification can help diabetic subjects to reach LDL-C goal in LOOK-AHEAD Trial.
9. Weight reduction by bariatric surgery can result in remissions of diabetes in more than half the diabetic subjects in the first year after operation.
10. Improvements in glycaemic control after bariatric surgery happen only after weight reduction.





**ANSWER SHEET FOR FEBRUARY 2010**

Please return the completed answer sheet to the Federation Secretariat on or before 28 February 2010 for documentation. 1 CME point will be awarded for answering the MCHK CME programme (for non-specialists) self-assessment questions.

**Management of Obesity-From Life Style Modification to Weight Reduction Surgery**

**Dr. WB CHAN**

*Clinical Director, Qualigenics Diabetes Centre*

1  2  3  4  5  6  7  8  9  10

Name (block letters): \_\_\_\_\_ HKMA No.: \_\_\_\_\_

HKID No.: \_\_\_\_\_ - \_\_\_\_\_ X X (x) HKDU No.: \_\_\_\_\_

Contact TelNo.: \_\_\_\_\_ DCHK No.: \_\_\_\_\_

**Answers to January 2010 Issue**

Easily Missed Hand & Wrist Injuries

1. **T**    2. **F**    3. **T**    4. **F**    5. **F**    6. **T**    7. **F**    8. **T**    9. **T**    10. **F**



## Expected Effort, Expected Result




More than  
100  
clinical trials<sup>1</sup>

Used by  
30 million  
patients<sup>1</sup>

No. 1 Selling  
Weight  
Management  
Drug<sup>2</sup>

Most  
Recommended  
by Doctors<sup>2</sup>

References: 1. Abbott Data on File ; 2. HKAPI (The Hong Kong Association of the Pharmaceutical Industry) Data 2004-2009



**Reductil®**  
諾美亭  
sibutramine



**Abbott**  
A Promise for Life

**Abbott Laboratories Limited**  
20/F, AIA Tower, 183 Electric Road, North Point, Hong Kong  
Tel: 2566 8711 Fax: 2219 8066 www.abbott.com.hk  
AI-N136-L-209 Further information available upon request.

# Obesity in Hong Kong - Risk and Burden

Dr. Gary TC KO

MBChB, MD, FRCPI, FHKCP, FHKAM

Vice President, Hong Kong Association for the Study of Obesity (HKASO)



Dr. Gary TC KO

## Introduction

Obesity is now a global concern not only in adults but also among children and adolescents. With increasing personal affluence and changing lifestyle characterised by increased food intake and reduced physical activity, obesity has become an epidemic not only in developed countries but some developing areas as well. Obesity is a chronic disease due to its associated increase in the risk of morbidity and mortality. Apart from the associations with cardiovascular diseases, hypertension, diabetes and dyslipidaemia, obesity has also been implicated in the development of degenerative bone diseases, obstructive sleep apnoea, gallbladder diseases and some cancers such as colorectal malignancy<sup>1</sup>. The rapid surge of diabetes, especially in the Asian Pacific Region, is closely associated with escalating obesity prevalence<sup>2</sup>.

## General vs. Central Obesity

Body Mass Index (BMI), defined as body weight in kilogram divided by body height in metre squared, has been used for measuring obesity for more than 20 years. The World Health Organization (WHO) in 1995 defined overweight as BMI  $\geq 25$ -29.9 kg/m<sup>2</sup> while obesity as BMI  $\geq 30$  kg/m<sup>2</sup>. However, these definitions are based on data obtained mainly from Caucasian populations and do not apply readily to Asian populations such as the Chinese. In 2000, the World Health Organization Western Pacific Region (WHO-WPR), International Association for the Study of Obesity (IASO) and the International Obesity Task Force (IOTF) jointly proposed a revised definition of obesity for non-Caucasian populations<sup>3</sup>. In this joint proposal, BMI cut-off levels for overweight and obesity in Asians were redefined as  $\geq 23$  kg/m<sup>2</sup> and  $\geq 25$  kg/m<sup>2</sup> respectively<sup>3</sup>. However, this modification had been criticised to be too radical such that the definition of obesity was dramatically decreased by 5 kg/m<sup>2</sup> (from 30 to 25 kg/m<sup>2</sup>). In 2004, a WHO expert consultation was held in Singapore. They concluded that Asians generally had a higher percentage of body fat than white people of the same age, sex and BMI, and that the proportion of Asian people with risk factors for type 2 diabetes and cardiovascular diseases was substantial even below the existing WHO BMI cut-off point of 25 kg/m<sup>2</sup> for overweight. They released a report that suggested retaining the traditional BMI cut-off levels for overweight ( $\geq 25$  kg/m<sup>2</sup>) and obesity ( $\geq 30$  kg/m<sup>2</sup>) but added 23.0, 27.5, 32.5 and 37.5 kg/m<sup>2</sup> as points for public health action<sup>4</sup>. For Asian populations, BMI at 27.5 kg/m<sup>2</sup> or higher was regarded as representing high risk<sup>4</sup>.

Vague was the first to describe that obesity which predominates in the upper body is more associated with hypertension and glucose intolerance compared to obesity which predominates in the lower body<sup>5</sup>. To measure abdominal obesity, waist circumference (WC) alone and/or waist to hip ratio (WHR) are most commonly used. The measurement of WC should be made at the approximate midpoint between the lower margin of the last palpable rib and the top of the iliac crest<sup>6</sup> while hip circumference is the maximum measurement, in a horizontal plane, around the buttocks posteriorly and the symphysis pubis anteriorly. Standardisation of the levels at which WC and hip circumferences should be measured is important since large variations in the ratio can result from small variations in the measurement sites. Some reports have shown that WC correlates better than WHR with intra-abdominal adipose area as measured by Computerised Tomography Scan or Magnetic Resonance Imaging<sup>7</sup>. Nowadays, many authorities are using WC alone to evaluate central obesity.

Central obesity, indicated by increased WC, is a proven marker for future clinical events<sup>8</sup>. There is general consensus that WC measurements can be used to supplement BMI to stratify health risks in the general and diabetic populations. According to both the International Diabetes Federation (IDF) and National Cholesterol Education Program (NCEP) guidelines, central obesity is a key parameter in the diagnosis of the metabolic syndrome, which is associated with 2 to 5 fold increased risks of diabetes, cardiovascular diseases and/or mortality<sup>9,10</sup>. Among Caucasians, central obesity is defined as a WC  $\geq 102$  cm in men and  $\geq 88$  cm in women or WHR  $\geq 0.90$  in men or  $\geq 0.85$  in women<sup>11,12</sup>. For Asians, these WC cut-off values are modified to  $\geq 90$  cm in men and  $\geq 80$  cm in women<sup>3, 10</sup>.

## Prevalence

### General Obesity

It is difficult to compare data concerning the prevalence of obesity among different populations when different parameters and definitions are used. In the 90's, the prevalence of overweight (BMI  $\geq 25$  kg/m<sup>2</sup>) in Hong Kong Chinese was around 35% and for obesity (BMI  $\geq 30$  kg/m<sup>2</sup>), 5%<sup>13 14</sup>. The respective figures of obesity were as high as 30% in Europe and US<sup>12</sup>. Similarly, in Hong Kong Chinese, the mean WC was only 80 cm in men and 74 cm in women, as compared to the mean values of 93 cm and 82 cm in Caucasian men and women respectively. For these reasons, Chinese populations are often erroneously considered as non-obese.



In 2005, using the WHO-WPR 2000 criteria with BMI  $\geq 25$  kg/m<sup>2</sup> as the cut-off for obesity<sup>3</sup>, the age-standardised prevalence of obesity in Hong Kong Chinese were 31.0% in men and 18.8% in women<sup>15</sup>. The figure in men was comparable to that of many western countries such as England (24.9%), Finland (14.9%) and USA (31.1%) (with obesity defined as BMI  $\geq 30$  kg/m<sup>2</sup>) for the same year period of 2001-2006<sup>16</sup>. By contrast, the rate of obesity in Hong Kong women was lower than that reported in USA (33.2%) and UK (25.2-26.0%), comparable to New Zealand (22.1%), and higher than some European countries such as Italy (9.1%) and Finland (13.5%)<sup>16</sup>. Using the same BMI cut-off ( $\geq 25$  kg/m<sup>2</sup>), Hong Kong has one of the highest prevalence of obesity amongst various Chinese communities (Mainland China: 16.7% in men, 15.4% in women; Taiwan: 22.3% in men, 19.9% in women)<sup>17</sup>.

### Central Obesity

In the period between 1987 and 1992, WHO had conducted a cardiovascular risk survey (MONItoring trends & determinants in CArdiovascular diseases [MONICA] Project) among 26 countries with measurements of WC in 32,000 subjects<sup>18</sup>. The mean WC in men in Beijing was 83cm only, which was around 10 cm less as compared to those in European countries. Mean WC values in the latter varied from 91cm in Italy to 98cm in German and Czech. Interestingly, for WC in women, it was 80cm in Beijing and slightly higher than that in Australia and Switzerland (78cm), and much lower than Spain (87cm) and Czech (91cm) (see Table 1).

In 2007, an international survey collected information on WC from 168,000 people in 63 countries (International Day for the Evaluation of Abdominal obesity [IDEA] Study)<sup>19</sup>. The study showed the mean WC of Asians (China Mainland, Hong Kong, Taiwan and South Korea) was 86.5cm in men and 80.2cm in women. Compared to the data from the MONICA Project, the WC of the IDEA Study in men increased by 3.4cm and remained static in women. Besides, WC markedly escalated to 99.1cm in men and 89.0cm in women among Australians. Most European countries also showed similar deteriorating trends in both genders (Table 1).

There is no population-based national health survey on the problem of obesity in Hong Kong. Comparing data from a local working population survey done in the early 90's and a health promotion campaign conducted in 2002, the rate of general obesity (BMI  $\geq 25$  kg/m<sup>2</sup>) increased from 30% to 35% in men and dropped from 28% to 22% in women, while similar figures for central obesity were more alarming with an increase from 12% to 27% in men and a static state in women (27-29%)<sup>20</sup>. Taken together, these figures suggested a worsening problem of central obesity in Hong Kong. In light of the confirmed prognostic significance of central obesity to predict diabetes, metabolic syndrome, cardiovascular and all cause mortality, they point to a looming epidemic of obesity-associated chronic diseases in our population.

### Implication

One of the WHO reports estimated that globally 35 million people died from chronic diseases every year and 1 billion people were estimated to be obese. In China, 558 billion US dollars of national income was estimated to forego in the next 10 years as a result of chronic diseases such as diabetes and obesity<sup>21</sup>. In Hong Kong, obesity and related conditions occupied ~15% of all admissions and the related expenditure showed a 47% increment in 5 years' time<sup>22</sup>. Obesity attributes a significant proportion of the costs on various diseases. This was estimated to be 10-20% for diabetes, hypertension or dyslipidaemia in Hong Kong Chinese.

Body weight is mainly determined by caloric intake, energy expenditure and basal metabolic rate. Although obesity is occasionally a presenting feature of an endocrine or metabolic disorder, in the majority of subjects, obesity is a consequence of energy imbalance due to excessive energy intake and (relatively) inadequate energy expenditure. Increased food intake, in particular, dietary fat, is the main cause of excessive energy input while reduced energy expenditure is usually due to a sedentary lifestyle with inadequate physical activity. While the search for the obesity genes continues, education on lifestyle modification with particular emphasis on a balanced diet and regular physical activity remains the cornerstone of weight reduction programmes at both the primary and secondary preventative levels.

Table 1. Data on waist circumferences from the MONICA Project (1987-1992) 18 and IDEA Study (2007) 19.

Waist Circumference, cm					
MONICA Project (1987-1992)			IDEA Study (2007)		
Country / region	Men	Women	Country / region	Men	Women
Beijing	83	80	Asia (China, Hong Kong, Taiwan, Korea)	86.4	80.2
Australia	92-95	78-83	Australia	99.1	89.0
Italy	91-93	80-83	Southern Europe	99.4	91.3
Spain	96	87	-	-	-
Switzerland	92	78	Northern Europe	97.8	88.3
Finland	93-94	81	-	-	-
Denmark	94	79	-	-	-
Germany	98	82-86	-	-	-
Yugoslavia	94	85	Eastern Europe	96.9	89.7
Czech	98	91	-	-	-
			Africa	93.6	89.8-93.1
			Middle East	98.2	93.4
			South-east Asia	89.3	84.1
			Canada	101.4	92.2
			Latin America	96.4	89.7

MONICA Project, MONItoring trends & determinants in CArdiovascular diseases; IDEA Study, International Day for the Evaluation of Abdominal obesity Study

References

1. Bray GA. Medical consequences of obesity. *J Clin Endocrinol Metab* 2004;89(6):2583-9.
2. Huxley R, James WP, Barzi F, Patel JV, Lear SA, Suriyawongpaisal P, et al. Ethnic comparisons of the cross-sectional relationships between measures of body size with diabetes and hypertension. *Obes Rev* 2008;9 Suppl 1:53-61.
3. WHO/IASO/IOTF. The Asia-Pacific perspective: redefining obesity and its treatment. Melbourne: Health Communications Australia, 2000.
4. WHO. World Health Organization (WHO) Expert Consultation: Appropriate body-mass index for Asian populations and its implications for policy and intervention strategies. *Lancet* 2004;363(9403):157-63.
5. Vague J. The degree of masculine differentiation of obesities: a factor determining predisposition to diabetes, atherosclerosis, gout, and uric calculous disease. *Am J Clin Nutr* 1956;4(1):20-34.
6. WHO. World Health Organization (WHO) STEPSwise approach to Surveillance (STEPS) protocol manual. In: WHO, editor. Geneva, 2008.
7. Koester RS, Hunter GR, Snyder S, Khaled MA, Berland LL. Estimation of computerized tomography derived abdominal fat distribution. *Int J Obes Relat Metab Disord* 1992;16(8):543-54.
8. Yusuf S, Hawken S, Ounpuu S, Bautista L, Franzosi MG, Commerford P, et al. Obesity and the risk of myocardial infarction in 27,000 participants from 52 countries: a case-control study. *Lancet*. 2005;366(9497):1640-9.
9. NCEP. National Cholesterol Education Program (NCEP): Executive Summary of The Third Report of The NCEP Expert Panel on Detection, Evaluation, And Treatment of High Blood Cholesterol in Adults (Adult Treatment Panel III). *Jama* 2001;285(19):2486-97.
10. Alberti KG ER, Grundy SM, Zimmet PZ, Cleeman JI, Donato KA, Fruchart JC, James WP, Loria CM, Smith SC Jr. Harmonizing the metabolic syndrome: a joint interim statement of the International Diabetes Federation Task Force on Epidemiology and Prevention; National Heart, Lung, and Blood Institute; American Heart Association; World Heart Federation; International Atherosclerosis Society; and international association for the Study of Obesity. *Circulation* 2009;120(16):1640-1645.
11. Alberti KG, Zimmet PZ. Definition, diagnosis and classification of diabetes mellitus and its complications. Part 1: diagnosis and classification of diabetes mellitus provisional report of a WHO consultation. *Diabet Med* 1998;15(7):539-53.
12. Bray GA. Obesity: a time bomb to be defused. *Lancet* 1998;352(9123):160-1.
13. Ko GT, Tang JS. Prevalence of obesity, overweight and underweight in a Hong Kong community: the United Christian Nethersole Community Health Service (UCNCHS) primary health care program 1996-1997. *Asia Pac J Clin Nutr* 2006;15(2):236-41.
14. Janus ED. Hong Kong Cardiovascular Risk Factor Prevalence Study, 1995-1996. Hong Kong, 1997.
15. Ko GT, Tang JS, Chan JC. Worsening trend of central obesity despite stable or declining body mass index in Hong Kong Chinese between 1996 and 2005. *Eur J Clin Nutr* 2010 (in press).
16. IOTF. International Obesity TaskForce (IOTF) prevalence data: Global obesity prevalence in adults.
17. APCSC. Asia Pacific Cohort Studies Collaboration (APCSC): The burden of overweight and obesity in the Asia-Pacific region. *Obes Rev* 2007;8(3):191-6.
18. Molarius A, Seidell JC, Sans S, Tuomilehto J, Kuulasmaa K. Varying sensitivity of waist action levels to identify subjects with overweight or obesity in 19 populations of the WHO MONICA Project. *Journal of Clinical Epidemiology* 1999;52(12):1213-24.
19. Balkau B, Deanfield JE, Despres JP, Bassand JP, Fox KA, Smith SC, Jr., et al. International Day for the Evaluation of Abdominal Obesity (IDEA): a study of waist circumference, cardiovascular disease, and diabetes mellitus in 168,000 primary care patients in 63 countries. *Circulation* 2007;116(17):1942-51.
20. Ko TC, Chan J, Chan A, Wong P, Hui S, Chow F, et al. Doubling over ten years of central obesity in Hong Kong Chinese working men. *Chin Med J (Engl)* 2007;120(13):1151-4.
21. WHO. World Health Organization (WHO): Preventing chronic diseases - a vital investment, 2005.
22. Ko GT. The cost of obesity in Hong Kong. *Obes Rev* 2008;9 Suppl 1:74-7.



**Accessibility and Dignity for your patient;  
Safe and Efficient patient care for your staff and you.**



180 kg  
capacity

**Midmark 623**



200 kg  
capacity

**Promotal quest**



385 kg  
capacity

**Midmark 244**

Everyone is entitled to equal access care. To do so, we have created complete range of variable height power couches. Accessibility, Comfort, Security for bariatrical, elderly and disabled patients is one of Midmark and Promotal's priorities.

**Midmark / Promotal Show Room Opening in Hong Kong: 9th March 2010**



For more information, please contact [j.lebras@promotal.fr](mailto:j.lebras@promotal.fr)

Local distributor: ASSOCIATED MEDICAL SUPPLIES CO., LTD. Phone: 2604 9389 Email: [sales@amscl.com](mailto:sales@amscl.com)





THE UNIVERSITY OF HONG KONG  
LI KA SHING FACULTY OF MEDICINE

香港大學李嘉誠醫學院



# Master of Medical Sciences (MMedSc)

- Provide structured training in both basic science and clinical disciplines for career or personal development
- Provide a bridging mechanism for preclinical and clinical studies

## Curriculum

1-year full-time or 2-year part-time (day-release)

- Induction Course on Dissertation Writing (7.5 hours)
- 4 Core Modules (80 hours)
- 6 Specialised Modules (120 hours)
- Research project leading to a dissertation (200 hours)

Those who wish to enhance their professional knowledge but do not intend to pursue the MMedSc qualification may take individual Core or Specialised Modules and receive a Certificate of Attendance.

## Admission requirements

- (a) Possess the relevant necessary requirements which comply with the General Regulations;
- (b) Hold a Bachelor's degree with honours or the degrees of MBBS of this University, or another qualification of equivalent standard;
- (c) Obtain a score of 550 or above (paper-based test), 213 or above (computer-based test) or 80 or above (internet-based test) in the Test of English as a Foreign Language (TOEFL) if seeking admission on the basis of a qualification from a university of which the language of teaching and/or examination is not English. Those taking IELTS should have a minimum overall band of 6 with no subtest lower than 5.5; and
- (d) Satisfy the examiners in a qualifying examination, if required.

**Course commencement:** *September 2010*

**Provisional Course fees** (subject to adjustment):

*HK\$92,000 (1-year Full-time); HK\$46,000/year (2-year Part-time)*

**Application Deadline:** *May 31, 2010*



Application forms and details of the curriculum can be found at  
[http://www.hku.hk/facmed/03edu\\_post\\_taught.htm](http://www.hku.hk/facmed/03edu_post_taught.htm)

Tel: 2819 9155 / 2819 9981; Fax: 2818 4913  
E-mail: [ylwongd@hkucc.hku.hk](mailto:ylwongd@hkucc.hku.hk) / [chktong@hku.hk](mailto:chktong@hku.hk)

# Surgical Treatment of Obesity

## Dr. Simon KH WONG

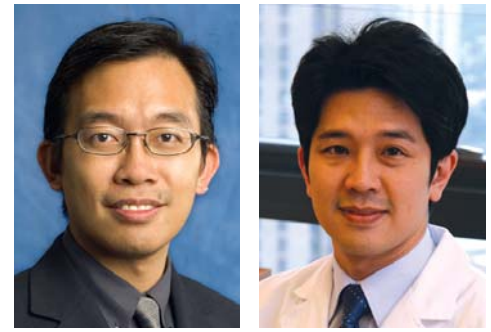
FRCSEd, FHKAM(Surg)

Consultant, Division of Upper GI Surgery, Department of Surgery,  
Prince of Wales Hospital, The Chinese University of Hong Kong

## Dr. Wilfred LM MUI

FRCSEd, FHKAM(Surg)

Medical Director, Hong Kong Bariatric & Metabolic Institute



Dr. Simon KH WONG

Dr. Wilfred LM MUI

## Introduction

With the rapid growth and development in the economy of Hong Kong and China Mainland, obesity and its associated morbidities are increasingly a health and societal burden to the region. In a territory-wide survey of Chinese adults in Hong Kong, the prevalence of overweight was even more alarming, as 26.9% of men and 31.1% of women studied were having BMI over 25<sup>1</sup>. A recent multi-centre study of obesity problem in various Asia-Pacific countries revealed that nearly 3% of Hong Kong Chinese are medically obese (BMI > 30)<sup>2</sup>. These figures are alarming, as many obese patients will inevitably suffer from the metabolic syndrome and other co-morbidities that lead to premature mortality. The goal of weight-reduction therapy is to improve health by modifying obesity-related diseases and the risks for future obesity-related medical complications. Substantial weight loss with weight maintenance has been shown to reduce markedly the prevalence of cardiovascular risk factors<sup>3</sup> and in most patients reverses diabetes, hypertension and pulmonary dysfunction<sup>4</sup>. While lifestyle modification, exercise, dietary training and medical therapy may be effective in weight control for slightly overweight people, those who are morbidly obese often fail with these simple measures. In 1954, the first jejunio-ileal bypass was performed by Kremer & Linner in USA, and it declared the beginning of an era of surgical management of morbid obesity. Various types of gastrointestinal surgeries have been developed in an attempt to achieve weight reduction in the last five decades and they truly provide the last hope for these desperate patients.

## What is Bariatric Surgery?

Bariatric surgery (weight reduction surgery or obesity surgery) is a surgery on the stomach and/or intestines to help a person with extreme obesity to lose weight. In the last 50 years, various procedures had been developed for this purpose. Although some of these procedures had already been condemned either because of its complications (e.g. jejunio-ileal bypass) or due to ineffective weight loss (e.g. Horizontal Gastroplasty), some other procedures have widely been adopted as the operation of choice in weight reduction. The two major groups of operations are gastric restrictive operations (e.g. adjustable gastric banding) and mal-absorptive operations (e.g. bilio-pancreatic bypass), or a hybrid operation of these two procedures (e.g. gastric bypass). In Hong Kong, surgical treatment of obesity started in 2002<sup>5</sup>, and in the last few years, procedures

including laparoscopic adjustable gastric banding (LAGB)<sup>5</sup>, laparoscopic gastric bypass (LGB) and laparoscopic sleeve gastrectomy (LSG)<sup>6,7</sup> had been introduced. Together with the rapid development of minimally invasive surgery, most of these procedures are currently performed by the laparoscopic technique, which significantly reduces postoperative wound complications and hospital stay and hence increases the acceptance of this invasive treatment.

## Multidisciplinary Weight Management Programme

Before year 2000, bariatric surgery was almost non-existent in Hong Kong. In 2002, we established the first Combined Obesity Clinic (COC) in Hong Kong. Surgical treatment of obesity requires a multidisciplinary approach involving surgeons, endocrinologists, dietitians and our specialty nurses. For patients who fulfil the criteria of surgical treatment, a preoperative assessment including nutritional, endocrine and metabolic diseases screening is performed. If necessary, a psychiatric consultation will be arranged for potential eating disorders, depression or other suspected psychiatric problems. A tailor-make weight management plan is formulated depending on the severity of obesity, co-morbidities, potential risk-benefit assessment, together with thorough discussions of the reality goal in relation to various strategies. Patients will go through an anaesthetic assessment before the operation and a designated operative team will provide peri-operative surgical care after the procedure. After surgery, all patients require regular reassessments by the bariatric surgeon, dietitians and physicians to take care of any surgical, dietary, medication and co-morbidity adjustment.

## Candidates for Bariatric Surgery

In Caucasian countries, indications of surgery for morbid obesity include patients whose BMI exceed 40, or patients who are less obese (BMI between 35-40) but suffering from high risk co-morbidities<sup>8</sup>. They should be able to participate in the treatment and long term follow up, clearly and realistically understand how their lives may change after the surgery. Patients with endocrine causes of obesity (e.g. hypothyroidism, Cushing disease) and those with poor medical compliance (e.g. major psychiatric disorders, drug or substance abuse) are excluded. However, in Asian countries like Hong Kong, we have a higher body fat



percentage than Caucasians with a comparable BMI<sup>9,10</sup>. These findings are in agreement with the higher morbidity risks at low BMI in Hong Kong Chinese<sup>11</sup>. In 2005, the Asia-Pacific Bariatric Surgery Group consensus meeting recommended bariatric surgeries in Asian patients with BMI >37 or >32 with diabetes or two other obesity-related co-morbidities<sup>12</sup>. Since 2005, we had modified our inclusion criteria and recruiting patients with lower BMI for surgery.

## Bariatric Surgeries in Hong Kong

**Laparoscopic Adjustable Gastric Banding (LAGB):** Among the various types of surgery, LAGB is considered the safest operation among all procedures. Laparoscopic adjustable gastric banding, which was introduced in the early 1990s, offers the advantages of minimally invasive surgery, adjustability and reversibility. This purely gastric restrictive procedure involves the use of an adjustable silicone band placed around the gastric cardia, creating a small gastric pouch (15 ml) with a narrow outlet, similar in concept to that of the vertical banded gastroplasty (VBG). These bands can be adjusted postoperatively by inflating a reservoir, which is accessed percutaneously by a subcutaneous port placed deep in the abdominal wall. Injection or withdrawal of saline from the port allows adjustment of the band's luminal diameter.

**Laparoscopic Gastric Bypass (LGB):** Although LAGB is effective against most of our patients with morbid obesity, it still has its limitations. Restrictive procedures cannot limit fluid calories and patients with poor compliance of dietary advice are at risk of inadequate weight loss or pouch dilatation secondary to binge eating behaviour. Gastric bypass, on the other hand, is a hybrid procedure combining restriction and foregut bypass in the form of either a Roux-en Y reconstruction (Roux-en Y gastric bypass, proximal gastric bypass) or a Billroth II reconstruction at the distal stomach (Mini-gastric bypass). Although gastric bypass is more effective in weight reduction and induces remissions of type II diabetes<sup>13</sup>, it carries higher peri-operative morbidities and mortality, and requires life-long nutrition supplement. In our centre, laparoscopic gastric bypass is used as a primary bariatric procedure for super-obese patients (BMI>50) or used for salvage patients with previous failed restrictive procedures especially with poor controlled type 2 diabetes.

**Laparoscopic Sleeve Gastrectomy (LSG):** "Sleeve gastrectomy" or "vertical gastrectomy" is a new form of bariatric procedure in weight management. It involves the removal of >75% of the stomach and leaves a small gastric tube. This procedure decreases the stomach size and will inhibit distention of the stomach, increase the patient's sensation of fullness and decrease their appetite. The mechanisms responsible for reducing appetite are poorly understood. But much interest has been focused on the role of the hormone ghrelin which is secreted in the fundus. Ghrelin receptors are found in the pituitary gland and hypothalamus and this hormone can increase food intake and weight gain. After sleeve gastrectomy, most of the stomach has been resected and this may explain why its efficacy seems to be more effective than simple restrictive surgery. This

procedure initially was used as the first stage of a 2-staged procedure to achieving weight loss and reducing comorbidities in patients who were super-obese before performing the second stage Roux-en-Y gastric bypass or biliopancreatic diversion with duodenal switch<sup>14,15</sup>. As the effectiveness and safety of laparoscopic sleeve gastrectomy is encouraging, it is gradually used as the primary procedure in various centres in Asia and Europe<sup>16,17</sup>.

## Benefit of Surgery

Numerous studies have already reported the effectiveness of bariatric surgery and its ability to alleviate obesity-related diseases such as the metabolic syndrome, diabetes, sleep apnoea and hypertension<sup>18,19</sup>. Complete resolution of diabetes, hypertension and sleep apnoea were also reported in 47 to 90% of patients depending on the type of surgery. Two recent prospective cohorts had also clearly demonstrated that bariatric surgery can improve survival of severely obese patients as compared to obese individuals who did not receive surgery<sup>20,21</sup>.

In our experience, significant weight loss was achieved in a cohort of 135 morbidly obese patients<sup>7</sup>. There were no operative mortality and the overall complication rate was 10.3%, which were usually minor. However, significant morbidities such as anastomotic leakage, postoperative haemorrhage and intestinal obstruction are still possible, especially with gastric bypass and sleeve gastrectomy. At 2 years follow up, the mean weight loss were 15kg, 27kg and 30kg in LAGB, LSG and LGB groups and the mean percentage of excessive weight loss at 2 years were 34%, 51%, 61% respectively. Moreover, significant improvement of co-morbidities was observed in most of the patients<sup>7,22</sup> and resolution of co-morbidities such as diabetes, hyperlipidaemia, the metabolic syndrome and sleep apnoea were achieved in a significant number of patients.

## Endoscopic Treatment

Bariatric surgery is considered as the only method to induce sustainable and profound weight loss in obese patients, but its acceptance in Chinese is far below the western society. Most traditional Chinese do not consider obesity a chronic illness and the majority of patients are unwilling to undertake an aggressive surgical approach for obesity treatment. Endoscopic approach becomes a very valid alternative to these patients who are reluctant for more invasive intervention.

**Intra-gastric Balloon (IGB) programme:** IGB was initially developed from observing the effects naturally caused by bezoars and the first documentation in human use was reported in 1982. The use of balloons was not popular in the early 90's due to the old design with high failure and complication rates. The newer design of balloons was introduced in 1999<sup>23</sup> and has undergone extensive evaluation in Europe and South America with promising results<sup>24,25</sup>. The balloon is silicone-made and is placed inside the stomach endoscopically for a maximum of 6 months to decrease



stomach capacity and gastric emptying. It facilitates the patient's compliance to the restricted diet prescribed. IGB treatment is considered as a part of the behaviour modification programme and its success depends heavily on the adaptation of a new eating habit after balloon removal. In our programme, IGB therapy is used as a temporary weight control measure in three groups of patients:

1. Patients who are surgical candidates<sup>11</sup> and willing to receive bariatric surgery, but preoperative weight reduction is considered beneficial, especially in super-obese (BMI>60) individuals.
2. Patients who are candidates for bariatric surgery but unwilling to undergo any major surgical procedure.
3. Patients with low BMI (BMI 25-32) who are not candidates for surgery but suffer from obese-related co-morbidities and have failed conservative weight reduction therapies in the past.

The IGB will be removed after 6 months or when the patient suffers from intolerance and complications from IGB treatment. Our initial result is promising with a high satisfaction rate at 6 months<sup>26</sup> with an average weight loss of 12kg. The procedure is well tolerated with 76% of patients able to be discharged in the following day. About 4% of patients have severe nausea and vomiting resulting in balloon removal. Other possible complications include premature rupture, dehydration and hypokalaemia due to severe vomiting. Patients will require prolonged acid suppression during IGB therapy to prevent gastric erosion and gastroesophageal reflux problems. After IGB treatment, patients will be reviewed and second bariatric procedures will be offered if clinically indicated. Although the majority of patients can achieve weight loss during balloon treatment, its limitation remains as weight regain occurs frequently after IGB removal especially in high BMI patients and those who cannot alter their dietary and exercise habits.

## Conclusion

Bariatric surgery is a new specialty in Hong Kong and it is growing from its infancy stage. In the past 6 years, bariatric procedures in Hong Kong have been evolving from a single surgical procedure (LAGB) to the full package of both endoscopic and laparoscopic surgeries. Initially, we encountered difficulties in persuading patients and even doctors in accepting such an invasive treatment for obesity. Now, more and more physicians and patients understand the importance of weight control in severe obesity and agree that the beneficial effects of surgery seem to have out-weighed its risks in selective groups of patients. There is no single procedure that can suit all patients and individual patients will require independent evaluations by the obesity surgery management team. With the rapid development in technology and research in obesity management, new devices and surgical procedures will evolve and further improve the outcome of surgical treatment of obesity. Moreover, recent research on the effects of glucose homeostasis in diabetes from foregut anatomic alternation had significant impacts on the development of bariatric surgery. A new concept

evolved from weight control (bariatric) to diabetes control (metabolic). Indeed, the term "Metabolic Surgery" is now beginning to be adherent to bariatric surgery in most international bariatric surgical societies. This reflects the considerable room for further development in this surgical field and our surgical society should prepare the new era of surgery for obesity.

## References

1. Ko GT, Tang JS. Prevalence of obesity, overweight and underweight in a Hong Kong community: the United Christian Nethersole Community Health Service (UCNCHS) primary health care program 1996-1997. *Asia Pac J Clin Nutr.* 2006;15(2):236-41.
2. Gill T. Epidemiology and health impact of obesity: an Asia Pacific perspective. *Asia Pac J Clin Nutr* 2006;15(Suppl):3S-14S.
3. Long SD, O'Brien K, MacDonald KG Jr, et al. Weight loss in severely obese subjects prevents the progression of impaired glucose tolerance in type II diabetes. A longitudinal interventional study. *Diabetes Care* 1994;17:372-5.
4. Sjostrom L, Narbro K, Sjostrom CD, et al. Effects of bariatric surgery on mortality in Swedish obese subjects. *N Engl J Med* 2007;357:741-52.
5. Wong SKH, So WY, Yau PY, Chan AK, Lee S, Chan PN, Chow FC, Chung SS. Laparoscopic adjustable gastric banding for the treatment of morbidly obese patients: early outcome in a Chinese cohort. *Hong Kong Med J.* 2005 ;11(1):20-9.
6. Mui WL, Ng EK, Tsung BY, Lam CC, Yung MY. Laparoscopic Sleeve Gastrectomy in Ethnic Obese Chinese. *Obes Surg.* 2008 Dec;18(12):1571-4
7. Wong SK, Kong AP, Mui WL, So WY, Tsung BY, Yau PY, Chow FC, Ng EK. Laparoscopic Bariatric Surgery: A Five Years Review. *Hong Kong Med J.* 2009, 15 (2):100-109
8. NIH conference. Gastrointestinal surgery for severe obesity. Consensus Development Conference Panel. *Ann Intern Med* 1991;115:956-61.
9. P. Deurenberg, M. Deurenberg-Yap and S. Guricci, Asians are different from Caucasians and from each other in their body mass index/body fat per cent relationship. *Obes. Rev.* 3 (2002), pp. 141-146
10. G.T. Ko, J. Tang and J.C. Chan et al., Lower BMI cut-off value to define obesity in Hong Kong Chinese: an analysis based on body fat assessment by bioelectrical impedance. *Br. J. Nutr.* 85 (2001), pp. 239-242.
11. G.T. Ko, J.C. Chan, C.S. Cockram and J. Woo, Prediction of hypertension, diabetes, dyslipidaemia or albuminuria using simple anthropometric indexes in Hong Kong Chinese. *Int. J. Obes. Relat. Metab. Disord.* 23 (1999), pp. 1136-1142.
12. Lee WJ, Wang W. Bariatric surgery: Asia-Pacific perspective. *Obes Surg* 2005;15:751-7.
13. Rubino F, Gagner M. Potential of Surgery for Curing Type 2 Diabetes Mellitus. *Ann Surg* 2002; 236, No. 5, 554-559
14. Gagner M, Inabnet WB, Pomp A. Laparoscopic sleeve gastrectomy with second stage biliopancreatic diversion and duodenal switch in the superobese. Chapter 18. In: Inabnet WB, DeMaria EJ, Ikramuddin S, eds. *Laparoscopic Bariatric Surgery.* 2nd ed. Philadelphia, PA: Lippincott Williams & Wilkins; 2005:145-150.
15. Silecchia G, Boru C, Pecchia A, et al. Effectiveness of laparoscopic sleeve gastrectomy (first stage of biliopancreatic diversion with duodenal switch) on co-morbidities in super-obese high-risk patients. *Obes Surg* 2006; 16(9):1138-44.
16. Moon Han S, Kim WW, Oh JH. Results of laparoscopic sleeve gastrectomy (LSG) at 1 year in morbidly obese Korean patients. *Obes Surg* 2005;15:1469-75.
17. Roa PE, Kaidar-Person O, Pinto D, et al. Laparoscopic sleeve gastrectomy as treatment for morbid obesity: technique and short-term outcome. *Obes Surg* 2006; 16(10):1323-6.
18. Sjostrom L, Lindroos AK, Peltonen M, Torgerson J, Bouchard C, Carlsson B, et al. Lifestyle, diabetes, and cardiovascular risk factors 10 years after bariatric surgery. *N Engl J Med.* 2004;351:2683-93.
19. Maggard MA, Shugarman LR, Suttrop M, Maglione M, Sugerman HJ, Livingston EH, Nguyen NT, Li Z, Mojica WA, Hilton L, Rhodes S, Morton SC, Shekelle PG.. Meta-analysis: surgical treatment of obesity. *Ann Intern Med.* 2005 Apr 5;142(7):547-59.
20. Sjostrom L, Narbro K, Sjostrom CD et al. Effects of bariatric surgery on mortality in Swedish obese subjects. *N Engl J Med* 2007;357: 741-52.
21. Adam TD, Gress RE, Smith SC, Halverson RC, Simper SC, Rosamond AD, LaMonte MJ, Antoniette M, Hunt SC. Long-term mortality after gastric bypass surgery. *N Eng J Med* 2007; 357(8): 753-761
22. Wong SK, Ng EK, Mui WL. Development of Bariatric Surgery: The Effectiveness of a Multidisciplinary Weight Management Programme in Hong Kong. *Ann Acad Med Singapore* 2009; Jan;38(1):9-6
23. Bioenterics Intra-gastric Balloon (IBB) System. Revision to Indications for use. Manufacturer's guidelines information sheet. Carpinteria, California: Bioenterics Corporation, 1999.
24. Sallet JA, Marchesini JB, Paiva DS et al. Brazilian multicenter study of intra-gastric balloon. *Obes Surg* 2004;14:991-8.
25. Methus-Vliegen EM, Tytgat GN. Intra-gastric balloon for treatment-resistant obesity: safety, tolerance, and efficacy of 1-year balloon treatment followed by a 1-year balloon free follow-up. *Gastrointest Endosc* 2005;61:19-27.
26. Mui WL, So WY, Yau PY, Lam CH, Yung MY, Cheng AY, Chow FC, Ng EK. Intra-gastric balloon in ethnic obese Chinese: initial experience. *Obes Surg.* 2006 Mar;16(3):308-13.



# Body Contouring - Post-bariatric Massive Weight Reduction

**Dr. Peter PANG**

MBChB, FRCS(Ed), FHKAM(Surgery)  
Specialist in Plastic Surgery



Dr. Peter PANG

## Introduction

There are increasing numbers of bariatric surgeries performed worldwide in weight reduction per year. It is not surprising to see a series of new body disfigurement conditions requiring correction. The traditional abdominoplasty techniques cannot solve all the new problems. The post-operative care for body contouring in post-massive weight reduction patients is expected to be long and challenging. New terms such as belt lipectomy, lower body lift, panniculectomy and truncoplasty are introduced for this new pathology.

There are a number of deformities of the body, namely the abdomen, back, buttock, thigh and upper arm. Body contouring surgery is deferred until the patient's weight is stable, generally at least 1 year after bariatric surgery. Surgeries are needed in a planned and scheduled sequence. Usually the circumferential abdominal excess skin is the first<sup>1</sup> (Fig 1 & 2) to be addressed, followed by other deformities as required. Brachioplasty and mastopexy are done in the same stage. The medial thigh and back are done in separate operations. Scar revision for the previous surgeries may be performed during subsequent body part surgery.

The risk of associated nutritional deficiency needs to be addressed or else this will severely affect the wound healing process. Seroma and wound dehiscence are the most commonly encountered post-operative complications. Raised Body Massive Index at the time of body contouring surgery is strongly correlated with these complications<sup>2</sup>.



Fig 1 - Pre Belt Lipectomy



Fig 2 - Post Belt Lipectomy

## Procedures

### Panniculectomy/ Circumferential Abdominoplasty/ Lower Body Lift, Belt Lipectomy

After losing over 100lbs with bariatric surgery, the dependent tissue creates problems of its own. Skin irritation<sup>3</sup> under the folds of redundant tissue is common. If the weight reduction is not too much, sometimes panniculectomy (excision of the redundant lower abdominal skin) is good enough. For more lateral redundancy, sometimes a vertical incision after an "elliptical spade-shaped excision"<sup>3</sup> is necessary for the better shaping of the waist tissue. The overall shape of the body is more important than the presence of a scar over the abdomen.



Fig 3 - Skin Irritation

Massive weight loss resulting in back tissue excess and hence there is a greater need to extend the excisional component of traditional abdominoplasty to the lateral sides and back, eventually leading to a circumferential resection. There are a number of names to describe the procedure: circumferential or extended panniculectomy, central body lift, lower body lift and belt lipectomy.

Belt lipectomy consists of several operations: abdominoplasty, lateral thigh lift, buttocks lift, abdominal wall tightening and liposuction. It is an extensive surgery involving multiple intra-operative turnings. Pre-operative planning is of utmost important. Understanding of the extensiveness of the surgery and significant risks associated are equally important to patients and surgeons. However in order to improve the lower body contour after massive weight loss, belt lipectomy is the most efficient way to remove the excess skin and fat. Contra-indications for belt lipectomy

include significant medical or psychiatric problems. The circumferential extensive tissue excision would put a great stress to the heart-lung function.

**Back Contouring**

Depends on the amount of weight loss, there are usually 4 folds<sup>4</sup> at the back namely the breast fold, scapula fold, lower thoracic fold and hip fold (Fig 4). The former two folds are removed in the same session with mastopexy and the latter 2 are removed during the belt lipectomy. Dehiscence is of major concern in the post-operative period. Pre-operative markings must give enough freedom for the patient to flex the back, yet at the same time remove as much redundant skin as possible.



Fig 4 - Breast and Scapular Fold

**Brachioplasty**

Massive weight reduction will cause redundancy of the upper arm skin and ptosis. Brachioplasty<sup>5</sup> is to re-shape the upper arm, sometimes the forearm by liposuction and skin excision. The procedure itself may be associated with poor scar formation and other complications such as seroma, paresthesias and wound dehiscence. The incision is placed in the bicipital groove and hence the resultant scar would be hidden when the arm is adducted.

**Mastopexy**

Breast ptosis is apparent after massive weight reduction. Men would suffer from the same deformity known as pseudogynaecomastia<sup>6</sup>. It is characterised by increased subareolar fat without enlargement of the breast glandular component. The treatment (Table 1) depends on the amount of excess skin, lateral skin roll, position of nipple-areolar complex (NAC) and infra-mammary fold (IMF). Treatment modalities include liposuction, skin excision, pedicle nipple reconstruction and free-nipple graft reconstruction.

Mastopexy is often carried out with brachioplasty in females. The combined procedure can often give a better result to both deformities.

**Conclusion**

Massive weight reduction after bariatric gives rise to a series of new challenges to plastic surgeons. The redundant inelastic skin hangs over various parts of the

body causing cosmetic and skin problems. The expectation of body shape changes and body contouring surgeries should be introduced<sup>7</sup> to patients at the time of bariatric surgery. New procedures such as belt lipectomy has been an evolution from traditional abdominoplasty. Combination and modifications of various body parts with contouring surgeries such as brachioplasty, back lipectomy and mastopexy are necessary to attain an optimal body shape. They are extensive surgeries. Both the surgeons and patients need to understand clearly the operative procedure, risks and after care.

Table 1. Classification and Treatment Algorithm for Pseudogynaecomastia after Massive Weight Loss.

Grade	Description	Treatment
1	Minimal excess skin and fat, minimal alteration of NAC, normal IMF	
1a	No lateral skin roll	Ultra-sound assisted Liposuction (UAL)
1b	Lateral skin roll	UAL and direct excision of roll
2	NAC and IMF below the ideal IMF, lateral chest roll, minimal upper abdominal laxity	Pedicle nipple reconstruction
3	NAC and IMF below the ideal IMF#, lateral chest roll, significant upper abdominal laxity	Free-nipple graft reconstruction

#Ideal IMF defined as the inferior border of the pectoralis major

**References**

1. Examination of the Massive Weight Loss Patient and Staging Considerations. Plastic and Reconstructive Surgery. Vol 117, Number 1. Supplement: 22S-30S. January 2006.
2. Seroma Development following Body Contouring Surgery for Massive Weight Loss: Patient Risk Factors and Treatment Strategies. Michele A. Shermak, Lisa A. Rotellini-Coltvet. Plastic and Reconstructive Surgery. Vol 122, Number 1, 280-288 July 2008.
3. Maximizing the Aesthetic Result in Panniculectomy after Massive Weight Loss. Paul J. Leahy, Soctt M. Shorten. Plastic and Reconstructive Surgery. Vol 122, Number 4. 1214-1224 October 2008.
4. Back Contouring in Weight Loss Patients. Berish Strauch, Christine Rohde. Plastic and Reconstructive Surgery. Vol 120, Number 6. 1692-1696 November 2007
5. Brachioplasty and Concomitant Procedures after Massive Weight Loss: A statistical Analysis from a Prospective Registry. Jeffrey A. Gusenoff, Devin Coon. Plastic and Reconstructive Surgery. Vol 122, Number 2., 595-603 August 2008.
6. Pseudogynaecomastia after Massive Weight Loss: Detectability of Technique, Patient Satisfaction, and Classification. Jeffrey A. Gusenoff, Devin Coon. Plastic and Reconstructive Surgery. Volume 122, Number 5, 1301-1311 November 2008.
7. Post-Bariatric Surgery Reconstruction: Patient Myths, Perceptions, Cost, and Attainability Strategies. Jeffrey A. Gusenoff, Ralph P. Pennino. Plastic and Reconstructive Surgery. July 2008. Vol 122, Number 1e-8e



Plastic Surgery



Hair Implantation



Laser / Light /  
Radiofrequency Treatment



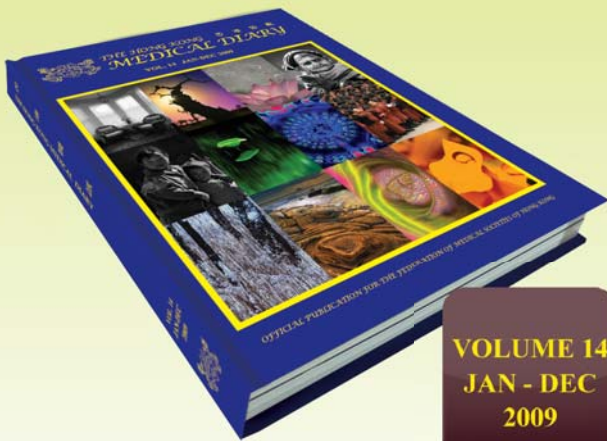
Dietetic Service

[www.unionpac.org](http://www.unionpac.org)

18 Fu Kin Street, Tai Wai, Shatin, Hong Kong



UNION HOSPITAL  
[www.union.org](http://www.union.org)



**VOLUME 14**  
**JAN - DEC**  
**2009**

# Stock Sale

The hard bound Medical Diary 2009 is now for sale. For \$150, you can keep a collection of all 12 monthly issues of the Medical Diary for the year. Should you wish to keep a copy, please feel free to contact our Secretariat on 2527 8898 or via email [info@fmshk.org](mailto:info@fmshk.org).



SCHOOL OF PUBLIC HEALTH  
LI KA SHING FACULTY OF MEDICINE  
THE UNIVERSITY OF HONG KONG

## MASTER OF PUBLIC HEALTH

Postgraduate Diploma & Postgraduate Certificate

- Public Health Practice • Epidemiology and Clinical Effectiveness
- Infectious Disease Epidemiology and Control
- Administrative Medicine • Health Economics and Policy



Application Deadline  
**30 April 2010**

# MPH

### Information Day

- February 20, 2010
- March 27, 2010
- 2:00 - 4:00 p.m.
- Seminar Room 5  
LG1 Laboratory Block  
Faculty of Medicine Building  
21 Sassoon Road  
Hong Kong

- World renowned faculty
- Internationally recognized degree
- Quotable qualifications
- Problem-based learning
- Flexible programme structure
- Individual CME accredited modules

### Enquiry

Tel: (852) 2819 9140  
Fax: (852) 2855 9528

Email: [cmdpgrd@hkucc.hku.hk](mailto:cmdpgrd@hkucc.hku.hk)  
<http://web.hku.hk/~cmdmph/>

# Liposuction for Body Sculpture and Obesity

## Dr. Chun-on MOK

MBBS(HK), FRCS(Edin), FRACS, FCSHK, FHKAM(Surgery)

Specialist in Plastic Surgery



Dr. Chun-on MOK

Since Illouz and Fournier pioneered to practise liposuction in the 1970's, liposuction has become a common and safe aesthetic plastic surgery procedure worldwide for shaping the body by removing localised subcutaneous fat collected through a few small puncture sites. Since then, liposuction has undergone many important technical refinements which permit the removal of a large volume of fat and major contour changes achieved safely in a single session with minimal blood loss. The use of tumescent infiltration technique and the application of ultrasonic energy to emulsify fatty tissue are the most significant improvements to facilitate both sophisticated and massive liposuction recently.

## Tumescent Liposuction

In 1987, Jeffrey Klein (1) first reported his experience of liposuction with the tumescent infiltration technique. This consists of injecting into the subcutaneous fat a large volume of lactated Ringer's Solution (or normal saline) containing superdiluted lignocaine and epinephrine (0.05%-0.10% lignocaine with 1:1,000,000 epinephrine). The manufacturers' recommended maximum dose of lignocaine for normal therapeutic use is 7 mg/kg (500 mg for a 70 kg person) but patients undergoing tumescent liposuction receive doses far in excess of the manufacturers' recommended maximum to 40-50mg/kg. The lignocaine-epinephrine solution creates intense vasoconstriction, profound local anaesthesia, and enlarges the subcutaneous space. Tumescent liposuction results in negligible blood loss with diminished bruising, provides complete fluid replacement, and facilitates use of smaller cannulae for superficial lipo-sculpture.

With the tumescent technique, liposuction can be safely performed in the office/day case setting for patients requiring localised areas of lipo-sculpture as it provides adequate local anaesthesia and eliminates the risks associated with general anaesthesia. It also provides adequate pain relief post-operatively and decreases post-operative bruising, discomfort and seroma formation.

## Third Generation Ultrasonic Liposuction

Ultrasound-assisted liposuction probes emit high frequency acoustic forces that cause cavitation within the infused tumescent solution in the fat tissue, resulting in displacement of adipocytes and dislodgement of fat from

the tissue matrix. The third generation ultrasonic liposuction system (VASER Lipo System) utilises a solid, side-grooved, blunt-tipped probe design to redistribute the ultrasonic energy from the tip to the sides in the region's immediate proximity. Additionally, it offers a choice of continuous ultrasound energy for debulking of fibrous fat tissue or a pulsating mode for sculpting softer fat tissue with less ultrasound energy and less thermal effects on the overlying thin skin.

The aspirate collected during an ultrasound liposuction is a uniform emulsification of viable fat cells. The amount of blood within the aspirate has been reduced to less than 3% of the volume of aspiration (Fig. 1).

These changes have advanced liposuction procedures by improving safety and efficiency, reducing complications like bruising / haematoma, seroma formation and allowing faster patient recovery with less pain and bruising /swelling.



Fig. 1 Yellowish fat aspirate with minimal blood extracted tumescent local anaesthesia and VASER liposuction



## Liposuction for Body-Sculpture

Individuals who have body contour varying from the accepted ideals may seek assistance in the form of liposuction surgery. They should be encouraged to use diet and exercise modifications as a first approach to improving their overall body shape. Failing that, the excessive subcutaneous fat accumulation involving the abdomen, torso, back, hips and thighs may be amenable by liposuction surgery.

The ideal patient should be in good health, preferably within 15 kg of their ideal body weight and has subcutaneous fat accumulation in areas that are out of proportion to the overall body shape. Liposuction surgery can then be used as a tool to further modify and improve appearance. The patient should also preferably have good skin tone which will contract adequately following the liposuction procedure.

Some of these patients will present with one or two areas requiring contouring by liposuction surgery, whereas others may require multiple areas to be treated. Most patients can be treated with tumescent local anaesthesia combined with oral / intravenous sedation in an outpatient / day surgery setting. For patients with multiple sites of treatment, general anaesthesia may be required in the hospital to avoid the excessive administration of lignocaine and to improve patient comfort. An overnight stay after the GA would be advisable before discharge.

To ensure symmetry and smoothness of the suctioned area, 'cross-tunnelling' of the treated area and 'feathering' of the adjacent areas should be done. With the use of tumescent local infiltration, ultrasonic liposuction and superficial suction with small calibre cannulae, post-operative pain, swelling and bruising would be minimised. Most patients can return to moderate daily activity in 2-3 days' time. Thereafter, elastic compression garments should be worn for a few weeks.

When combined with a programme of exercise and proper nutrition, liposuction surgery offers improvement in body contour for the abdomen, flanks, hips and back. Patients should expect to have a better body shape even on wearing a revealing swimsuit, feel better about their appearance and enjoy an improved fit of their clothing (Fig.2,3,4,5).



*Fig. 2 A young and fit female patient requested to improve her hip (saddle deformity) and thigh contour despite proper dieting and exercise.*



*Fig. 3 The contour improvement of her hips, lateral thighs and especially the medial thighs after liposuction*



*Fig. 4 A young female patient with normal BMI but with upper and especially lower abdominal obesity despite dieting and exercise*



*Fig. 5 The abdominal protrusion improved with VASER liposuction*

## Liposuction for Obesity

Liposuction has undergone many important technical refinements. The combined use of smaller diameter cannulae, tumescent infiltration and ultrasonic fat emulsification techniques permit a large volume of fat removal and major contour changes with minimal blood loss and increased safety without blood transfusion in obese patients undergoing liposuction.

However, liposuction is not a treatment for generalised obesity and is not an effective means of weight reduction. A major liposuction under general anaesthesia may remove around 6 litres of emulsified fat. The patients will not see a significant reduction in weight unless they undergo multiple liposuction procedures.

Careful patient selection for liposuction of obese patients is important. They should be medically fit for a general anaesthesia as large volume liposuctions will be performed under general anaesthesia in the hospital. An overnight stay is essential after the GA.

The removal of excessive accumulation of fatty tissue in one or two major areas is most rewarding in correcting the proportion and contour of the body of the obese patients. Most patients are delighted with their overall body contour change, their ability to fit into clothing that has not been possible for years (Fig. 6, 7).



*Fig. 6 A grossly overweight female patient with marked adiposity of the abdomen and flanks with redundant and lax lower abdominal skin*



*Fig. 7 She underwent major VASER liposuction of her abdomen and flanks yielding 5 litre of fat aspirate in one GA. She also had abdominoplasty to remove the redundant lower abdominal skin. She was mobile and with minimal swelling and bruising 48 hours after the operation*

Though some contour irregularities may exist and tissue ptosis or increased skin laxity may develop after massive liposuction, these can be further dealt with by additional ancillary procedures like abdominoplasty or plication of the rectus sheath (Fig. 8, 9, 10) (due to diastasis of the rectus muscle from multi-parturition).



Fig. 8 A middle age female patient with diastasis of the rectus abdominis muscles due to multiple parturition



Fig. 9 The medial edges of the diastased rectus muscle were marked

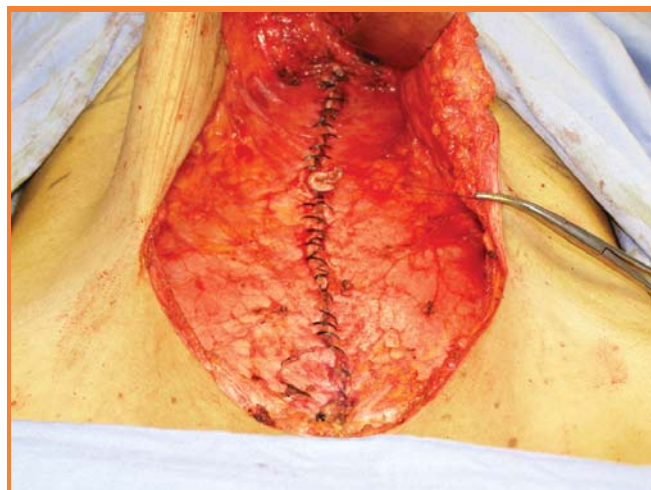


Fig. 10 The distasis repaired with two layer plication of the rectus sheath with strong nylon suture

## Conclusion

Liposuction has undergone many important technical refinements and is a safe and effective means of body contouring for fit and healthy patients. In obese patients, large volume liposuctions can also be safely offered to correct the proportion and contour of the body with gratifying results.

- (1) Klein JA 1987 The tumescent technique for liposuction surgery. American Journal of Cosmetic Surgery 4:263-267
- (2) Pitman GH: Tumescent liposuction: Operative technique Operative Techniques in Plastic and Reconstructive Surgery Vol. 3, No. 2, 88-93
- (3) Hunstad JH: Hunstad JH: Liposuction for obesity Operative Technique in Plastic and Reconstructive Surgery Vol. 3, No.2, 124-131
- (4) Cimino WW. VASER-assisted lipoplasty: Technology and technique. In: Shiffman MA, Giuseppe AD, eds. Liposuction: Principles and Practice. New York, NY: Springer Berlin Heidelberg; 2006:239244



## Dermatological Quiz

### Dr. Lai-yin CHONG

MBBS(HK), FRCP(Lond, Edin, Glas), FHKCP, FHKAM(Med)

Private Dermatologist



Dr. Lai-yin CHONG



Multiple brown-bluish macules at both cheeks and nose

This 40-year-old lady complained of pigmented patches at both cheeks for five years. The lesions did not have any seasonal variation. She could not recall any similar lesion in childhood. Her past health was good. She is still single and has not taken pills. There was no history of applying any cosmetic bleaching agent.

#### Questions:

1. What is your clinical diagnosis?
2. What are the main differential diagnoses?
3. How do you treat this patient?

(See P. 34 for answers)



### Rental Fees of Meeting Room and Facilities at The Federation of Medical Societies of Hong Kong (Effective from October 2009)

Venue or Meeting Facilities	Member Society (Hourly Rate HK\$)			Non-Member Society (Hourly Rate HK\$)		
	Peak Hour	Non-Peak Hour	All day Sats, Suns & Public Holidays	Peak Hour	Non-Peak Hour	All day Sats, Suns & Public Holidays
Multifunction Room I (Max 15 persons)	150.00	105.00	225.00	250.00	175.00	375.00
Council Chamber (Max 20 persons)	240.00	168.00	360.00	400.00	280.00	600.00
Lecture Hall (Max 100 persons)	300.00	210.00	450.00	500.00	350.00	750.00
<b>Non-Peak Hour: 9.30 am - 5.30 pm</b> <b>Peak Hour: 5.30pm - 10.30pm</b>						
LCD Projector	500.00 per session					
Microphone System	50.00 per hour, minimum 2 hours					

#### NOTES:

1. Rental Hours: Monday - Sunday 9:30 a.m. - 10:30 p.m.
2. Hirer will be liable to pay an **extra hour** of room charge if the booked session is not completed within **15 minutes at the end of the rental period**.
3. Cancellation of room reservation will only be accepted in writing and **NOT less than two weeks before the date of rental**. **Insufficient notice will require FULL payment of rental fees**. The fee conditions are subject to review at the discretion of the Federation.
4. There will be a surcharge of 20% of the total food and drink cost if such is served in the meeting facilities. An extra deposit of HK\$1,000 is required when booking the facilities and will be returned if cleaning or repair is not required after the rental.
5. When typhoon signal no. 8 or black rainstorm warning signal is hoisted, all meeting facilities will be closed and the rental charges will be refunded. The facilities will reopen two hours after typhoon signal no. 8 or the black rainstorm warning signal is lowered.
6. For enquiry and booking, please contact the Secretariat on 2527 8898.



# Life Style

## Prof. Philip WY CHIU

MBChB(CUHK), FRCSEd(Gen), FCSHK, FHKAM(Surgery), MD(CUHK)  
Associate Professor, Department of Surgery, The Chinese University of Hong Kong



Prof. Philip WY CHIU

I started learning Chinese painting majoring in Lingnan Art since the age of fourteen for which I graduated from the Lingnan Art Studio under Professor Chao Shao-Ang. He is a legendary master in Lingnan Art. I started my interest in Chinese Painting when I was exposed to Chinese painting and doing "homework" in my secondary school days. I was fascinated by the skills of painting where a single brush will produce an object with the accuracy in the shape, the similarity and the characteristics, as contrast to Western painting where the paint would be applied repeatedly until the object appeared real. Having inspired by my mother Professor Ng Yuet Lau, I was introduced to Professor Chao as one of his last students when he was 80 years old. I learnt Chinese painting for 10 years under his influence. During his teaching classes, Professor Chao usually demonstrated his technique of painting and at the same time shared his own life experience. Unlike training in Surgery, we do not have "hands-on" experience during our classes. We had to practise the technique at home. Professor Chao saw this gap between the teaching and the acquirement of skills. He published the very first "skill manual" of the Lingnan art - A study of Chinese Paintings (2). In his book he demonstrated his skills of painting in a step by step manner. It is similar to a book on operative surgery!

I was deeply inspired by Professor Chao as his student, not only by his technique of painting in the Lingnan style, but also by the enthusiastic and humble character, the broad mind of thinking and the unlimited creativity. The impact of learning Chinese painting has tremendous effect to my behaviour, my endurance and my value. I always treasure my moments with Professor Chao.

Year	Event
1984	Start study in Chinese Painting under Prof. Chao Shao-an
1987-1988	Championship in Hong Kong Youth Cultural & Arts Competition (Student session)
1988-1989	First Runner-up in Hong Kong Youth Cultural & Arts Competition (Adult session)
1990	Joint Exhibition of Chinese Painting Singapore
1991	American Society of Lingnan Art Conjoint Exhibition New York
1993	Joint Mother-son Exhibition of Chinese Painting Hong Kong
1996	Joint Mother-son Exhibition of Chinese Painting Guangzhou
1999	The Hong Kong Lingnan Art Society Exhibition
2000	China's Ninth National Arts Exhibition (Selective works)
2001	Joint exhibition of Chiu Ng Yuet Lau and Chiu Wai Yan Philip
2001	The millennium international touring exhibition of Lingnan Art - Hong Kong, Mainland China, U.S.A., Canada, Malaysia, Australia & Taiwan



夕陽遙落萬重山  
Dusk Lingering over the mountain range  
70 x 118cm



杏林俊傑  
Master Surgeon  
68 x 72 cm





荷塘初雪 Early snow in lotus pond 66 x 99 cm



南極之皇 Penguins 143 x 73 cm



翠色不為霜雪減 Green leaves undaunted by snow 100 x 67 cm





**Choose the best\* for your daughter**

**The long-lasting choice for cervical cancer prevention<sup>1,3\*</sup>**

Cervarix™ is the first vaccine explicitly developed for strong cervical cancer protection that is designed to last. Formulated with the innovative adjuvant system, AS04, Cervarix™ has shown strong and sustained immune response<sup>4</sup>

- 100% protection against precancerous cervical lesions<sup>4</sup> related to HPV types 16 & 18<sup>4</sup>
- Antibody levels to HPV 16 and 18 start high and stay high, 11 times above natural immunity for up to 7.3 years with follow-up ongoing<sup>5,6</sup>

**Abbreviated Prescribing Information**  
**Product Name:** Cervarix™  
**Active Ingredient:** Human Papillomavirus vaccine Types 16 and 18 (Recombinant, AS04 adjuvanted) **Indications:** In females from 10 to 45 years of age for the prevention of cervical cancer by protecting against incident and persistent infections, cytological abnormalities including atypical squamous cells of undetermined significance (ASC-US) and cervical intraepithelial neoplasia (CIN), CIN1 and pre-cancerous lesions (CIN2 and CIN3) caused by human papillomavirus types 16 and 18. **Dosage & Administration:** The primary vaccination course consists of three doses. The recommended vaccination schedule is 0, 1, 6 months. If flexibility in the vaccination schedule is necessary, the second dose can be administered between 1 month and 2.5 months after the first dose. The necessity for a booster dose has yet to be established. Cervarix is for intramuscular injection in the deltoid region. **Contra-indication:** Cervarix should not be administered to subjects with known hypersensitivity to any component of the vaccine. **Warnings and Precautions:** As with other vaccines, the administration of Cervarix should be postponed in subjects suffering from acute severe febrile illness. However, the presence of a minor infection, such as a cold, should not result in the deferral of vaccination. It is good clinical practice to precede vaccination by a review of the medical history (especially with regard to previous vaccination and possible occurrence of undesirable events) and a clinical examination. As with all injectable vaccines, appropriate medical treatment and supervision should always be readily available in case of a rare anaphylactic event following the administration of the vaccine. As for other vaccines administered intramuscularly, Cervarix should be given with caution to individuals with thrombocytopenia or any coagulation disorder since bleeding may occur following an intramuscular administration to these subjects. As with any vaccine, a protective immune response may not be elicited in all vaccinees. Cervarix is a prophylactic vaccine. Cervarix is not intended to be a treatment for persistent infection or for HPV-related lesions present at the time of vaccination. HPV-16 and HPV-18 are not responsible for all cervical cancers. Other oncogenic HPV types can also cause cervical cancer. HPV infections and related clinical outcomes due to these other oncogenic types may not be prevented by vaccination. Vaccination is primary prevention and is not a substitute for regular cytological screening (secondary prevention) or for precautions against exposure to HPV and sexually transmitted diseases. There are no data on the use of Cervarix in subjects with impaired immune responsiveness such as HIV infected patients or patients receiving immunosuppressive treatment. For these individuals an adequate immune response may not be elicited. Duration of protection has not been established. Limited data support protective efficacy for 4.5 years after the first dose. Long-term studies are ongoing to establish the duration of protection. **Interactions:** There are no data on concomitant administration of Cervarix with hepatitis B vaccine, varicella vaccine and dTpa vaccine. If Cervarix is to be given at the same time as another injectable vaccine, the vaccines should always be administered at different injection sites. In clinical studies, approximately 60% of women who received Cervarix used hormonal contraceptives. There is no evidence that the use of hormonal contraceptives has an impact on the efficacy of Cervarix. As with other vaccines it may be expected that in patients receiving immunosuppressive treatment, an adequate response may not be elicited. **Pregnancy and Lactation:** Specific studies of the vaccine in pregnant women were not conducted. These data are insufficient to recommend use of Cervarix during pregnancy. Vaccination should therefore be postponed until after pregnancy. The effect of Cervarix on embryofetal development, perinatal and post-natal survival and development has not been prospectively evaluated in clinical trials. No adverse effects on embryofetal development, parturition or postnatal development were observed in pregnant rats that received double the clinical dose of vaccine on 4 occasions during gestation. The effect on breastfed infants of the administration of Cervarix to their mothers has not been evaluated in clinical studies. Cervarix should only be used during breast-feeding when the possible advantages outweigh the possible risks. Serological data suggest a transfer of anti-HPV16 and anti-HPV18 antibodies via the milk during the lactation period in rats. However, it is unknown whether vaccine-induced antibodies are excreted in human breast milk. Undesirable effects: upper respiratory tract infection, headache, dizziness, gastrointestinal including nausea, vomiting, diarrhoea and abdominal pain, itching/pruritus, rash, urticaria, myalgia, arthralgia, injection site reactions including pain, redness, swelling, fatigue, fever (≥38°C), other injection site reactions such as induration, local paraesthesia. **Non-Clinical Information:** The carcinogenic potential of Cervarix has not been investigated. **Incompatibilities:** In the absence of compatibility studies, this medicinal product must not be mixed with other medicinal products. **Use and Handling:** A fine white deposit with a clear colourless supernatant may be observed upon storage of the syringe/vial. This does not constitute a sign of deterioration. The content of the syringe/vial should be inspected visually both before and after shaking for any foreign particulate matter and/or abnormal physical appearance prior to administration. In the event of either being observed, discard the vaccine. The vaccine should be well shaken before use. Any unused product or waste material should be disposed of in accordance with local requirements. **Please read the full prescribing information prior to administration. Full prescribing information is available on request from GlaxoSmithKline Ltd, 23/F, Tower 6, The Gateway, 9 Canton Road, Tsimshatsui, Kowloon, Hong Kong**  
Abbreviated Prescribing Information Version 2.0, prepared on 1 May 2007

**\* Vaccination against HPV 16 & 18 alongside regular Pap smear screening is the best preventive measure for women against cervical cancer.\***

<sup>1</sup>Duration of protection has been demonstrated for up to 7.3 years.  
<sup>2</sup>CIN1+, CIN2+, ASCUS  
References: 1. Schwarz TF, Leo O. Gynecol Oncol 2008; 110(3):S1-S10 2. Harper D. Future Medicine Therapy 2008; 5(3): 513-524 3. Wheeler DM, et al. ESMO May 13-16 2008. abstr. Abstract presented. 4. Galt SA, et al. 2007 AACR Annual meeting Los Angeles CA. 2007; April 14-18; abstract 4900. 5. Sellers JW, Karwalajys TL, Kaczorowski J, et al. CMAJ 2003; 168: 421-425. 6. GlaxoSmithKline Cervarix International data sheet. 2007. 7. Australian National Cervical Screening Program. [http://www.health.gov.au/internet/main/display.nsf/content/young\\_women%27s\\_lifestyle\\_women\\_brochure.pdf](http://www.health.gov.au/internet/main/display.nsf/content/young_women%27s_lifestyle_women_brochure.pdf). Accessed on 13th February 2008. 8. CDC. The Pink Book. <http://www.cdc.gov/vaccines/subunit/pinkbook/downloads/rpn-508.pdf>. Accessed on 13th February 2008. 9. UK Department of Health. The Green Book. [http://www.dh.gov.uk/wm/PublicHealth/HealthProtection/Immunisation/GreenBook/4\\_40272467.CONTENT\\_ID=4097254&ch=VITGX](http://www.dh.gov.uk/wm/PublicHealth/HealthProtection/Immunisation/GreenBook/4_40272467.CONTENT_ID=4097254&ch=VITGX). Accessed on 13th February 2008.

Remark: Cervarix is efficacious in preventing HPV16/18-related cervical lesions as well as CIN2+ lesions. Patients are recommended to take regular pap screening after vaccination.

<sup>3</sup>Cervarix is a trademark of the GlaxoSmithKline group of companies.  
**Limited 23/F, Tower 6, The Gateway, 9 Canton Road, Tsimshatsui, Kowloon, Hong Kong**  
Tel: (852) 3189 8989 Fax: (852) 2506 1378



Human Papillomavirus Vaccine Types 16 and 18 (Recombinant, AS04 adjuvanted)

NSC/P0208/140/2009

# LEXUS



## HYBRID

### RX450h 2010 Upgrade

### You've Got the Power

### No.1 Luxury SUV!

Now the RX450h 2010 Upgrade Edition with even more advanced features is available. Please come and experience today!

Prestigious awards won in 2009:

- Car Plus "The Best Japanese SUV"
- Car and Driver "10 Best Cars of the Year"
- Top Gear "SUV of the Year"



### New features of the RX450h 2010 Upgrade

- Advanced rear parking camera
- Ample back trunk storage space
- More upgraded features for the Sport version: • New power back door • LED headlamps

\* No.1 Luxury SUV — The Lexus RX series is the best-selling SUV model in its class based on 2009 sales result.



LEXUS  
HYBRID  
DRIVE

The power of real performance  
to lead the green revolution!

Book your test drive on [www.lexus.com.hk](http://www.lexus.com.hk) or visit our Lexus premium outlets today...

**Hong Kong:** Shop A, G/F Harcourt House, 39 Gloucester Road, Wanchai. Tel: 2511-9430 (Free Valet Parking)  
**New Territories:** G/F Mita Centre, 552-566 Castle Peak Road, Kwai Chung. Tel: 2880-4151 (Free Valet Parking)

[www.lexus.com.hk](http://www.lexus.com.hk)





## My Road to Driving & Road Safety

### Dr. Hoi-keung MONG

*Specialist in Forensic Pathology*



Dr. Hoi-keung MONG

It had always been my childhood dream, common to all teenagers, to drive! On my 18th birthday back in the year 1964 when I was still a Form 5 student, the very first thing I did to celebrate my adulthood was to apply for learner driving licences in the motor-cycle and private car classes. In those days, as a motor-cycle 'learner driver' it meant you could ride, without a driving instructor (and of course without a passenger), a motor-cycle and go places independently. Petrol was at \$2.6 a gallon then! and a tankful could take me to Deep Water Bay every morning for a swim, then to school, drove home for lunch, returned to the school for afternoon sessions, and after taking a shower back home after school, shared informal evenings with friends anywhere you could name it for a whole fortnight without any need to refuel. I lived on the Island and no place was out of bound to me in my 50 c.c. scooter but soon to be taken over by brand-names like BSA, Triumph and Norton, huge monster machines by even today's standard. Looking back, I must say I had been extremely lucky in never having fallen off my bike or hit by other cars. Perhaps traffic was excusably sparse then but once over the passion, I came to realise the lack, or in fact, the complete absence of any protection to me on a 2-wheeler with "flesh over metal". I did the wise thing one fine day when I was driving, though at a very modest speed, when suddenly I felt my rear wheel slid and skidded just a little bit. Basic instincts dictated to me to simply "jump over" and let go of my bike with me landing running for a while on the ground but ultimately upright. Understandably, my motor-cycle lost balance without a driver and side-turned. And that was the last occasion when I had ever been on top of any 2-wheeler thereafter.

I immediately turned to something solid and I meant a 4-wheeled private car with "metal over flesh" this time! My first car was a modest DKW (ever heard of such a name?), a 3-cylinder 2-stroke engine and of course standard in those days, in manual transmission. As a youngster then, it was with no denial that I had committed each and every driving mistake of an irresponsible, arrogant, selfish and blatantly dangerous driver in one devil. I speeded, tailgated, took every opportunity to overtake and cut into others, revved my engine even standing on red and "attacked" corners with tyres yelling. On benefit of hindsight, again I could only say (and admit) that I must have been extremely lucky in not ending in an ugly car-crash.

My "glamour" days were short-lived. When I had the first exposure to broken bones and blood splashes after seeing traffic victims admitted into the Casualty (this was what it was called then) in my undergrad days as a

medical student, I immediately came back to the real world. I immediately realised the dark side (and of course the ugly side) of moving cars. I was aware that the speed a driver so eagerly tried to achieve, if ended up in a stop not in the designed way (here I mean a collision with another car, a pedestrian or any stationary object) would produce irreparable damages to property and injuries if not fatalities of car occupants and other road-users. You as the driver would definitely be involved in the process both in the causation of the crash if you drive carelessly or dangerously but also equally in sustaining injuries by fallen victim to your own wrong-doings.

I took the long and arduous way. I studied hard the make-up of cars so that I could know how cars can move, and turn, and stop, and... etc. etc. I took hands-on knowledge of parts and repairs by going "under"; I went under cars to see for myself the various components of the engine, the chassis, the transmission, the wheels and the brakes. I attempted, on my own volition, the Advanced Driving Test conducted by the Institute of Advanced Motorists to seek recognition of my driving skill and to join hand-in-hand with those elites in promoting good driving standards and attitudes in the locality. I joined the Road Safety Council of the Government and the various working groups in drink-driving & drug-driving to advise the administration on road safety matters. I answered questions by the media on traffic matters and shared my experience with viewers/readers/listeners in how to equip oneself in the best possible status while on the road and avoid dangers with foresight. I led driving convoys into China before 1997 (and the Mainland after that) in helping to disseminate the concept of Advanced Driving on the Motherland. To add to it all, I was elected the chairman of the IAM after my retirement from the civil service and I headed the group of enthusiasts at the Institute targeting at the common vision of Zero Accidents on the Road; Hong Kong's Goal! The result? The number of fatal traffic victims in Hong Kong peaked at near 300 in 1993 but came 2009, we saw a low of 136 only, less than 50% of what it was a decade ago in spite of the growth in the number of cars and population during these years. Of course we should never be complacent and one single fatal traffic accident would still be too many!

So in order to help to achieve this Road Safety Vision, I pledge to you to contribute whatever you may have under your control.

As a driver, other than your duty to obey all traffic signs and signals, due allowance must also be given to other road-users and including pedestrians. You should be alert to others' mistakes and omissions and



prepare yourself well in advance so as to avoid any undue entrapment. A simple rule-of-thumb is to Keep the 3 Good Virtues, namely, Keep your Distance, Keep your Speed and Keep in Lane! Firstly by keeping a clearance of no less than 2-seconds travel distance from the car in front of you even in the most optimal conditions, you could, in any emergency, brake to a halt making use of the precious available road space ahead of you. In times of less than ideal situations like rain and fog, it always pays to err on the safe side and that means a travel distance of 3, if not 4 seconds. In short, the more; the better. Secondly by keeping your speed appropriate to the prevailing traffic condition, your chance of loss of control will be greatly reduced. Never take the announced speed limit as your target. It is meant to be the ceiling only and it goes without saying that under no circumstances should you exceed this limit. On the other hand, you will never be wrong by travelling at a lower speed when both your car and your body are not subjected to any undue stress. Thirdly by keeping in your driving lane means an orderly line of travel and that will effectively avoid any errant deviation of course resulting in collisions with other vehicles, possibly a monstrous one like a container truck overtaking you in the adjacent lane and its approach escapes your attention. If you can adhere to this basic safety rule of Keeping the 3 Good Virtues, you will be far, far away from danger.

As a motor-cycle driver, it will pay to make you better seen by others. Other than shining your headlight at all

times of the day as required by law, wearing a reflective vest will help to identify you to other road-users, and especially those who are visually-challenged or senior citizens.

As a pedal cyclist, you will benefit by wearing a cycle helmet just in case that you may fall off the bicycle. Wearing a helmet can protect your vulnerable head. Moreover, putting on a reflective vest will also attract others into avoiding hitting you.


As a car occupant, you must wear your seat-belt when there is one including travelling on a taxi or public light bus. Failure to restrain yourself may end up with you being thrown forward in a collision and risk running over by your own car. Ironically, you also lose your right to be compensated if you opt to disobey the seat-belt law.

As a pedestrian, you can help to improve road safety by minimising all potential conflicts between you and the moving traffic. You should make the best use of pedestrian flyovers, subways and green-man traffic light-controlled crossings to maintain separation of moving traffic with pedestrian activities.

All in all, this Utopia of mine, involving the participation of all parties, is not an impossible dream if we can all contribute. I have personally started the ball rolling, so will you join me?

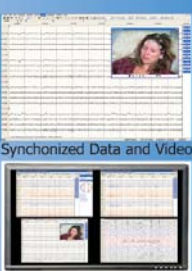
**Nicolet Monitoring System**

**Nicolet Long-Term Epilepsy Monitoring**

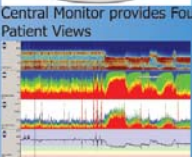


- Single unit to highly-networked epilepsy lab
- Selective video records user-specified video
- Software-controllable dome camera
- VLink/HL7 compatible

Synchronized Data and Video




Central Monitor provides Four Patient Views




Quickly identify trends in the EEG

**Nicolet Endeavor CR Intraoperative Monitoring**




- Superior amplifier delivers clean averages in fewer steps
- Trending allows for fast response to clinical changes
- Remote viewing allows experts to see into the OR without entering the OR
- VLink/HL7 compatible


Multiple Data Views



Trending Analysis



Flexible EP Recordings



CardinalHealth  
Distributed by: Neuwake Medical Solutions  
Tel: 2891-2028 Fax: 2891-0119 email: sales@newwake.com

**靈實寧養院**  
醫院以外另一個選擇

用愛擁抱晚晴

• 寧靜優美的園林環境

• 提供四人房、雙人房、單人房、豪華單人房及家庭套房、家庭式佈置

• 駐院老人科和舒緩治療科專科醫生  
• 每天均有醫生巡房（假日除外）  
• 中醫師到診及針灸服務

• 駐院物理及職業治療部  
• 由社工及院牧提供專業輔導及心靈關顧

**靈實寧養院**  
歡迎參觀及查詢  
電話：(852) 2703-3000  
地址：香港九龍將軍澳靈實路十九號  
電郵：hcc@hohcs.org.hk  
網址：www.seniorhome.org.hk  
適合體弱長者、長期病患者及晚期癌症病友暨晚年，或作短期復康及休養。

基督教靈實會 HAVEN OF HOPE  
基督教靈實會 HAVEN OF HOPE  
基督教靈實會 HAVEN OF HOPE  
基督教靈實會 HAVEN OF HOPE

主辦機構：



The Federation of  
Medical Societies of Hong Kong  
香港醫學組織聯會

贊助機構：



National Australia Bank  
澳洲銀行



# 安全、精明及 高級駕駛

# 免費講座

主講：蒙海強醫生 (香港汽車高級駕駛協會主席)

日期：2010年3月19日 (星期五)

時間：晚上七點半至九點半

地點：香港灣仔軒尼詩道15號

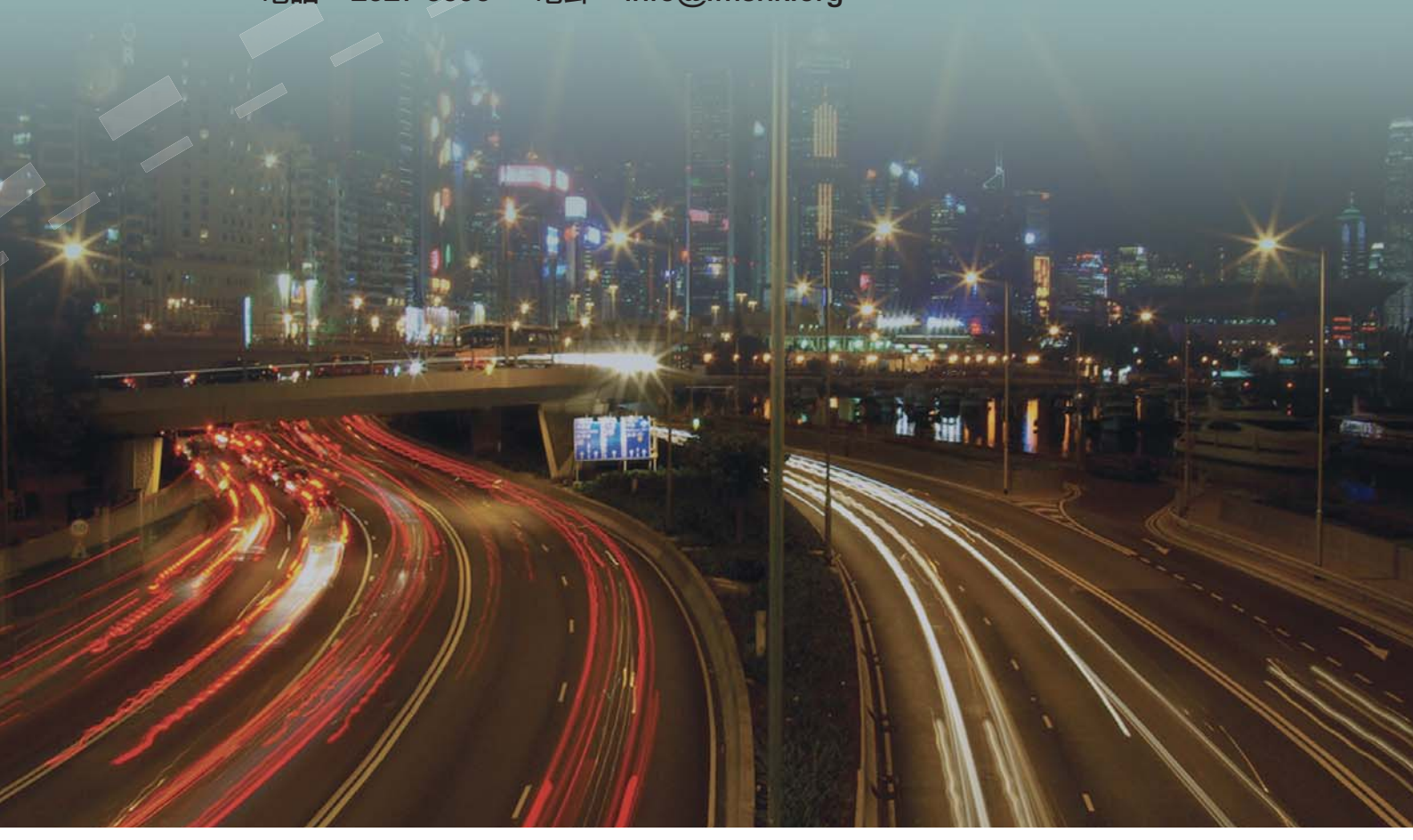
溫莎公爵社會服務大廈四樓演講廳

敬備茶點招待

欲免向隅，請先行登記

如有查詢請聯絡香港醫學組織聯會秘書處

電話：2527 8898 電郵：[info@fmshk.org](mailto:info@fmshk.org)





## Food and Health Bureau Consultation Paper on Advance Directives

The Concept of Advance Directives Consultation Paper was published by the Food and Health Bureau to consult and collect views from professionals and the community. The Federation of Medical Societies of Hong Kong would like to draw attention of our member societies to this consultation. The consultation period will end on 22 March 2010 and the Federation encourages our member societies to respond to the Bureau before the closing date. Alternatively, our member societies can also forward any comments and suggestions to the Federation, and we can help co-ordinate and compile a return to the Bureau.

To enhance the awareness of this consultation, the Federation has also invited a clinician, ethicist and a lawyer to share their personal views and perspectives in the March issue of our Hong Kong Medical Diary. Please look out for our next issue. Meanwhile, an introduction from the Bureau is included below for readers' reference.

### Introduction of the Concept of Advance Directives Consultation Paper Published

The Food and Health Bureau today (December 23) published the Introduction of the Concept of Advance Directives Consultation Paper to consult the healthcare and legal professions, patient groups, stakeholders such as non-governmental organisations providing healthcare and related services for patients as well as other sectors in the community.

The consultation period will last for three months until 22 March 2010.

The consultation paper is published in response to the recommendations of the Law Reform Commission's Report on Substitute Decision-making and Advance Directives in relation to Medical Treatment, with an aim to seek views from different sectors in the society on whether the concept of advance directives should be introduced in Hong Kong.

The consultation paper also seeks to collect views from different sectors on the following:

- (a) procedures for making, altering and revoking advance directives;
- (b) content of the information package on advance directives for the public; and
- (c) the need to promulgate any guidelines for handling advance directives.

A spokesman for the Food and Health Bureau said that the purpose of making an advance directive is to allow a mentally competent individual to indicate the form of healthcare treatment he would like to receive, including the refusal of treatment that merely sustains the body functions, when he is no longer mentally competent (for example, when he is terminally ill, in a coma etc.).

The concept of advance directives has already been adopted in many countries, such as the United Kingdom, the United States, Canada and Singapore.

Advance directives allow doctors and family members to recognise the patients' wish with certainty, thus minimising conflicts between the two sides over the appropriate form of medical treatment for the patients. This can help releasing the burden of both parties in deciding whether life-sustaining treatments should be maintained or withdrawn.

"After consulting different sectors and parties in the community, we will prepare an information package on advance directives for public use and will hold further discussion on the required guidelines or procedures with the relevant professions," the spokesman said.

The consultation paper can be downloaded from the Food and Health Bureau's website ([www.fhb.gov.hk](http://www.fhb.gov.hk)).

Ends/Wednesday, 23 December 2009



## The Federation Annual Dinner 2009 - Swinging Melodies

As in good tradition, the Federation Annual Dinner 2009 was held on New Year's Eve. This year the theme was 'Swinging Melodies' and the night was filled with dances and melodies of various types to match the theme.



Welcoming our guests into the dinner venue were two swinging Harley Davidson motor bikes displayed at the entrance, both of them were limited editions - Road King Side Car 100 anniversary 2003 and Ultra Electric Glide Police 1993 owned by Dr. Raymond MA and Mr. Henri TSUI respectively. The cocktail reception was spirited and complemented with live music performance at the foyer. Inside the dinner hall, the entertainment programmes were rich with song performance by Dr. David FANG and Miss Victoria SO, Trio performance of classical music, Oldies by the house singer, Canton Pops by Mr. PO Chun and Ms. Sara LEE, and the not to be missed dance sessions. The renowned DJ, Ms. Sara LEE, was the MC for the evening and brought with us lots of fun. During the night, our Federation dance school at the foyer proved to be popular. The atmosphere was lifted to its climax at countdown when everyone put their dancing feet on the dancing floor.



Off the stage performance, the guests enjoyed the hall game led by Sara and the BINGO game hosted by Dr. Dominic LI and Mr. Nelson LAM. The evening concluded with a raffle draw with lots of lucky guests winning attractive prizes such as i-phone, white jade, LCD TV etc.

We would like to thank all our gift and table sponsors, donors to Foundation - Abenefits, Lundbeck and Dr. CHAN Chi Kuen, and especially our platinum sponsor - National Australia Bank who provided their full support to the event and sponsored the raffle prizes. The intake from the Raffles will go towards our Foundation community and charity events.



Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
<p>★ A Case of Varicoccele Recurrence</p> <p>★ HKMA Certificate Course on Family Medicine 2010</p> <p><b>7</b></p>	<p><b>1</b></p> <p><b>8</b></p>	<p>★ HKMA New Territories West Community Network - Updates on the Management of Hepatitis B</p> <p>★ FMSHK Officers' Meeting</p> <p><b>2</b></p> <p><b>9</b></p>	<p>★ HKMA Orchestra Rehearsal</p> <p><b>3</b></p> <p><b>10</b></p>	<p>★ HKMA - Practical Health Informatics Course for Doctors</p> <p>★ HKMA Council Meeting</p> <p><b>4</b></p> <p>★ HKMA - Practical Health Informatics Course for Doctors</p> <p>★ HKMA Structured CME Programme with Hong Kong Sanatorium &amp; Hospital Year 2010 - Diagnosis of OSA in Primary Care - When to Suspect?</p> <p><b>11</b></p>	<p>★ Joint Surgical Symposium - Complications of Cholecystectomy</p> <p>★ HKMA Shatin Doctors Network - Management of Allergic Skin Disorders - Tips and Tricks</p> <p><b>5</b></p> <p><b>12</b></p>	<p>★ Refresher Course for Health Care Providers 2009/2010</p> <p>★ History of Public Health in Hong Kong</p> <p><b>6</b></p> <p><b>13</b></p>
<p><b>14</b></p>	<p><b>15</b></p>	<p>★ FMSHK Executive Committee &amp; Council Meeting</p> <p><b>16</b></p>	<p>★ HKMA Orchestra Rehearsal</p> <p><b>17</b></p>	<p>★ HKMA - Practical Health Informatics Course for Doctors</p> <p><b>18</b></p>	<p>★ HKMA Shatin Doctors Network - Advance in Management of Allergic Rhinitis</p> <p><b>19</b></p>	<p>★ HKMA HKE Network - PPI Lecture on Diabetic Nephropathy</p> <p><b>20</b></p>
<p><b>21</b></p>	<p><b>22</b></p>	<p><b>23</b></p>	<p><b>24</b></p>	<p><b>25</b></p>	<p><b>26</b></p>	<p><b>27</b></p>
<p><b>28</b></p>						





Date / Time	Function	Enquiry / Remarks
<b>1</b> 7:30 pm - 8:30 pm <b>MON</b>	<b>A Case of Varicocele Recurrence</b> Organiser: Hong Kong Urological Association, Chairman: Dr. MAK Siu King, Speaker: Dr. HO Kwok Leung Frankin, Venue: Seminar Room, G/F, Block A, Queen Elizabeth Hospital, Kowloon	Dr. HUNG Hing Hoi / Ms. Tammy HUNG Tel: 9609 6064 / 2958 6006 Fax: 2958 6076 1CME Point
<b>2</b> 1:00 pm <b>TUE</b> 8:00 pm - 10:00pm	<b>HKMA New Territories West Community Network - Updates on the Management of Hepatitis B</b> Organiser: HKMA New Territories West Community Network, Chairman: Dr. LEE Fook Kay Aaron, Speaker: Dr. FUNG Tang Tat Konrad, Venue: Plentiful Delight Banquet (元朗喜尚嘉喜酒家), 1/F., Ho Shun Tai Building, 10 Sai Ching Street, Yuen Long, New Territories <b>FMSHK Officers' Meeting</b> Organiser: The Federation of Medical Societies of Hong Kong, Venue: Gallop, 2/F., Hong Kong Jockey Club Club House, Shan Kwong Road, Happy Valley, Hong Kong	Miss Alice TANG Tel: 2527 8285 1 CME Point  Ms. Paulina TANG Tel: 2527 8898 Fax: 2865 0345
<b>3</b> 8:00 pm <b>WED</b> (10,24)	<b>HKMA Orchestra Rehearsal</b> Organiser: The Hong Kong Medical Association, Venue: Pui Ching Academy	Ms. Candy YUEN Tel: 2527 8285
<b>4</b> 8:00 pm <b>THU</b> (11,25) 8:00 pm	<b>HKMA - Practical Health Informatics Course for Doctors</b> Organiser: The Hong Kong Medical Association, Speakers: Various, Venue: Chapel, 9/F., Block D, The Hong Kong Baptist Hospital, 222 Waterloo Road, Kowloon <b>HKMA Council Meeting</b> Organiser: The Hong Kong Medical Association, Chairman: Dr. H.H. TSE, Venue: HKMA Head Office, 5/F., Duke of Windsor Social Service Building, 15 Hennessy Road, Wanchai, Hong Kong	Miss Carman WONG Tel: 2527 8285 1.5 CME Points  Ms. Christine WONG Tel: 2527 8285
<b>5</b> 8:00 am - 9:00 am <b>FRI</b> 1:00 pm	<b>Joint Surgical Symposium - Complications of Cholecystectomy</b> Organisers: Department of Surgery, The University of Hong Kong & Hong Kong Sanatorium & Hospital, Chairman: Prof. Simon LAW, Speakers: Dr. NG Kwok Chai & Dr. CHOK Siu Ho, Venue: Hong Kong Sanatorium & Hospital <b>HKMA Shatin Doctors Network - Management of Allergic Skin Disorders - Tips and Tricks</b> Organiser: HKMA Shatin Doctors Network, Speaker: Dr. TANG Yuk Ming, Venue: Royal Park Chinese Restaurant, Royal Park Hotel, 8 Pak Hok Ting Street, Shatin	Department of Surgery, Hong Kong Sanatorium & Hospital Tel: 2835 8698 Fax: 2892 7511 1 CME Point (Active)  Mr. Jason JEN Tel: 9045 5120 1.5 CME Points
<b>6</b> 2:30 pm <b>SAT</b> 4:00 pm - 6:00 pm	<b>Refresher Course for Health Care Providers 2009/ 2010</b> Organiser: The Hong Kong Medical Association, Speaker: Dr. HUNG Yu Tak, Venue: Training Room II, 1/F., OPD Block, Our Lady of Maryknoll Hospital, 118 Shatin Pass Road, Wong Tai Sin, Kowloon <b>History of Public Health in Hong Kong</b> Organiser: Hong Kong Museum of Medical Sciences Society, Speaker: Prof. LEE Shiu Hung, Venue: Li Shu Pui Education Centre, HKMA, 2/F., Chinese Club Building, 21-22 Connaught Road Central, Hong Kong	Ms. Clara TSANG Tel: 2354 2440 2 CME Points  Ms. Cathy HUNG & Mr. Ringo NG Tel: 2549 5123 Fax: 2559 9458
<b>7</b> 2:00 pm <b>SUN</b>	<b>HKMA Certificate Course on Family Medicine 2010</b> Organiser: The Hong Kong Medical Association, Speakers: Prof. Albert LEE & Dr. LO Seen Tsing Sue, Venue: Seminar Room, G/F, Block D, Queen Elizabeth Hospital, Kowloon	Miss Viviane LAM Tel: 2527 8452 3 CME Points
<b>11</b> 2:00 pm <b>THU</b>	<b>HKMA Structured CME Programme with Hong Kong Sanatorium &amp; Hospital Year 2010 - Diagnosis of OSA in Primary Care - When to Suspect?</b> Organiser: The Hong Kong Medical Association, Speaker: Dr. LAM Bing, Venue: The HKMA Dr. Li Shu Pui Professional Education Centre, 2/F., Chinese Club Building, 21-22 Connaught Road Central, Hong Kong	Miss Viviane LAM Tel: 2527 8452 1 CME Point
<b>23</b> 7:00 pm - 8:00 pm <b>TUE</b>	<b>FMSHK Executive Committee &amp; Council Meeting</b> Organiser: The Federation of Medical Societies of Hong Kong, Venue: Council Chambers, 4/F., Duke of Windsor Social Service Building, 15 Hennessy Road, Wanchai, Hong Kong	Ms. Paulina TANG Tel: 2527 8898 Fax: 2865 0345
<b>26</b> 1:00 pm <b>FRI</b>	<b>HKMA Shatin Doctors Network - Advance in Management of Allergic Rhinitis</b> Organiser: HKMA Shatin Doctors Network, Speaker: Dr. LO Chun Yip, Venue: Royal Park Chinese Restaurant, Royal Park Hotel, 8 Pak Hok Ting Street, Shatin	Mr. Jason JEN Tel: 9045 5120 1.5 CME Points
<b>27</b> 1:00 pm <b>SAT</b>	<b>HKMA HKE Network - PPI Lecture on Diabetic Nephropathy</b> Organiser: HKMA HKE Network & HA HKE Cluster, Chairman: Dr. CHAN Nim Tak Douglas, Speakers: Dr. LO Hok King Stanley & Dr. LO Kwong Wing Matthew, Venue: HKEC Training Centre for Healthcare Management & Clinical Technology, Pamela Youde Nethersole Eastern Hospital, Chai Wan, Hong Kong	Miss Alice TANG / Miss WL KWONG Tel: 2527 8285 / 2595 6941

## Society News



## News from Member Societies

**Hong Kong Society for Emergency Medicine and Surgery Limited**

Updated office-bearers for the year 2009-2011 are as follows: President: Dr. NG Fu; Honorary Secretary: Dr. Ka-leung MOK; Honorary Treasurer: Dr. Chor-man LO

**Hong Kong Society of Palliative Medicine Limited**

Updated office-bearers for the year 2009-2010 are as follows: President: Dr. Oi-ling KWOK; Honorary Secretary: Dr. Rico King-yin LIU; Honorary Treasurer: Dr. Kwok-keung YUEN

**Hong Kong College of Paediatricians**

Updated office-bearers for the year 2009-2010 are as follows: President: Prof. Pak-cheung NG; Honorary Secretary: Dr. Winnie Wing-yee TSE; Honorary Treasurer: Dr. Chi-sik CHAN

The FMSHK would like to send its congratulations to the new office-bearers and look forward to working together with the societies.



## Meetings

6/3/2010	<b>14th Annual Scientific Meeting</b> Organiser: Hong Kong Society Infectious Diseases, Enquiry: Ms. Chloe WONG, Tel: 2155 8557 / 2116 4348, Fax: 2559 6910, Email: meeting.hk@asia.cmpmedica.com
14/3/2010	<b>Annual Scientific Meeting 2010</b> Organiser: Hong Kong Thoracic Society and American College of Chest Physicians (HK & Macau Chapter), Enquiry: Ms. Chloe WONG, Tel: 2155 8557 / 2116 4348, Fax: 2559 6910, Email: meeting.hk@asia.cmpmedica.com
17-19/3/2010	<b>The Paediatric Infectious Disease and Immunology Course 2010 - Infection and Immunity of the Fetus and Newborn Infant</b> Organiser: Hong Kong Hospital Authority Infectious Disease Centre, Hong Kong Society for Paediatric Immunology and Infectious Diseases and The Hong Kong Society of Neonatal Medicine, Speakers: Dr. Vas NOVELL, Prof. Nigel KLEIN, Prof. Nigel CURTIS, Prof. David ISAACS, Prof. Sandra BURCHETT and Local Speakers, Venue: Lecture Theatre, 7th Floor, Block H, Princess Margaret Hospital, Enquiry: Dr. Mike KWAN, Tel: 2990 2872, Fax: 2990 2875, Website: <a href="http://haidc.home">http://haidc.home</a> , E-mail: haidcpidimcourse2010@hotmail.com
20/3/2010	<b>The 3rd Annual Scientific Meeting and 4th Annual General Meeting of the Hong Kong Society for Paediatric Immunology and Infectious Diseases, Bill Marshall and Roland Levinsky Memorial Lectures</b> Speakers: Dr. Nigel CURTIS (Bill Marshall Memorial Lecture) & Prof. David ISAACS (Roland Levinsky Memorial Lecture) and Free Paper Presentation, Venue: Ballroom, The Langham Hong Kong, 8 Peking Road, Tsimshatsui, Hong Kong, Enquiry: Ms. YL YEUNG, Tel: 2990 2872, Fax: 2990 2875, E-mail: hkspiid4agm@hotmail.com
24-25/4/2010	<b>Annual Scientific Meeting 2010</b> Organiser: Hong Kong Pain Society, Enquiry: Ms. Chloe WONG, Tel: 2155 8557 / 2116 4348, Fax: 2559 6910, Email: meeting.hk@asia.cmpmedica.com
20/6/2010	<b>Annual Scientific Meeting 2010</b> Organiser: Hong Kong Society of Dermatology and Venerology, Enquiry: Ms. Chloe WONG, Tel: 2155 8557 / 2116 4348, Fax: 2559 6910, Email: meeting.hk@asia.cmpmedica.com

# Happy Year of the Tiger



GREETINGS FROM  
PRESIDENT DR. RAYMOND LO AND EXCO COLLEAGUES



The Federation of Medical Societies of Hong Kong  
香港醫學組織聯會



## Answer to Dermatological Quiz

### Answer:

1. Acquired bilateral naevus of Ota-like macules (ABNOM), also known as Hori's naevus.
2. The main differential diagnoses include bilateral naevus of Ota, melasma, freckles, lentiginos and post-inflammatory hyperpigmentation.

ABNOM is an acquired condition with onset around 20-40 years of age. The female to male ratio is around 6:1, and like Naevus of Ota, is much more common in Orientals than Caucasians. Clinically it presents with bilateral, symmetrical and speckled brown-bluish macules over the malar area, and it has no ocular involvement.

Naevus of Ota is typically unilateral but rarely can be bilateral. But the early onset in infancy or early childhood, and the involvement of the sclera can help to distinguish it from ABNOM. Melasma can be difficult to be distinguished from ABNOM as it also presents in adulthood with brownish macules. But in general, the pigmented macules in ABNOM are more discrete, clustered and bluish. The histology may also help. In melasma, there is an increase in melanophages in the dermis, while in ABNOM, the melanocytes in the dermis is increased. Freckles usually occur in childhood and have strong seasonal variations due to sunlight. Lentiginos appear similarly to freckles but do not have seasonal variations.

3. Just like naevus of Ota, ABNOM can be successfully treated with Q-switched Alexandrite Laser or Q-Switched Nd:YAG laser. The result of treatment with these pigmented laser system is excellent in Naevus of Ota, good in ABNOM, but unsatisfactory in melasma. Repeated treatment sessions are required and there is a possibility of increased pigmentation after the first treatment in ABNOM. Patients should be informed of this possibility beforehand to avoid dissatisfaction.

### Dr. Lai-yin CHONG

MBBS(HK), FRCP(Lond, Edin, Glasg), FHKCP, FHKAM(Med)  
Private Dermatologist

## Classified Advertisement

Prestigious clinic location for Doctor or Dentist, ground floor, Bonham Road, Near St. Paul's School, in a mid-level prosperous neighborhood, upcoming MTR. Rent negotiable, call **Ms. Tse** on **9277 9138**.

### The Federation of Medical Societies of Hong Kong

4/F Duke of Windsor Social Service Building,  
15 Hennessy Road, Wanchai, Hong Kong  
Tel: 2527 8898 Fax: 2865 0345

<b>Patron</b>		
The Honourable Donald TSANG, GBM		曾蔭權先生
<b>President</b>		
Dr. LO See-kit, Raymond		勞思傑醫生
<b>1st Vice-President</b>		
Dr. CHAN Chi-fung, Godfrey		陳志峰醫生
<b>2nd Vice-President</b>		
Dr. LO Sze-ching, Susanna		盧時楨醫生
<b>Hon. Treasurer</b>		
Mr. LEE Cheung-mei, Benjamin		李祥美先生
<b>Hon. Secretary</b>		
Dr. CHAN Sai-kwing		陳世炯醫生
<b>Executive Committee Members</b>		
Dr. CHAN Chi-wing, Timmy		陳智榮醫生
Dr. CHAN Hau-ngai, Kingsley		陳厚毅醫生
Dr. CHIM Chor-sang, James		詹楚生醫生
Dr. CHOI Kin		蔡堅醫生
Dr. HUNG Che-wai, Terry		洪致偉醫生
Ms. KU Wai-yin, Ellen		顧慧賢女士
Dr. LEUNG Ka-kit, Gilberto		梁嘉傑醫生
Dr. MAN Chi-wai		文志衛醫生
Dr. MOK Chun-on		莫鎮安醫生
Dr. NG Yin-kwok		吳賢國醫生
Dr. YU Chau-leung, Edwin		余秋良醫生
Dr. WONG Mo-lin, Maureen		黃慕蓮醫生

### Founder Members

#### British Medical Association (HongKong Branch) 英國醫學會 (香港分會)

<b>President</b>		
Dr. WU, Adrian		鄔揚源醫生
<b>Vice-President</b>		
Dr. LO See-kit, Raymond		勞思傑醫生
<b>Hon. Secretary</b>		
Dr. LI, Anthony		李志毅醫生
<b>Hon. Treasurer</b>		
Dr. LEUNG, Clarence		梁顯信醫生
<b>Council Representatives</b>		
Dr. LO See-kit, Raymond		勞思傑醫生
Dr. CHEUNG Tse-ming		張子明醫生
Tel: 2527 8898 Fax: 2865 0345		

#### The Hong Kong Medical Association 香港醫學會

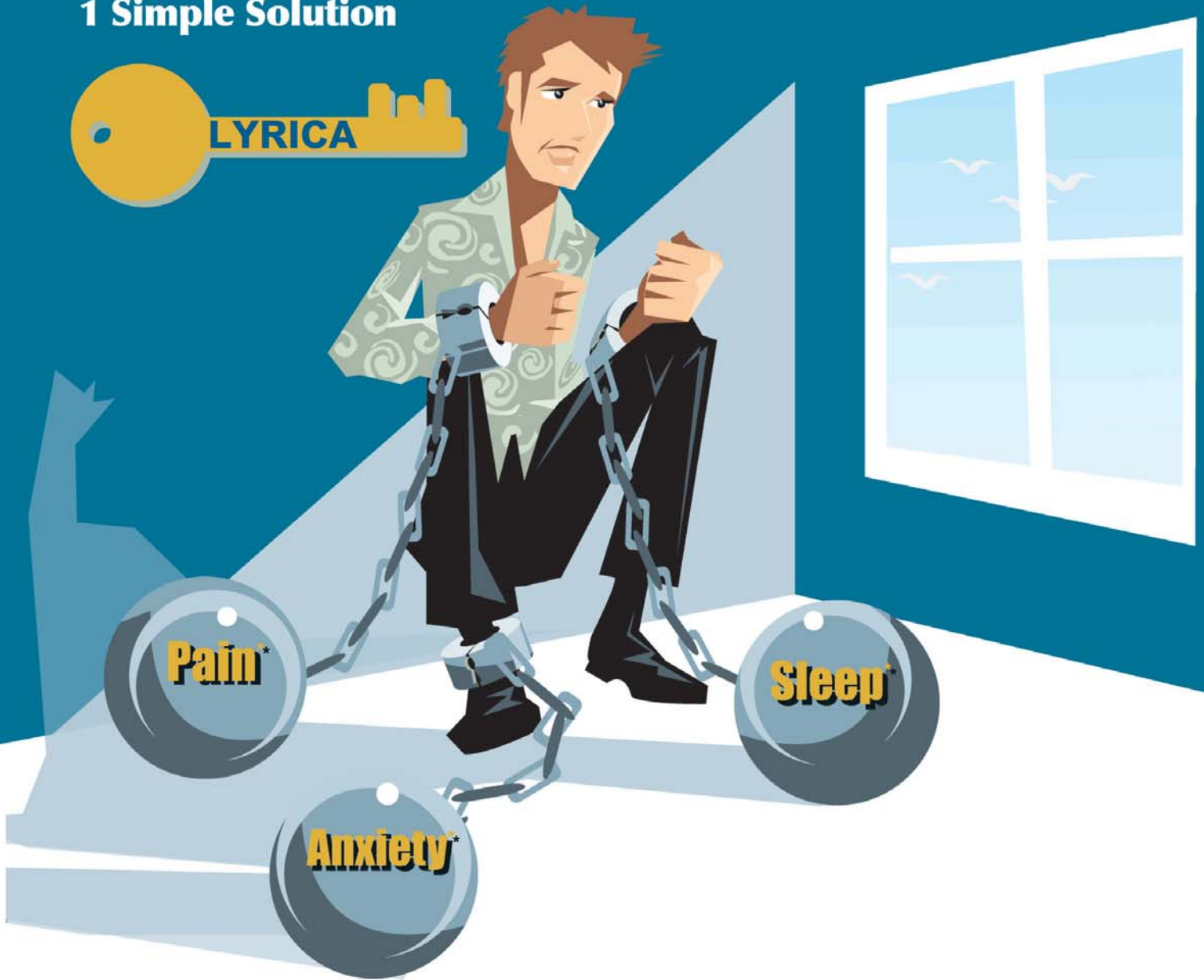
<b>President</b>		
Dr. TSE Hung-hing		謝鴻興醫生
<b>Vice-Presidents</b>		
Dr. CHAN Yee-shing, Alvin		陳以誠醫生
Dr. CHOW Pak-chin		周伯展醫生
<b>Hon. Secretary</b>		
Dr. LO Chi-fung, Ernie		羅智峰醫生
<b>Hon. Treasurer</b>		
Dr. LEUNG Chi-chiu		梁子超醫生
<b>Council Representatives</b>		
Dr. CHAN Yee-shing		陳以誠醫生
Dr. CHOI Kin		蔡堅醫生
<b>Chief Executive</b>		
Mrs. LEUNG, Yvonne		梁周月美女士
Tel: 2527 8285 (General Office) 2527 8324 / 2536 9388 (Club House in Wanchai / Central)		
Fax: 2865 0943 (Wanchai), 2536 9398 (Central)		
Email: hkma@hkma.org		
Website: http://www.hkma.org		

#### The HKFMS Foundation Limited 香港醫學組織聯會基金

<b>Board of Directors</b>		
<b>President</b>		
Dr. LO See-kit, Raymond		勞思傑醫生
<b>1st Vice-President</b>		
Dr. CHAN Chi-fung, Godfrey		陳志峰醫生
<b>2nd Vice-President</b>		
Dr. LO Sze-ching, Susanna		盧時楨醫生
<b>Hon. Treasurer</b>		
Mr. LEE Cheung-mei, Benjamin		李祥美先生
<b>Hon. Secretary</b>		
Dr. CHAN Sai-kwing		陳世炯醫生
<b>Directors</b>		
Mr. CHAN Yan-chi, Samuel		陳恩賜先生
Dr. CHIM Chor-sang, James		詹楚生醫生
Ms. KU Wai-yin, Ellen		顧慧賢女士
Dr. WONG Mo-lin, Maureen		黃慕蓮醫生
Dr. YU Chak-man, Aaron		余則文醫生

# Triad of Neuropathic Pain

3 Different Problems  
1 Simple Solution



## Advanced Treatment for Neuropathic Pain

Powerful pain relief as early as after the 1st full day of treatment<sup>1</sup>

## A New Class for Generalized Anxiety Disorder (GAD)<sup>2</sup>

Rapid relief of both psychic and somatic symptoms at week 1<sup>3</sup>

## Novel Sleep Architecture Benefits

Significantly reduced sleep onset latency and increased slow-wave sleep proportion compared with placebo<sup>4</sup>



\*Symptoms of neuropathic pain

References: 1. Dworkin RH, et al. Neurology 2003;60:1274-1283. 2. Riekels K., et al. Arch Gen Psychiatry 2005; 62:1022-1030. 3. Montgomery SA, et al. J Clin Psychiatry 2006; 67:771-782. 4. Ian Hindmarch, et al. Sleep 2005; Vol 28, No.2. Full prescribing information is available upon request.



Pfizer Corporation Hong Kong Limited  
16/F, Stanhope House, 738 King's Road, North Point, Hong Kong  
Tel: (852) 2811 9711 Fax: (852) 2579 0599  
Website: www.pfizer.com.hk



**LYRICA**<sup>®</sup>  
PREGABALIN