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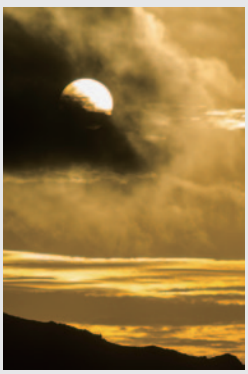

The Photo was taken in one early morning in Hong Kong in 2010 during a hiking exercise in Island East with the Olympus EPL-1 and Panasonic Lumix G Vario 45-200mm at the 200mm end.

The Photo captured the time when the sun just moved out from a cloud. The photo showed the mighty power of the sun in the wilderness as if everything around it was burning.

The Olympus EPL-1, being a light weight mirrorless camera, really realises the Olympus slogan of "Happy Photography" and it is always in my backpack.

Dr. MC YUEN
MBBS(HKU)
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Editorial

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Editor

Dr. Wah-shan NG

It is very common to see patients in a wide range of emergency conditions in the primary care setting. It is also very frequent to encounter someone or even oneself suffering from the various emergency conditions or injuries in the wilderness. One of your friends may complain of bone pain after scuba-diving just after you have surfaced or surfacing or someone stung by jelly fish may ask for your help while you are having sunbath on the beach; someone may collapse in a hot sunny summer day while you are playing golf in the next court, or even worse, you may need to decide whether you have to retreat when you yourself experience terrible headache while staying in the Mt. Qomolangma base camp – a trip that you have planned for so many years and you are only allowed to go once in a lifetime by your spouse! Emergencies have no boundaries.

In this issue, you will find answers to the above situations and ways to treat them, most importantly on how to prevent them. Dr. CM LO summarised on the heat emergencies which are very common during the hot and humid summer of Hong Kong. Dr. Ludwig TSOI wrote a review of the situations that you will most commonly encounter when someone collapses in the street. And we hope that you will be more confident in offering help after reading it. Dr. YC CHAN gave a detailed list of the dangerous creatures in the sea and the way to treat the related emergencies. Dr. KL AU YEUNG highlighted the contemporary use of hyperbaric oxygen, focusing on decompression sickness, gas embolism and carbon monoxide poisoning. Dr. Axel SIU did a review on Acute Mountain Sickness. I am sure you do not want to miss them while you are preparing or advising someone for a trip to an extremely high place. This issue also had an article prepared by Dr. Peter CHEE about experiences of practising emergency medicine in a remote area of Hong Kong that will be very interesting to you.

I hope our readers will enjoy reading this issue and share the joy of many of the activities that are also the hobbies of most of us.

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Heat Emergencies: Management and Prevention

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Introduction

Heat illness is a spectrum of clinical syndromes ranging from muscle cramps to life threatening heat stroke. Heat illness is commonly encountered in the Emergency Department during summer months.

Heat illness is seen most commonly during summer heat waves and high environmental temperatures, it can occur in more temperate environments, especially in patients who have chronic medical conditions, mental illness, occupational exposure to high temperatures, or insufficient acclimatisation.[1] Exertional heat stroke had been reported in healthy military recruits in Hong Kong.[2,3] One local study revealed that heat illness (24.4% of total cases) was one of the major reasons for helicopter medical transfer from June 1998 through November 1998.[4] Among the 17 casualty evacuation cases of Oxfam Trailwalker 2006, 2 of them were heat cramps and 3 of them were heat exhaustion.[5,6]

The climate of Hong Kong is sub-tropical and it is hot and humid from May to August. Temperatures in the afternoon often exceed 31 °C whereas temperatures at night generally remain around 26 °C with high humidity.[7] Heat illness is expected to increase due to global warming. Compared with the 1980-1999 average of 23.1°C, the annual mean temperature in Hong Kong in the decade 2090-2099 is expected to rise by 4.4 °C.[8] Another study conducted by the Hong Kong Observatory shows that the annual number of hot nights (days with a minimum temperature of 28°C or above) and very hot days (days with a maximum temperature of 33°C or above) are expected to increase significantly in the 21st Century. On the other hand, the annual number of cold days (days with a minimum temperature of 12°C or below) will continue to drop.[9]

Pathophysiology

Human body heat is produced by cellular metabolism and gained from the environment (e.g. solar radiation). The overall heat load is dissipated by efficient heat loss mechanisms to maintain a body temperature of about 37°C by homeostatic thermoregulation. Body heat is dissipated through all four physical mechanisms of heat transfer namely conduction, convection, radiation and evaporation.[10] Convection and evaporation are far more important than other methods of heat transfer because they are regulated primarily by the temperature control centre in the preoptic nucleus of the anterior hypothalamus.

Acclimatisation is the adaptation of heat stress mechanisms of the body to increase the efficiency of heat loss in a hot climate. The primary methods of acclimatisation involves changes in the onset and volume of sweating, improvement in cutaneous vascular flow and overall cardiovascular function, and alteration of the thermoregulatory set point.[11]

Heat stress causes damage to the organism by ways of at least three mechanisms. Firstly, heat is directly cytotoxic to cells. An increase in cellular temperature results in protein denaturation which interrupts critical cellular processes, resulting in apoptosis and cell death. Secondly, heat stress results in release of inflammatory cytokines including the tumour necrosis factor alpha, interleukin-1 beta and interferon gamma, and the anti-inflammatory cytokines IL-6, IL-10, and TNF receptors p55 and p75. Thirdly, elevated temperature can lead to damage of vascular endothelium, resulting in enhanced vascular permeability, activation of the coagulation cascade, and disseminated intravascular coagulation (DIC).[1]

In this respect, severe heat illness can be seen as a combination of direct cytotoxicity and a severe systemic inflammatory response in which encephalopathy predominates early in the course of the disease. If left unchecked, acute renal failure (ARF), coagulopathy, hepatic dysfunction, and ultimately multiple organ dysfunction syndrome will ensue.[1]

Clinical Features

Heat illness is a spectrum of clinical syndromes ranging from muscle cramps to life threatening heat stroke. Symptoms, signs and treatment of the various syndromes are summarised in Table 1.

Table 1. Heat illness symptoms, signs and treatment[12]

	Symptoms	Signs	Treatment
Heat oedema	None	Peripheral oedema	Rest, elevation of extremities, acclimatisation
Heat cramps	Painful muscle cramps, Normal to mild elevated temperature, sweating	Palpable muscular spasm	Stretch, ice massage, oral fluids (salt-containing)
Heat syncope	Syncope	Loss of consciousness	Rest, supine with feet up, monitor vital signs
Heat exhaustion	Fatigue, inability to continue exercise, dizziness, nausea, vomiting, syncope, 'chills' of head and neck	Orthostatic hypotension, elevated core temperature (up to 40°C), syncope	Attention to airway, breathing and circulation (ABC), cool, rest, monitor temperature and vital signs, oral fluids (salt-containing)
Heat stroke	Pronounced mental status changes, confused, fatigue, nausea, vomiting, seizures, anhidrosis or sweating	Elevated core temp >40°C, hypotension, tachycardia, tachypnoea, possible cessation of sweating, coma, DIC, ARF	ABC, cool urgently, intravenous fluid, intensive care support

The cardinal features of heat stroke are hyperthermia (>40°C) and altered mental state. The distinction between exertional and classic heat stroke (Table 2) is not clinically important because immediate cooling and support of organ function are the therapeutic goals for both.[11]

Table 2. Characteristics of Heat stroke[11]

Exertional	Classic
Healthy	Chronic ill/on medication
Younger	Older
Strenuous exercise	Sedentary
Sporadic	Heat wave
Diaphoresis	Sweating may be absent
Hypoglycaemia	Normoglycaemia
DIC	mild coagulopathy
Rhabdomyolysis	Mild increase CPK
20-30% Acute renal failure	<5% Acute renal failure
Marked lactic acidosis	Mild acidosis
Hypocalcaemia	Normocalcaemia

There is no diagnostic test for heat stroke, and the list of differential diagnoses is extensive (Table 3). Therefore the diagnosis of heat stroke should be established promptly by the clinical presentation and information on the environmental circumstances; and exclusion of other diseases.

Table 3. Differential Diagnoses of Heat Stroke[11]

1.	Sepsis or infection, e.g. Encephalitis, Meningitis, Typhoid, Malaria
2.	Toxins or Drugs, e.g. anticholinergic, salicylate, sympathomimetic
3.	Seizures
4.	Intracranial haemorrhage
5.	Thyroid storm
6.	Serotonin syndrome
7.	Neuroleptic malignant syndrome
8.	Malignant hyperthermia

Management of Heat Stroke:

First Aid

All victims of even minor heat illness should be assessed for the possibility of heat stroke and continuously monitored for the development of such. Heat stroke victims must be immediately cooled by any means possible. Patients should be moved to a shaded, cooler area and have the clothing removed. If condition allows, first aid providers can immerse the victim in water as cold as possible, up to the chin. Circulating water should be used over static water. For a victim of heat stroke, if water immersion is not possible or delayed, the victim should be doused with copious amounts of cold water, sprayed with water, fanned, covered with icy towels or have ice bags placed over the neck, axillae and groins.[13]

Hospital Treatment

Immediate cooling is the cornerstone of treatment. Morbidity and mortality are directly related to how rapidly the core temperature is reduced. Patients should also be assessed and stabilised with respect to airway, breathing and circulation (ABC). The most effective method of reducing body core temperature appears to be immersion in iced water, although the practicalities of this treatment may limit its use.[14] Evaporative cooling involves the removal of clothing, spraying tepid water over the patient, and facilitating evaporation and convection with the use of a fan. At the same time, ice packs should be placed at the neck, axillae and groins.[14]

There is no clear evidence to support the use of dantrolene or antipyretics in the treatment of heat stroke.[14]

Heat stroke patients should be cooled rapidly to a core temperature of 38.5°C to 39°C, after which, active cooling should be stopped to avoid hypothermia. Continuous core temperature monitoring is needed to keep temperatures between 37°C and 38°C and to identify any rebound of hyperthermia requiring further treatment.[1]

Disposition and Prognosis

Patients with minor heat illness require short emergency department observation and out-patient follow up if necessary. Heat stroke is a true medical emergency and most heat stroke patients warrant admission to intensive care unit for further treatment and monitoring. Mortality ranges from 10 to 50%, and residual neurologic deficits may be present in 20 to 33% of survivors.[1,10]

Prevention

Most cases of heat illness are preventable. The "heat stress" perceived by humans depends on many factors and there are four relevant meteorological factors namely air temperature, relative humidity, wind speed and solar radiation.[15] High temperature would make it difficult for the body to lose heat by direction radiation. The higher the relative humidity, the more difficult it will be for heat loss by sweating. On the contrary, higher wind speed would facilitate evaporation of sweat and heat removal from the skin. Under direct sunshine, the body temperature would rise. In order to assess the risk of heat stroke, all the above-mentioned meteorological factors should be taken into account. The "Heat Stress Monitoring System" developed by the Hong Kong Observatory uses three types of temperature, namely Natural Wet Bulb Temperature (T_{nw}), Globe Temperature (T_g) and Dry Bulb temperature (T_a), to calculate a combined temperature index called Wet Bulb Globe Temperature (WBGT) according to the following formula:

$$\mathbf{WBGT = 0.7\ T_{nw} + 0.2\ T_g + 0.1\ T_a}$$

"Natural Wet Bulb Temperature" is measured by a temperature sensor which is covered with a wetted wick and is directly exposed to sunshine. The measured temperature depends on solar radiation, wind speed and relative humidity. The "Dry Bulb Temperature" is the ordinary air temperature. The "Globe Temperature" is the temperature measured by a temperature sensor installed inside a black, thin hollow globe made of copper. It measures the combined effects of solar radiation and wind.[15] WBGT above 27.8°C is considered 'very high risk'. WBGT between 22.8–27.8°C is considered 'high risk'. WBGT between 18.3–22.8°C is considered 'moderate risk'.[12] The American College of Sports Medicine recommends cancelling sporting events when the WBGT index is above 28°C.[16]

The Hong Kong Observatory maintains a close watch on the local temperature changes. It issues "Very Hot Weather Warning" whenever Hong Kong is threatened by very hot weather, to alert members of the public to the risk of heat illness.[17] The public are reminded to take the following precautions:

1. When engaged in outdoor work or activities, drink plenty of water and avoid over exertion. If not feeling well, take a rest in the shade or cooler place as soon as possible.
2. People staying indoors without air-conditioning should keep windows open as far as possible to ensure that there is adequate ventilation.
3. Athletic and practice events should preferably be scheduled during the coolest part of the day or coolest time of year.
4. Light-coloured, loose-fitting, open-weave clothes allow maximum heat deflection and optimal evaporation.
5. Athletes and outdoor workers should maintain optimal hydration and consume salty food.
6. Automobiles should be locked, and people (especially children) should not be left unattended in an automobile during hot weather.

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Emergency Care in the Street – Boundless Emergency Medicine

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Introduction

Traditionally, the practice of medicine is hospital based, focusing largely on hi-tech equipment and advanced technology. Although the clinical skills acquired by the medical student in the undergraduate days can be applied anywhere, clinicians rarely have the chance to practise medicine out of the clinic or hospital premises.

In recent years, the public and the mass media are expecting more and more from the medical profession, be it private practitioners or public sector doctors. General practice doctor dashing out of his/her office to perform first aid on a road traffic accident victim will be praised as "kind-hearted doctor" (仁 醫); failing to do so will be blamed as cold-blooded. Although most pre-hospital care is now rendered by our paramedic colleagues, medical doctors should be prepared to deliver some degree of "on-the-street emergency care" when requested to. Knowing a few common scenarios and familiarising with the first aid principles will be of help when you are put on the spot.

I. Outdoor - Road traffic accident
II. Indoor - Somebody fainted in front of you in a queue

I) Road traffic accident

Hong Kong is a highly developed city, and as a result, the number of vehicles on the road is on an ever rise. Very often, minor collision between low-velocity vehicles will result in no casualty. However, sometimes injuries do happen and would require some first responder assessment and treatment. The overall plan can be divided into the following steps:

1. Safety – make sure the environment is safe to perform further assessment and treatment. In a busy downtown street, your own safety is of top priority in a traffic accident. You must not risk your own life lest you create a second victim. Very often, the police officer arriving before you would have set up a road block to prevent further traffic accidents. Only remove the victim to a safer environment if the risk of staying at the scene outweighs the risk of potential cervical spinal injury.

2. Primary assessment – the most important step next is to assess for the number of casualties. For single victim traffic accidents, you can proceed with BLS (basic life support) and first aid. But for multiple casualties, the philosophy is slightly different. Instead of focusing on the first victim, you may need to take the whole picture into perspective. Sometimes yelling out, *"Those who can walk please come over and sit on that side of the road"* may be a simple and effective way to triage those who have no immediate life threatening conditions.

3. Initiate emergency response system – solicit the help from other pedestrians to make emergency service phone calls. This could alleviate you from the burden of making phone calls, so you can concentrate on the victim(s). Ask your helper to return after making the phone call to help you. If a heart attack is suspected (e.g. passengers witnessing a driver's loss of consciousness), ask the helper to get an AED (automated external defibrillator) after making the phone call. AED devices are available throughout Hong Kong, e.g. MTR stations, hotels and shopping malls.

4. For single victim injuries – follow the BLS and first aid principles. If the victim can talk, that means the airway and breathing are unremarkable. For those who cannot talk and are unresponsive, check the carotid pulse for 5 seconds (5-10 seconds) . If a pulse is present, open up the patient's airway by head tilt and chin lift (if cervical spine injury is suspected, replace the technique "head tilt and chin lift" with "jaw thrust"). Deliver a breath every 5-6 seconds. If you have brought with you a BVM (bag-valve-mask), use the BVM instead of a pocket mask or mouth-to-mouth resuscitation.

5. If the single victim is breathing and talking, control any visible bleeding. This can be applied to any bleeding site using direct pressure. Put on your sterile gloves from your first aid bag (see Table 1 below), and open a pack of sterile gauze to be put over the bleeding site. If sterile gauze is not available, any clean towel or handkerchief will do. Then use digital pressure to control the bleeding. Apply a roll of bandage to secure the gauze dressing. If bleeding is not yet controlled, adjust the position of the gauze and apply firmer pressure on the bleeding. If you feel there is a need to change the blood soaked gauze, be vigilant NOT to peel off the clot from the last gauze adjacent to the skin.

6. Last but not the least – after you have attended the victim's ABC (or CAB), you have successfully managed the victim's most vulnerable moments which would readily kill in a short while. Following the steps outlined above is not a panacea for all traffic accident victims. E.g. we have not covered pain management. Nonetheless, pain will not kill instantaneously. Pain is a useful indicator / symptom to guide practitioners to look for

other associated injuries, e.g. fractures and contusions. But always prioritise your time to those areas that will kill if they have not yet been looked after.

Table 1. First aid bag content

1) Gauze – several packs
2) Bandage – several rolls
3) Triangular bandage – several packs
4) Cellulose sticky tape
5) A pair of scissors
6) Normal saline – for irrigation of wound
7) Alcohol prep – for cleansing of equipment
8) Cotton wool balls – one sealed bag; to be used with normal saline to cleanse wounds (should not be used to pack wound)
9) Simple forceps – at least 2 pairs (some of these equipment can be found in commercially available simple and economical dressing sets)
10) Sterile gloves – several pairs
11) Several clean towels – to provide a clean platform to put your stuff on
12) Bag-valve-mask (at least one set; or at least a pocket mask)

II) Somebody fainted in front of you in a queue

When someone faints in front of you in a line, the causes can vary from orthostatic hypotension to hypoglycaemia, or from epilepsy to myocardial infarction. It may not be easy to tell from the onset which diagnosis the patient belongs to. To confound the situation a bit more, patients fainted with a short duration of generalised convulsion ("twitching of limbs") is not uncommon in hypotension and heart attacks. The reason being when there is insufficient blood perfusion in the brain for whatever reasons, the brain would respond by firing its neurons hectically. The result is a brief period of limb twitchings mimicking epileptic fits. A practical tip that is useful to distinguish the two is, for convulsion which is secondary to brain hypoperfusion (as in orthostatic hypotension and myocardial infarction), the duration is short and in terms of seconds (vs in epilepsy the convulsion is counted in terms of minutes).

Regardless of the cause of the fainting, the person must be attended immediately to prevent further injuries imposed on him/her by an unskilled bystander. The most common mistake committed by the non-trained is to sit up the victim. The practice of sitting up the patient has no scientific support and in fact it is dangerous to do so. If the patient is already hypotensive, sitting him/her up would further jeopardise the circulation to the brain. The same rationale will also apply in heart attack cases. If the patient is having an epileptic fit, the manoeuvre to sit up the patient can cause bodily injury to the limbs and torso, not to mention hurting the first responder himself / herself. The second mistake commonly seen is to feed the patient with food or drinks. Unless the patient is fully conscious, giving the patient anything by mouth will run the risk of choking the patient and jeopardising his / her airway. Although we do see some diabetic patients collapsed due to hypoglycaemia, the risk of choking the patient must be weighed against the risk of prolonged hypoglycaemia. One practical tip is to use a straw – if the patient is conscious enough to suck from a straw, the risk of airway problem would be extremely low.

The following steps would help you to save a fainted person:

1) Safety – you may think why bother safety in such an urgent situation. Even when you are indoor, safety first should also be observed (e.g. water and damaged wires). If it happens that you were queuing up for a bus, it could be by chance the patient may have fallen to the roadside rather than the walkway. If you witnessed the fainting and do not suspect cervical injury, you may transport the patient to a safer environment (e.g. walkway) before you attempt the life-saving procedures.

2) Check for responsiveness – this can be done by shaking the victim's shoulder and yelling, "Are you OK?" A lack of active response should prompt you to the next step.

3) Check for normal breathing – kneel down next to your victim, bend down so that your face could feel the breath from his/her nose while you can observe for chest rise. If the victim is not breathing or is not breathing normally (e.g. gasping), then shout for help.

4) Shout for help – you can yell out, *"Is there anybody who knows first aid?"* to solicit help from the bystanders. Even when nobody knows first aid is around, do ask somebody to activate the emergency response system and to get an AED.

5) Check pulse – In the latest AHA Guidelines 2010 for healthcare workers, you are advised to check the victim's pulse . The crucial point for this step is to check the pulse for at least 5 seconds but not more than 10 seconds. The rationale behind this "5 to 10 seconds" recommendation is, do not waste time before you start chest compression. If a person is unresponsive and is not breathing (or not breathing normally), the chance of a strong pulse is low. So if you do not detect a definitive pulse within 10 seconds, go to the next step.

6) 5 cycles of CPR – perform 5 cycles of CPR (cardiopulmonary resuscitation) without interruption. If the patient is unresponsive, not breathing (or not breathing normally), and you do not detect a pulse definitely, perform 5 cycles of compression and breaths (in the ratio of 30:2) starting with compression. The sequence CAB is new to the 2010 Guidelines. The ratio also changed to 30 compressions to 2 assisted breaths. This change highlights that minimal interruption to compression (see Table 2) is essential to maintaining a good cardiac output. This ratio even holds in 1-rescuer infant CPR . In fact this ratio 30:2 is called "universal ratio for lone rescuers" for all ages.

7) When an AED is available – when your bystander helper has returned after grabbing an AED device, ask him / her to open the AED device and follow the instructions. Modern AED devices have written instructions (e.g. "#1 Press ON") printed on the device to guide the operator in deploying its use, assisted by audio instructions to minimise operator failure. Many training institutions in Hong Kong provide AED courses for laymen to boost the usage of AED in the pre-hospital setting.

8) When 2 rescuers are available – even when your bystander helper could not locate an AED device and return empty-handed, if he / she has training in CPR, it would be a good idea to institute 2-rescuer CPR. Performing effective chest compression is hard work, which means you will be exhausted after a while. The crucial point in performing 2-person CPR is to minimise the interruption between changeovers to less than 10 seconds. Once you are relieved from doing chest compression, you should assume the responsibility of the airway and breathing for another 5 cycles of CPR (30 chest compressions to 2 breaths). At the end of the 5 cycles, changeover again with your bystander helper.

Table 2. Techniques of chest compression – there are a few points to note regarding chest compression techniques

- Put your palms on the victim's lower half of the sternum, which is approximately mid-point of the nipples.
- Position yourself so that your shoulder is directly above the heels of your hands
- Push fast (at least 100 compressions per minute) and push hard (at least 5 cm)
- Allow full recoil of the chest after each compression
- Avoid unnecessary interruption

Summary

Unlike the classical medical school teaching of history taking, physical examination and investigation, in the emergency we just mentioned, it is prudent for a practitioner to have a clear mental pathway of what should be done first and fast. Although not every practitioner will be faced with these circumstances in their lifetime, getting prepared for one will make a difference between life and death.

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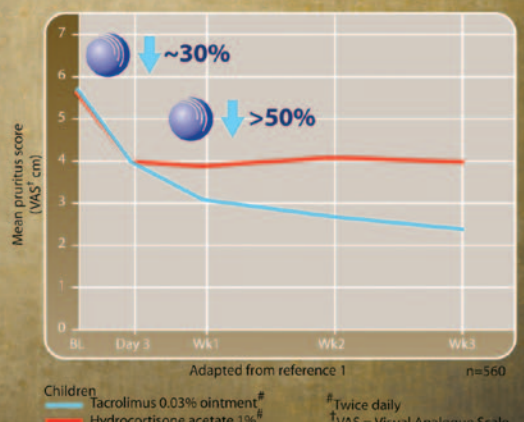

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Marine Envenomation

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This article has been selected by the Editorial Board of the Hong Kong Medical Diary for participants in the CME programme of the Medical Council of Hong Kong (MCHK) to complete the following self-assessment questions in order to be awarded 1 CME credit under the programme upon returning the completed answer sheet to the Federation Secretariat on or before 31 March 2013.

As an emergency physician, we are prepared to deal with various kinds of emergency medical problems, even in our leisure time. It is always good to enjoy the beautiful sunny day on a beach with family and friends. Sometimes, things are not so smooth, you hear screaming from one of your friends and notice her leg is injured by a marine creature…

In 2010, the Hong Kong Poison Information Centre received 4,418 poisoning cases. Apart from ethanol which was commonly involved as co-ingestant, venomous bites and stings ranked the eighth commonest poisoning. In the subgroup analysis of those cases, 16% of them involve marine creatures involving jellyfish, spiny fish, and sea urchin. In this article, the basic toxicological information of common marine envenomation and their first aid treatment as well as the initial clinic or emergency department management are discussed.

Jellyfish

The phylum Cnidaria (commonly known as jellyfish) includes more than 9,000 species, of which approximately 100 are known to injure humans. Fortunately, no severe jellyfish envenomation has been reported in Hong Kong. On the other hand, several species of jellyfish were reported causing severe poisoning or deaths may be found in the vicinity of the coast of China Mainland, including Chironex fleckeri (box jellyfish), Chiropsalmus quadrigatus (sea wasp), Physalia physalis (Portuguese man-o'war), Carukia barnesi (Irukandji). In general, the sting of most jellyfish species in Hong Kong can be considered as minimally toxic and usually causes local effects only. Jellyfish toxins may contain inflammatory mediators or vasoactive substances such as bradykinin, histamine, proteases, prostaglandins and serotonin. The commonest clinical presentation is pain and erythema at the site of nematocyst contact. Urticaria, local oedema and blisters may also present. This may progress to ulceration and secondary infection in severe cases. Pain usually resolves within 24 hours but haemorrhagic vesicles and urticaria may last for up to weeks. Besides, anaphylaxis is possible if a large area of skin is involved. Airway obstruction is another concern if stings occur in the head and neck area. For first aid management, rinse the affected area with seawater or normal saline. Remaining tentacles should be scrap off with the edge of a plastic card (e.g. credit cards) or razor & shaving cream. Topical ice or cold pack may help in relieving pain. Use of vinegar (5% acetic acid) is recommended if the sting is known or likely to be from a box jellyfish or close relative. It is important to avoid fresh water rinsing, alcohol scrubbing and rough handling with jellyfish body parts attaching to the victim's skin as this may cause further nematocysts discharge. Other medical management include standard wound care, anti-tetanus toxoid, analgesic, antihistamine, and antibiotic as clinically indicated. Although antivenom for certain jellyfish (e.g. box jellyfish) is available in other countries, Hong Kong (Hospital Authority) does not have stock of it.

Picture 1 – 51 years old lady stung by jellyfish at her armpit in Clear Water Bay, Hong Kong. She was managed conventionally and recovered uneventfully.

Fish Stings

Common venomous fish stings in Hong Kong include injuries by stonefish (Synanceia verrucosa, 石頭魚), lionfish (Pterois volitans, 獅子魚), waspfish (Hypodytes rubripinnis, 老虎魚), rockfish (Sebastiscus marmoratus, 石狗公), striped eel catfish (Plotosus lineatus, 坑鰼), rabbitfish (Siganus canaliculatu, 泥鯭) and stingray (Taeniura meyeni, 魔鬼魚). They have venomous spines on the dorsal, and/or anal, pelvic fins. Most of the venomous stings are confined to local injuries with local toxicities. However, stonefish and stingray stings are capable of causing systemic toxicities or even deaths. Stonefish sting injuries in Hong Kong commonly involve food handlers although stonefish can be found in the Hong Kong wilderness. It causes immediate onset of extreme pain that usually peaks at 60-90 minutes. Severity increases with the number of stings.

Other local features include erythema, gross oedema, vesicle, cellulitis and hyperesthesia may occur. Systemic envenomation symptoms include anaphylaxis, nausea, vomiting, sweating, weakness, respiratory depression, pulmonary oedema, and hypotension. Five fatal cases of stonefish envenomation were reported worldwide but are poorly documented. Stingray sting causes deep penetrating and laceration wounds with disproportional pain. Bluish discoloration around the wound may be observed. Systemic effects of muscle cramp, weakness, seizure, hypotension and cardiovascular collapse are reported. At least 19 fatal cases were reported in the literature. Other venomous fish stings usually present with varying degrees of pain and are limited to local features only, deaths have not reported. Warm water (40-45°C) immersion is the most effective first aid to relieve pain by inactivating the heat-labile venom. Wound assessment is recommended during warm water immersion to look for thermal injuries, significant local infection or compartment syndrome. Other management includes standard wound care, anti-tetanus toxoid, analgesic, antihistamine and antibiotic (to cover Vibrio species) as clinically indicated. All embedded foreign bodies should be identified and removed surgically if possible. Surgical or orthopaedic consultation is required for deep penetrating injuries caused by stingrays. Stonefish antivenom is currently a level III antidote in the Hospital Authority. It is a horse anti-stonefish toxin IgG with established efficacy for analgesia and diminution of tissue damage due to stonefish toxin. It is indicated for envenomation by stonefish with significant local pain or presence of systemic symptoms.

Picture 2 – A middle age man stung by stone fish at his right index finger in Kwun Tong, Hong Kong, He was given warm water immersion and later stone fish antivenom, He recovered uneventfully.

Sea Urchin

The phylum Echinodermata includes sea stars, sea urchins, sand dollars and sea cucumbers. Human envenomation often occurs after stepping on these creatures, especially sea urchins. Sea urchins are covered in spines and pedicellariae, which both contain venom including serotonin, protease, and acetylcholine like substances. The brittle spines often break off in the wounds; fascial space, joint and neurovascular involvement are possible. The commonest clinical presentation is immediate sharp burning pain, which usually improves after a few hours. Other local reactions such as erythema, oedema are possible. Rarely, systemic effects such as nausea, weakness, dizziness, syncope, hypotension, or systemic allergic reaction were reported. Death reports due to echinodermata envenomation are not well substantiated. Management includes standard wound care, warm water immersion (40-45°C) and analgesic. Consider X-rays and ultrasound for deeply embedded spines especially when joint or neurovascular bundle involvement is possible. Removal of embedded spines is extremely difficult due to their brittle nature and may be tried with pliers or forceps. Attempts at retrieving any except the most easily reachable is probably best avoided as they will likely be absorbed or extruded over time. Spines that penetrate a joint space or other vital structures should be removed surgically. Antivenom is not available.

Blue Octopus / Cone Snails

The species of toxicological concern under the phylum Mollucae include blue-ringed octopus (Hapalochlaena maculosa, Hapalochaena lunulata) which contains tetrodotoxin, and cone snail (Conus geographicus, Conus textile) which contains conotoxin. Blue-ringed octopus is reported existing in Hong Kong both in the wilderness and as a pet in aquariums. Fortunately, it is not aggressive and only bites humans when handled. Cone snails predominantly inhabit the Indo-Pacific, New Guinea and the Philippines. Worldwide, 21 and 15 fatal cases of blue ringed octopus and cone snail envenomation were reported. Both tetrodotoxin and conotoxin block the sodium channel. Envenomation may cause rapid onset of paralysis and early respiratory failure in the presence of small local wounds. Pressure immobilisation is recommended as first aid. Some authors also recommend warm water immersion (40-45°C) with limited evidence. Medical management includes maintenance of airway and ventilation; mechanical ventilation is indicated for respiratory failure. Antivenom is not available for blue-ringed octopus or cone snails.

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MCHK CME Programme Self-assessment Questions

Please read the article entitled "Marine Envenomation" by Dr. Yiu-cheung CHAN and complete the following self-assessment questions. Participants in the MCHK CME Programme will be awarded CME credit under the Programme for returning completed answer sheets via fax (2865 0345) or by mail to the Federation Secretariat on or before 31 March 2013. 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. Stinging by box jellyfish can be fatal.
2. Vinegar can inactivate nematocysts in Jelly fish stinging.
3. Warm water (40-45°C) immersion is an effective first aid torelieve pain caused by the venomous sting of most marine animals.
4. Stonefish sting injuries in Hong Kong commonly involve food handlers.
5. Stinging by stonefish causes immediate extreme pain.
6. If antibiotic is used to prevent infection after stinging by marine creatures, it should cover the Vibrio species.
7. Embedded sea urchin spines under the skin must be removed surgically.
8. The main content of blue ring octopus venom is tetrodotoxin similar to the poison in puffer fish (FUGU) .
9. The main effect of blue ring octopus venom is haemolysis.
10. Antivenom for blue ring octopus is available in Hong Kong.

ANSWER SHEET FOR MARCH 2013

Please return the completed answer sheet to the Federation Secretariat on or before 31 March 2013 for documentation. 1 CME point will be awarded for answering the MCHK CME programme (for non-specialists) self-assessment questions.

Marine Envenomation

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Answers to February 2013 Issue

Oral Arsenic Trioxide in the Treatment of Acute Promyelocytic Leukaemia

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

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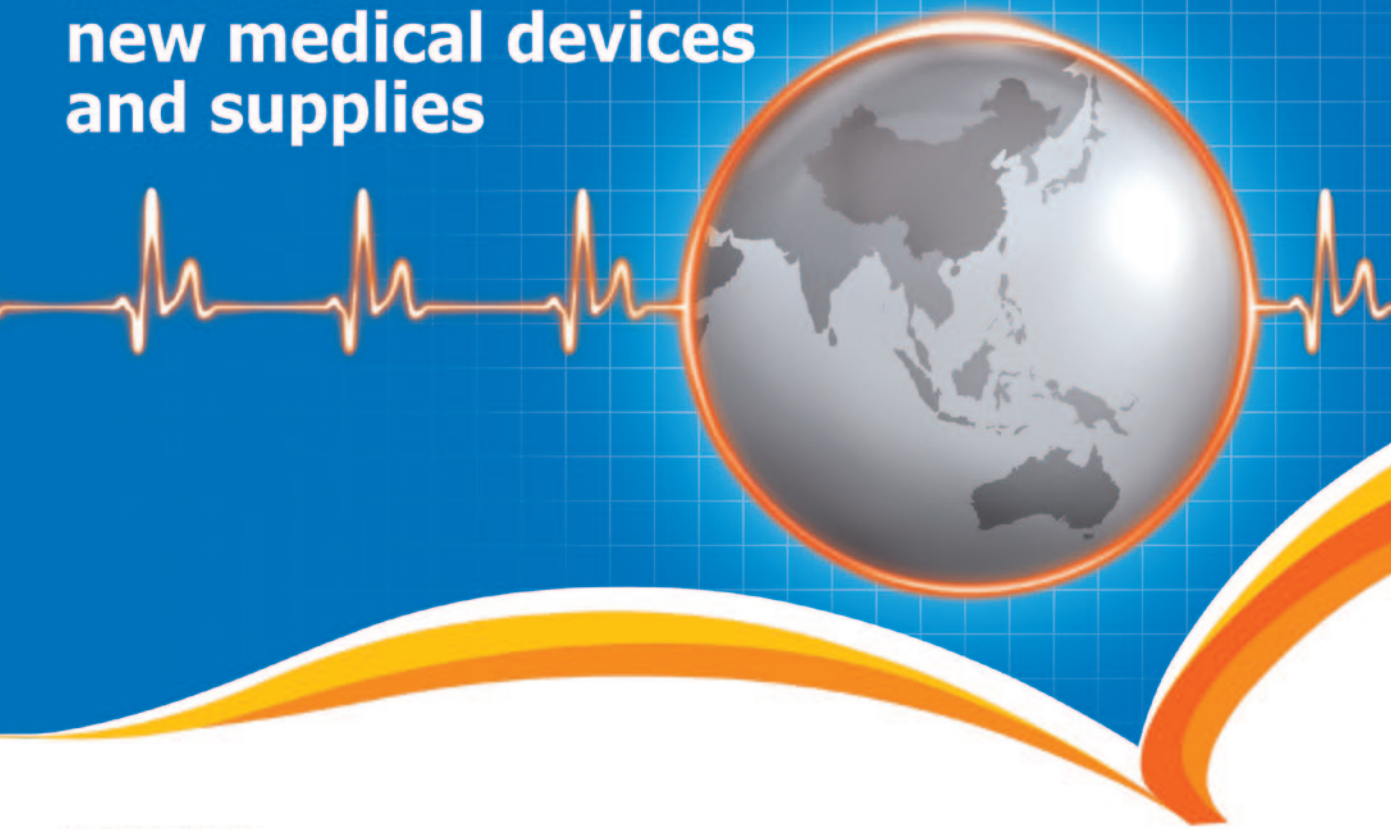

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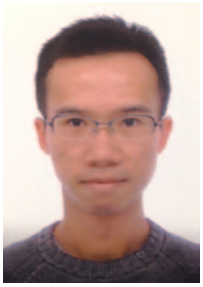
Introductions to Hyperbaric Oxygen Therapy (HBOT) and the Emergency Indications



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Hyperbaric Oxygen Therapy (HBOT) basics

Hyperbaric Oxygen Therapy is defined as a patient breathing 100% oxygen intermittently inside a pressurised chamber. The partial pressure of oxygen is at least 1.4 atm to be clinically effective. The chamber built to withstand the pressure is called a hyperbaric chamber. Hyperbaric chambers are classified as either mono or multiplace. The monoplace chamber accommodates only one patient where the entire chamber is pressurised with 100% oxygen, and the patient breathes in the ambient chamber oxygen directly. The multiplace chamber holds two or more people (patients, observers, and, often support personnel). The multiplace chamber is pressurised with compressed air while the patients breathe 100% oxygen via masks, head hoods, or endotracheal tubes. According to the Undersea & Hyperbaric Medical Society (UHMS) definition, any patient breathing 100% oxygen at 1 atmosphere of pressure or exposing isolated parts of the body to 100% oxygen does not constitute HBO2 therapy.

The usage of HBOT is measured in terms of treatment sessions. The number of sessions varies in different clinical settings. Most cases of decompression sickness recover with only a single session. On the other hand, patients with non-healing diabetic wounds may require 20-30 sessions. The duration of single sessions also varies e.g. 45 min for carbon monoxide poisoning and up to 5 hours for severe decompression sickness. There are standard treatment protocols produced by the UK's Royal Navy which can serve as reference.

A brief history of hyperbaric medicine

The clinical use of the hyperbaric chamber can be dated back to 1955 with the work of I. Churchill-Davidson (Lancet). He attempted to use HBOT to potentiate the effects of radiation therapy in cancer patients. In that same year, Professor Boerema from the University of Amsterdam in Holland, proposed using hyperbaric oxygen in patients undergoing cardiac surgery. This served to prolong the circulatory arrest time and allowed more time for the cardiac surgeon.

In 1967, the Undersea Medical Society (UMS) was established by six dedicated diving and submarine medical officers. With rising validity in clinical hyperbaric medicine, the society was renamed Undersea and Hyperbaric Medical Society (UMHS) in 1986. The first journal devoted to HBO was launched in 1980 by Dr. Charles W. Shilling and was called Hyperbaric Oxygen Review. In 1986, this journal was supplanted by the Journal of Hyperbaric Medicine and it was combined with another journal called Undersea Biomedical Research in 1993 and became the journal Undersea and Hyperbaric Medicine nowadays.

Clinical indications for HBOT

Medical authorities of different countries adopt different policies to the practice of HBOT. Many take the committee report produced by the Hyperbaric Oxygen Therapy Committee of the UHMS as reference. They approved the uses of HBOT for 14 clinical conditions (Table 1)

Table 1. The following indications are approved uses of hyperbaric oxygen therapy as defined by the Hyperbaric Oxygen Therapy Committee of the UHMS

1.	Air or Gas Embolism
2.	Carbon Monoxide Poisoning Carbon Monoxide Poisoning Complicated By Cyanide Poisoning
3.	Clostridial Myositis and Myonecrosis (Gas Gangrene)
4.	Crush Injury, Compartment Syndrome and Other Acute Traumatic Ischaemias
5.	Decompression Sickness
6.	Arterial Insufficiencies: Central Retinal Artery Occlusion Enhancement of Healing In Selected Problem Wounds
7.	Severe Anaemia
8.	Intracranial Abscess
9.	Necrotising Soft Tissue Infections
10.	Osteomyelitis (Refractory)
11.	Delayed Radiation Injury (Soft Tissue and Bony Necrosis)
12.	Compromised Grafts and Flaps
13.	Acute Thermal Burn Injury
14.	Idiopathic Sudden Sensorineural Hearing Loss* ** approved on October 8, 2011 by the UHMS Board of Directors*

HBOT remains the primary treatment modality for some conditions while in others it serves as an adjunct. For practical purposes, all the indicated clinical conditions can also be classified into either emergency or elective cases. We will focus on the following three emergency conditions for which HBOT serves as the primary treatment modality:
1) Decompression Sickness,
2) Gas embolism and,
3) Carbon Monoxide poisoning.

Decompression Sickness

Decompression sickness (DCS) is a clinical condition that is well known to all divers. We all have gases in our circulation as long as we are breathing. However, these gases do not form bubbles of significant size. Divers' tanks are filled with atmospheric air which consists of nitrogen (78.1%) and oxygen (20.9%). When a diver breathes with the air tank and descends, the partial pressures of these gases rise as he goes deeper.

Therefore, the total number of molecules of these gases inside the body will increase and most of these gases will dissolve in the blood.

When the diver ascends, the pressure surrounding him decreases. According to Boyles Law (which states that volume is inversely proportional to pressure), the volume of gases will increase with decreasing depths. If the diver goes up at a safe ascend rate, the dissolved gases diffuse out from the lungs. However, if the diver goes up too quickly, the dissolved gases will form bubbles. The bubbles formed will progressively get bigger as the diver ascends; and the bubbles will coalesce. As the oxygen is continuously being used up by tissues, the content of these bubbles becomes mainly nitrogen. When these nitrogen bubbles become big enough to impair organ function, symptoms of DCS arises.

As bubbles could be formed at any tissue with blood vessels, symptoms of DCS could be highly variable. Any diver who presents with a symptom that develops after surfacing should be considered as DCS until proved otherwise. The majority of patients will present within 6 hours from the last dive. Common symptoms of DCI include joint pain, myalgia, malaise, rash, paraesthesiae, flu-like symptoms etc. Traditionally, DCS was classified as Type 1 (musculoskeletal or joint – called bend) or Type 2 (other organ systems). Nowadays, DCS is classified according to the organ system involved e.g. neurological, musculoskeletal etc.

When seeing a diver with suspected DCS, the initial treatment at scene includes laying the victim down in the supine position, giving 100% normobaric oxygen, providing intravenous fluid and follows by arranging emergency transfer to a medical centre for further treatment. Hyperbaric Oxygen Therapy is the primary treatment modality for DCS. Basically HBOT reverses the process of DCS. When the patient diver receives HBOT, he is actually receiving two parts of treatment. The first part is pressure. As the pressure of the chamber rises, the bubbles formed inside the blood stream shrink in size and finally become small enough to pass through the capillaries and be exhaled through the lungs. The second part is the 100% oxygen. This pure oxygen will saturate the blood and "washes out" the nitrogen inside the bubbles along the pressure gradient. As the oxygen is constantly being used, the oxygen bubbles do not cause obstruction problems as nitrogen does.

Last but not least, review of the diving accident to look for underlying cause(s) is also very important. Preventing the occurrence of DCS in future dives is always better than treating DCS that has occurred. Divers could still suffer from DCS despite strict adherence to the dive tables. A medical fitness examination for all divers is the most ideal.

Gas embolism

Cerebral arterial gas embolism (CAGE) is one of the most fatal conditions to divers. It occurs when the gas bubble becomes an embolus and travels up to the cerebral circulation. Most commonly, the diver victim ascends far too quickly and sustains barotrauma of the lungs resulting in gas emboli entering the circulation. The diver often becomes unconscious upon surfacing. When the air hits the brain, the victim is often described as having a stroke-like presentation. Patients with pre-existing lung pathology such as bullae or restrictive airway disease are also at increased risks. For patients with a patent foramen ovale, the bubbles could go easily from the venous system to the cerebral circulation.

Apart from simple mechanical obstruction of blood vessels by bubbles, animal studies using a cranial window have demonstrated that bubbles can cause a progressive decline in blood flow even without vessel obstruction. This appeared to be caused by neutrophil-mediated endothelial damage induced by the bubbles. It is also observed that in some cases of CAGE, there is a phenomenon of delayed deterioration a few hours after clinical improvement. Proposed mechanisms for this include oedema, bubble re-growth and secondary thrombotic occlusion.

Other than diving, CAGE could also occur inside hospitals (iatrogenic causes) e.g. accidental intravenous air injections during clinical procedure, cardiopulmonary bypass accidents, needle biopsy of the lung, central venous catheter placement or disconnection etc. It is difficult, if not impossible, to prevent air entering the circulation during these procedures. It is fortunate that intravenous injection is often asymptomatic unless the volume is big, although clinical deficits can occur after intra-arterial injection of only small volumes of air. In humans, continuous IV infusion of oxygen at 10 mL/min has been reported as well tolerated, while 20 mL/min cause symptoms. While imaging studies sometimes reveal intravascular air, brain CT/MRI are often normal (since the bubbles have past already) even in the presence of severe neurological abnormalities.

Initial treatments of CAGE include 100% (normobaric) oxygen and putting the patient in the Trendellenberg position. HBOT is the primary treatment modality for gas embolism. The hyperbaric effect can not only reduce the bubble size and speed up the clearance of bubbles, but also inhibits neutrophil activation and diminishes secondary effects of bubble passage and thus the endothelial damage. The ischaemic time of brain tissue is relatively short and thus HBOT should be applied early in order to maximise the chance of recovery. Good results are often obtained if HBOT could be initiated within 6 hours of the insult. There are evidences to suggest that there is a continuum of outcome to the time to HBOT.

Carbon Monoxide poisoning

Carbon monoxide (CO) is odourless, colourless and tasteless. It binds haemoglobin (Hb) ~250 times stronger than oxygen. The carboxyhaemoglobin (COHb) formed does not carry oxygen, and that it shifts the O2-Hb curve to the left, making oxygen more difficult to unload. In addition to binding haemoglobin, CO also binds to myoglobin and cytochrome oxidase. All these results in decreased oxygen carrying capacity, decreased oxygen delivery to tissues and impaired mitochondrial oxygen utilisation. In addition to these hypoxic stress induced by elevated COHb, some injuries appear to be mediated by systemic oxidative stress. This was shown in the observation that COHb level does not correlate with the development of neurological or cognitive sequelae. It was postulated that CO induces lipid peroxidation in the brain, causing perivascular and neuronal injuries; and results in neurological sequelae.

In Western countries, CO poisoning is more commonly due to industrial or domestic accidents. However in Hong Kong, intentional CO poisoning is a particularly prevalence method in suicidal attempts.

Acute symptoms due to CO poisoning varies correlated with the level of COHb. Patients could be asymptomatic with COHb of up to 15%. Patients most commonly present with non-specific complaints including malaise, dizziness, headache and varying degrees of altered mentation. A transient loss of consciousness is also common. With level of COHb increases, seizure, cardiovascular collapse and death could result.

Treatment of CO poisoning includes oxygen and supportive measures. The half-life of COHb in air is 5 hours which will be reduced to 20 minutes in a HBO environment. There are conflicting evidences to support the use of HBOT for CO poisoning. The decision for HBOT is dependent on evidence of end organ damages e.g. coma, seizure, myocardial infarction or the level of COHb (with a lower threshold for pregnant women and children).

Considerations before applying HBOT

HBOT, like any other medical therapy, has its indications and risks. Risks to patients undergoing HBOT include barotrauma due to Eustachian tube dysfunction, sinus squeeze, claustrophobia, and reversible myopia. Patients with history of spontaneous pneumothorax, cardiovascular disease or seizure are also at higher risk. However, in the management of critically ill patients, these risks become relative and the escorting medical personnel should have the knowledge to manage any complications that may arise.

HBOT service in Hong Kong

Recompression Treatment Centre (RTC) is the only hyperbaric facility for public use in Hong Kong. The centre is located on the Stonecutter Island (which is actually no longer an Island after land reclamation). The service is coordinated by the Occupational Medicine Division of the Labour Department. When a patient indicated for HBOT is identified, the on-call medical officer could be contact for arranging HBOT. Most of the time, this is initiated by doctors from the public hospitals in Hong Kong.

However in Hong Kong, the service is under-utilised. Take CO poisoning as an example, only 6.8% patients indicated for HBOT did actually have received treatment (according to HKPIC data). There are many reasons for this. First, the RTC is not easily accessible. Second, this treatment centre is not affiliated to any medical facility; and that only basic resuscitation equipment are available. This may be taken into account by physicians in deciding the transfer of those critically ill patients. Third, there is no designated "hyperbaric medical team". The escorting medical staff often need to go into the chamber with the patient during treatment. This poses not only risks to the patient but also to the medical personnel.

HBOT consultation service was first commenced in the Accident & Emergency Department in the Queen Elizabeth Hospital since February 2012. This service provides consultations to medical conditions related to diving or any emergencies related to the use of HBOT. If the patient is deemed appropriate for HBOT, the service will include the liaison with the RTC for patient care and providing in-patient beds for transition care.

Dermatological Quiz

Dr. Ka-ho LAU

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

Dr. Ka-ho LAU

Fig.1 Close up of skin lesion at left shin

This 70-year-old man presented with this rapidly growing lesion at his left shin (Fig. 1) for six weeks. There was no history of preceding trauma.

Questions:

1. What is your provisional diagnosis or differential diagnoses?
2. How will you treat this patient?

(See P.33 for answers)

DCH (Diploma in Child Health Examination) Written Examination (MRCPCH Foundation of Practice) 2013

The Hong Kong College of Paediatricians (HKCPaed) and the Royal College of Paediatrics and Child Health (RCPCH) will hold a Joint Diploma in Child Health Examination in Hong Kong in 2013 awarding DCH (HK) and DCH (International) to successful candidates.

The DCH Examination is divided into two parts, written (MRCPCH Foundation of Practice (formerly known as Pt IA) and clinical. The written examination is the same as the MRCPCH Foundation of Practice Examination, which is held three times a year in Hong Kong. The next DCH written examination will be held on **Tuesday, 11 June 2013.** The examination fee is **HK$4,250** for Foundation of Practice. Candidates who wish to enter the examination must hold a recognized medical qualification in Hong Kong.

Application: Candidates who wish to sit the examination in Hong Kong **MUST** apply through the Hong Kong College of Paediatricians (HKCPaed). For application details, please visit the HKCPaed website at www.paediatrician.org.hk or call the College Secretariat at 28718871.

Deadline for Application: Friday, 5 April 2013

Important Notice

New Clinical Examination for DCH from April 2011

A new format of the DCH clinical examination has been adopted since April 2011. Details of the new format and other relevant information can be viewed on the RCPCH website at: www.rcpch.ac.uk

Prevention of Acute Mountain Sickness: A Global Perspective

Dr. Axel YC SIU

MBChB(CUHK), FRCS(Edin), FHKCEM, FHKAM(Emergency Medicine)
Specialist in Emergency Medicine

Dr. Axel YC SIU

Introduction

High altitude illness is a group of disorders developed when a susceptible person is exposed to high altitude. Patients may suffer from minor symptoms, including headache, nausea and sleep disturbance which can be grouped as Acute Mountain Sickness (AMS). However, some patients may have the risk in in developing the life-threatening conditions, namely High Altitude Pulmonary Oedema (HAPO) and High Altitude Cerebral Oedema (HACO).

The pathogenesis of AMS is still not well understood. However arterial hypoxaemia is considered as the primary problem which could be aggregated by hypoventilation, periodic breathing and exercise. The subsequent development of vasodilatation, increased capillary permeability, sodium and fluid retention and pulmonary hypertension would result in the disease manifestation.[1]

Prevention of Acute Mountain Sickness

General Measures

Though it is difficult to predict the individual susceptibility of AMS, it is generally accepted that slow ascent is the main key of prevention of AMS. Ascent should not be greater than 500m when you are at an altitude higher than 3000m. A famous slogan among trekkers is "Climb high and sleep low" which has already implied the important message of rest at an altitude as low as possible. A rest day without ascent is also a good choice after three to four days of continuous ascent. Another important point one should not forget is that one should never ascend when one has developed suspicious symptoms of AMS. Unfortunately most of the time, the early symptoms of AMS are non-specific. Trekkers will frequently deny themselves as suffering from AMS and attribute all these symptoms to other causes.

Sometimes, it is not possible to follow all the rules especially when one is going on a journey with a tight schedule. People have previous history of AMS or plan to take high risk activities will have a higher risk of development of AMS.[2] In all these cases, chemical prophylaxis will be indicated. (Table 1)

Acetazolamide

Acetazolamide has been a well recognised drug for prophylaxis of AMS for many years.[3,4] Acetazolamide helps to enhance acclimatisation. It does not cause any rebound effect when the drug is stopped at high altitude. The common side effects of acetazolamide include nausea, paraesthesia and dysgeusia. As acetazolamide has a diuretic effect, it will also increase urine output and may aggregate the problem of dehydration. Traditionally, the dosage for AMS prophylaxis is 250 to 500mg twice daily. But, there have been more evidences appeared that a reduced dose of 125mg twice daily may be as effective as the 250mg twice daily and it could help to reduce the incidence of side effects.[5,6]

Dexamethazone

Dexamethasone first gained interests to have been used as prophylaxis of AMS in 1980s.[7-10] The mechanism of action was not certain but it may be associated with the modification of capillary permeability. The side effects are similar to other corticosteroids, including hyperglycaemia, stomach irritation and effects on the immune system. It is usually used as the alternative when one cannot take acetazolamide because of hypersensitivity to sulphonamide or intolerant to the side effects. It is also used as the treatment for severe forms of high altitude disease, HACE and HAPE when immediate descent is not feasible. But rebound effects will emerge once the drug is stopped.

Table 1: The categorisation of risk of AMS[2]

Risk Group	
Low	No history of AMS and ascend to <= 2800m Take at least 2 days to arrive at 2500-300m with subsequent increase in sleep elevation < 500m/day
Moderate	With history of AMS and ascend to 2500-2800m in 1 day No history of AMS and ascend to >2800m in 1 day Ascend > 500m at altitude > 3000m
High	With history of AMS and ascend to >=2800m in 1 day With history of HAPE or HACE Ascend to > 3500m in 1 day Ascend > 500m/day at altitude > 3500m Very rapid ascent

HAPE: High Altitude Pulmonary Edema
HACE: High Altitude Cerebral Edema

Gingko Biloba

The active ingredient is extracted from Gingko Biloba leaves. It is usually marketed as a healthy food. The mechanism on prevention of AMS by Gingko Biloba is still not known but it may be related to its anti-oxidant effect. The current evidence on using Gingko Biloba as AMS prophylaxis is inconsistent. In some studies, it was shown that 24 hour pre-treatment with Gingo Biloba can effectively reduce the incidence of AMS. However

in other studies, it was found to be no better than the placebo.[11-14] It was postulated that the inconsistency was probably related to the difference in the source and composition of the Gingko Biloba products.[15]

Coca Leaves Product

Coca leaves are commonly found in South America as an herbal tea. It is also the practice of the local people to chew the coca leaves to tackle the symptoms of AMS. There are plenty of coca leaf products in the market for AMS prophylaxis and treatment. (Fig. 1) However, there is no well established evidence to explain the mechanism of prevention of AMS. On the other hand, it can increase catecholamine release and enhance the fluid shift which in turn reduces the effective plasma volume. A recent study also showed the consumption of coca leaves before ascent would increase the chance of development of AMS.[16]

Fig 1: Coca Leave Candy as a local remedy for AMS prophylaxis in South America

Roseroot (紅景天)

The scientific name of Roseroot is *Rhodiola rosea*. It is a renowned herbal medicine in Tibet and is commonly used for prophylaxis of AMS. It is usually advised to take it about one week before ascent in order to produce the prophylactic action. Besides as the drug of choice for AMS prophylaxis, it is also used as a tonic for brain in some of the Chinese medicine. However the exact mechanism of action is still not sure. It may be related to its cerebroprotective action. There was no major study to testify the effectiveness of roseroot in AMS prevention. Future research is required to prove whether it is worthwhile for clinical use.

Ibuprofen

Some recent published studies had investigated the use of ibuprofen 600mg three times a day. It was found that the incidence of AMS could be reduced by about 40% in a group of Western trekkers going up Mt. Qomolangma. However, it was commented that ibuprofen can mask the symptom of headache which is the essential criterion for AMS diagnosis. There were also no data to compare between ibuprofen and acetazolamide.[17,18]

Conclusion

In the current setting, acetazolamide is still the well proven medication appropriate for prophylaxis of AMS. Dexamethasone can be considered if one is unable to tolerate acetazolamide. A lot of other possible choices are available but most of them have not been verified by previous clinical trials. The clinical experiences of using Gingko Biloba were inconsistent and it was difficult to determine its role in AMS prophylaxis. More well-organised and controlled studies are required to justify their effectiveness in AMS prophylaxis.

Table 2: Recommended Dosage of medication for AMS prophylaxis by Wilderness Medical Society[2]

Medication	Dosage
Acetazolamide	Adult: 125mg twice daily by oral Pediatric: 2.5mg/kg every 12 hour by oral
Dexamethasone	Adult: 2mg every 4 hour or 4mg every 12 hour by oral Pediatric: Not indicated for prophylaxis

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How Emergency Medicine was practised on outlying islands of Hong Kong?

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St. John Hospital (SJH)

The foundation stone of this Victorian style construction was laid by the late Mr. Aw Boon Haw and Mr. Aw Boon Par in 1932. The building was 3 storey tall facing a magnificent picturesque eastern shore of Cheung Chau. It was originally built as a private cottage for the two brothers. It was later donated to the Hong Kong St. John Ambulance Brigade as a tuberculosis sanitorium in November 1934. During the World War II, it was a custom for the rescuing brigades to hoist a red-cross flag. St. John Hospital has therefore long been known as the "十字會" by Cheung Chau residents. It was converted to a convalescence hospital in 1946 when the Hong Kong Government started to pay a rent of HK$1.00 to the St. John Ambulance Brigade annually. The hospital had its official Chinese name "聖約翰紅十字會" in 1996, however, this name has not been widely used.

The early casualty, later A&E room, was located on the 1st floor of the building. It was a room just big enough to accommodate 3 beds and 1 consultation desk. It had an entrance at the west and exit at the east enhancing a smooth patient flow. One of the 3 beds was fixed inside a concrete partition next to the doctor's desk. This small partition was initially used as an examination room or observation room. Enlargement project of the A&E department was done in October 1995 when the wall between the A&E room and male ward was pushed further north and a nursing triage/ registration station was reconstructed.

Operating Hours of the Early Casualty

The casualty service of St. John Hospital began in the fifties. At first it operated only during the office hours. The on-called medical officer who was assigned to wards and out-patient clinic had to be called to attend the casualty on demand. The casualty service extended to 24 hours a day on 28th November 1983.

There has been a hilarious legend depicting how doctors were called to the casualty in those era of no pagers and mobile phones. When there was a need of the doctor to attend a patient, a red flag would be hoisted in the tallest part of the hospital building where everyone could see it. The oncall medical officer, who would probably be swimming on the beach nearby would dash to the casualty with his wet body still dribbling.

Manpower

The medical officers shared the duty in St. John Hospital on a 24 hours roster ever since the commencement of the service. A team of 4 doctors was led by a senior medical officer of the Medical and Health Services Department in the early days. The senior medical officer was also the "Medical Superintendent" who had to look over all the services of the hospital. Dr. D. Wijedoru, a Sri-Lankan doctor, took up the post of Medical Superintendent in 1987. She was appointed to be the first Hospital Chief Executive of SJH when the hospital was taken over by the Hospital Authority in December 1991.

With the liaison with the A&E Department of RHTSK, trainees of the Hong Kong College of Emergency Medicine (HKCEM) from RHTSK began to support the service of SJH in 2001. Under the influence of the visiting consultants from RHTSK, the quality of services of A&E has been greatly improved. An extra medical officer was employed in July 2004 to make up the current team of 6 doctors. SJH employed the first fellow of the HKCEM in August 2004 to be the Associate Consultant in charge of the A&E Department.

Since the early days of A&E SJH, there were altogether 3 nurses on duty at any shift, one of whom is solely responsible for the triage and nursing care to the A&E patients.

The Practice of Emergency Medicine in A&E SJH

In the early days, patients were not triaged. They were first addressed by the nurse at the registration counter before they are led to a queue to wait for the on-call medical officer in the corridor. The average waiting time was around 20 minutes. Of course, patients who were brought to the casualty by ambulances would have the privilege to cut the queue. It was not until 1996 when the new "Computerised Management System" was introduced that the management of SJH started to adopt the triage system as laid down by the COC (A&E) of the Hospital Authority.

The first pathology / biochemistry laboratory was set up in SJH in November 1986 which was officially opened in July 1987. This laboratory provided comprehensive support to both in-patients and A&E patients until its closure on 31st July 2000. Thereafter, urgent biochemical tests were largely replaced by several "Point-of-care"

tests machines thereafter, e.g. Haemocue and i-stat machines.

A mini blood bank was established in the casualty in early 1986. Since then, the hospital was allowed to stock two units of O positive blood for emergency resuscitation.

Electrocardiography was not available until the first ECG machine was purchased in 1980's.

The radiology department commenced its service on 5th November 1974. It continued to serve the SJH patients during the office hours. After office hours, patients would have to be transferred to an urban hospital if urgent imaging study was required. The first Aloka portable sized ultrasound machine (HK$500k) was donated by the daughter of Mr. Aw Boon Haw, Ms. Shirley Aw in 1994. The second more sophisticated ultrasound machine ($480k) was donated by the Ho Tung Charity Fund in November 2004 exactly ten years later.

CASEVAC in SJH

St. John Hospital is a rural hospital in an outlying island of Hong Kong. Before 2001, the management of patients had been taken care of by doctors without specialist training. Patients were brought to urban hospitals by helicopters or police launches after a brief assessment in SJH. The first helipad for operations of the Government Flying Service was built in early 1986. It was located within 2 minutes walk from the hospital building of SJH. Before its construction, helicopters had to land and to take off from a football sports ground which was almost 20 minutes walk from the hospital building.

CASEVAC is a shorthand word that means "casualty evacuation", i.e. getting the wounded person away from the incident site to a designated safe area for the purposes of basic life support, resuscitation and stabilisation of injuries, or additionally, evacuation to the nearest medical facility where a more complex medical care can be provided. In Hong Kong, the service has been extended to the evacuation of the patient from a remote incident site or a rural medical facility to an appropriate medical centre (urban hospital) for further treatment.

Since 2001, doctors with emergency medicine background began to serve in SJH. In 2004, the first emergency physician (HKCEM fellow) was employed to conduct regular clinical audits, mortality & morbidity meetings and trainings to the clinical staff. In a study comparing all patients being transferred to urban hospital from SJH by helicopters or police launches in the latter half of year 2000 and 2005, the author has demonstrated the presence of appropriately qualified emergency medicine doctors could successfully stabilise critically ill patients before CASEVAC. These patients showed a significant reduction of length of hospital stay in the urban hospitals. (Chee et al 2006).

Federation President Cup Soccer Five and Basketball Tournament 2012

The Federation President Cup Soccer Five and Basketball Tournament 2012 was held at the Ying Wa College on 18 Nov, 2 Dec 2012 and 13 Jan 2013. This is the Federation's second successful year in organising also basketball matches. This year, we had 7 participating teams for the Soccer Five Tournament –AstraZeneca HK, Hong Kong Dental Association, Jacobson Pharma Group, Pfizer Corporation Hong Kong Limited, Federation Invitation Team, Hong Kong College of Psychiatrists and Hong Kong Medical Association; and 9 teams for the Basketball Tournament –AstraZeneca HK, Baxter Healthcare Limited, Hong Kong Dental Association, Hong Kong Urological Association, Jacobson Pharma Group, Janssen, Pfizer Corporation Hong Kong Limited and Sanofi-aventis Hong Kong Limited. The highlight of the event was an Exhibition match between our Federation United Team, comprising of players from the winner and runners-up of the 2011 championship, and the Sun Hei All Star Football Team on the closing day.

We were glad to have our honourable guest Mr. Dick LEE in joining us to present trophies to the winning teams.

We would like to congratulate all the winners in the tournaments and express our sincere gratitude to all the participants and guests for their active participation and support. We look forward to seeing you again at the Federation President Cup Soccer Five & Basketball Tournament in 2013 !

Precious Moments throughout the Tournament

Award Presentation

The followings were the results of the tournaments:

Soccer Five Tournament

Champion	: Pfizer Corporation Hong Kong Limited
1st Runner Up	: Federation Invitation Team
2nd Runner Up	: Hong Kong Medical Association
Top Scorer	: Mr. Tsz-kin NG, Pfizer Corporation Hong Kong Limited

Basketball Tournament

Champion	: Pfizer Corporation Hong Kong Limited
1st Runner Up	: Jacobson Pharma Group
2nd Runner Up	: Janssen
Top Scorer	: Mr. Ka-wai YUEN, Pfizer Corporation Hong Kong Limited

Exhibition Match

Champion	: Sun Hei All Star Football Team
1st Runner Up	: Federation United Team

Public Talk on Dementia

On 18th November, a Public Talk was held at the Federation's Lecture Hall attended by over 70 participants. It was our honour and privilege to have 2 speakers from the Jockey Club Centre for Positive Ageing which is a comprehensive care centre for people with dementia. The first speaker, Professor Timothy KWOK, is the Director of the centre and a specialist in Geriatric and Internal Medicine. His research interests include dementia, nutrition and palliative care. The second speaker, Mr. Andrew LAU, one of the centre's social workers, is designing and arranging a variety of trainings to patients on recognition, recreation and social capability. The topics include an introduction to dementia, its symptoms and treatment and family caregivers' trainings.

The participants' attentiveness and active questioning, together with the informal exchange at the tea break, helped to complete a very successful afternoon of public educational event. We would like to express our sincere gratitude to our supporting organisation, the Jockey Club Centre for Positive Ageing, for their support to the event without which this informative public talk could not be realised.

Public Talk on Diabetes- Flameless Cooking for Christmas

On 22nd December, a Public Talk for Diabetes patients was held at the Federation's Lecture Hall. It was our honour and privilege to co-organise the event with the Hong Kong Practising Dietitians Union (HKPDU). Dr. Vanessa NG, a resident specialist in Endocrinology and Diabetes, delivered a brief talk on Diabetes therapy. Another speaker, Ms. Sally POON, Chairperson of HKPDU, taught the audience on how to prepare healthy meals and snacks through flameless cooking such as cold crispy cucumbers, Salsa sauce with whole-wheat crackers and lemon grass ginger tea. The participants' active questioning and engagement in the cooking demonstration and tasting marked a wonderful ending of this event. We would like to express our sincere gratitude to our sponsor, Novartis, for their generosity to the event so that everybody was able to prepare healthy meals for the joyful Christmas.

The Federation's Time in RTHK Health Programme

Starting from 3 January 2013, the Federation collaborates with a very popular health programme (精靈一點) of RTHK Radio One to run a regular medical and healthcare information session, namely 'The Federation's Time'. It runs from 1.30pm to 2pm every Thursday. Through representatives of different member societies of different specialties, the goal of the project is to disseminate medical and healthcare knowledge to the general public.

In January, the participating guest speakers, on behalf of their societies, includes Dr. Siu-keung LAM and Dr. N SIU from the Hong Kong Society for Colposcopy and Cervical Pathology, Dr. Hiu-fai HO from the Hong Kong College of Emergency Medicine, Dr. William FOO from the Hong Kong Society of Clinical Oncology, Dr. Hau-kwun CHEUNG and CMP Wenshu FU from the Association for Integrative Aesthetic Medicine, and Prof. Siu-wa TANG and Dr. Michael WONG from the Hong Kong Society of Biological Psychiatry.

We would like to express our gratitude to the programme presenters, Mr. Kwok-wah SIU and Ms. Wendy CHEUNG, in realising this meaningful programme and making the programme informative and beneficial to the general public. We would also like to extend our appreciation to all the above participating guest speakers and their member societies.

The programme will run from January to March, July to September and November to December, with many more hot topics to be discussed. Your active participation and support is highly encouraged through browsing the on-line updated radio programme on the following link - **http://www.fmshk.org/fmshk.php?id=295**

Certificate Course on

Dental Nursing in Oral Surgery 2013

Jointly organised by

The Federation of Medical Societies of Hong Kong

The Hong Kong Association of Oral and Maxillofacial Surgeons Limited

Objectives: Modern dentistry has been continuously evolving. Oral surgical procedures are commonly performed nowadays in the dental office. Good dental nursing is a key component to success in this setting. Our course aims at introducing contemporary concept on dental nursing in oral and maxillofacial surgery.

Date	Topics	Speakers
19 April	Oral and Maxillofacial Surgery Overview	Dr. Mike Yiu-yan LEUNG *Assistant Professor* *The University of Hong Kong*
26 April	Minor Oral Surgery Overview	Dr. Julianna Cho-hwei LIEW *Specialist in Oral and Maxillofacial Surgery* *Dental Officer, Queen Mary Hospital*
3 May	Dental Implant Surgery	Dr. Raymond Lop-keung CHOW *Private Practice*
10 May	Peri-operative Nursing	Ms. Phenita Kit-ching LI Ms. Lai-har LEUNG *OT nurse, Queen Mary Hospital*
24 May	Medical Emergency in Dental Clinic	Dr. Alfred Sze-lok LAU *Private Practice*
31 May	Sedation in Oral Surgery / Dentistry	Dr. John Matthew Say-woon LOW *Private Practice*

Date : 19 April 2013 – 31 May 2013 (Every Friday, Skip 17 May 2013)
Time : 7:00 p.m. – 8:30 p.m.
Venue : Lecture Hall, 4/F., Duke of Windsor Social Service Building, 15 Hennessy Road, Wanchai, Hong Kong
Language Media : Cantonese (Supplemented with English)
Course Fee : HK$750 (6 sessions)
Certificate : Awarded to participants with a minimum attendance of 70%
Enquiry : The Secretariat of The Federation of Medical Societies of Hong Kong
Tel.: 2527 8898 Fax: 2865 0345 Email: info@fmshk.org

CME / CPD Accreditation in application

A total of **9 CNE** points for the whole course and the points will be awarded according to the number of hours attended.
Application form can be downloaded from website: http://www.fmshk.org

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					* Joint Surgical Symposium - A Difficult Pancreatectomy * Oxfam Trailwalker 2012 Prize Presentation Ceremony **1**	* HKMA Singing Competition * MPS Workshop – Mastering Adverse Outcomes **2**
* MPS Workshop– Mastering Difficult Interactions with Patients * Joint Professional Tennis Tournament 2013 **3**	**4**	* HKMA Tai Po Community Network - Advances Prevention on Meales, Mumps, Rubella & Varicella in Community * FMSHK Officers' Meeting * HKMA Council Meeting **5**	* Joint Professional Golf Tournament 2013 * MPS Workshop – Mastering Shared Decision Making **6**	* MPS Workshop – Mastering Your Risk **7**	**8**	* MPS Workshop – Mastering Professional Interactions * Refresher Course for Health Care Providers 2012/2013 **9**
* HKMA Football Day 2013 * MPS Workshop – Mastering Adverse Outcomes **10**	* HKMA Choir Family Concert **11**	* HKMA Kowloon West Community Network– Chronic Prostatitis and Related Problems **12**	* Hong Kong Neurosurgical Society Monthly Academic Meeting –Advanced Imaging for Brain Tumour * MPS Workshop – Mastering Difficult Interactions with Patients **13**	* HKMA Kowloon East Community Network – A Sharing Session on How to Manage Children with Autism * HKMA Structured CME Programme with Hong Kong Sanatorium & Hospital Year 2013 – The Management of Abnormal Vaginal Bleeding * MPS Workshop – Mastering Adverse Outcomes * Dietary Manipulation in Skin Disorders **14**	* HKMA Yau Tsim Mong Community Network – Advancement in the Treatment of IBS **15**	* MPS Workshop – Mastering Your Risk **16**
* MPS Workshop – Mastering Shared Decision Making **17**	**18**	**19**	* MPS Workshop – Mastering Shared Decision Making **20**	* HKMA New Territories West Community Network - Long Duration and Real Effectiveness of Quadrivalent HPV Vaccine * MPS Workshop – Mastering Professional Interactions * FMSHK Executive Committee Meeting **21**	**22**	**23**
* HKMAPS 1st Seasonal Competition & Sharing **24**	**25**	* HKMA Kowloon West Community Network – Allergic Rhinitis & Asthma: An Update **26**	* HKMA Shatin Doctors Network – Penile Surgery under LA in a Surgical Clinic **27**	* HKMA Kowloon East Community Network - New Approach to Cardiovascular Risk Management – From Heart to Kidney **28**	* HKMA Luoyang Peony Tour **29**	* HKMA Luoyang Peony Tour * 9th CT Coronary Angiography Teaching Course 2013– Intermediate & Advanced Level **30**
* HKMA Luoyang Peony Tour * 9th CT Coronary Angiography Teaching Course 2013– Intermediate & Advanced Level **31**						

Date / Time	Function	Enquiry / Remarks
1 FRI 8:00 am	**Joint Surgical Symposium - A Difficult Pancreatectomy** Organiser: Department of Surgery, The University of Hong Kong & Hong Kong Sanatorium & Hospital, Chairman: Professor William WEI, Speakers: Professor FAN Sheung-Tat & Dr. CHEUNG Tan-To, Venue: Hong Kong Sanatorium & Hospital	Department of Surgery, Hong Kong Sanatorium & Hospital Tel: 2835 8698 1 CME point
7:00 pm	**Oxfam Trailwalker 2012 Prize Presentation Ceremony** Organiser: The Hong Kong Medical Association, Venue: YMCA, Tsimshatsui	Ms. Dorothy KWOK Tel: 2527 8285
2 SAT 12:00 nn	**HKMA Singing Competition** Organiser: The Hong Kong Medical Association, Venue: Neway CEO, 2-8 Sugar Street, Causeway Bay	Miss Phoebe WONG Tel: 2527 8285
2:30 pm	**MPS Workshop – Mastering Adverse Outcomes** Organiser: The Hong Kong Medical Association, Speaker: Dr. Ares LEUNG, Venue: HKMA Dr. Li Shu Pui Professional Education Centre, 2/F, Chinese Club Building, 21-22 Connaught Road, Central, Hong Kong	HKMA CME Dept. Tel: 2527 8452 2.5 CME points
3 SUN 2:30 pm	**MPS Workshop– Mastering Difficult Interactions with Patients** Organiser: The Hong Kong Medical Association, Speaker: Dr. Justin CHENG, Venue: HKMA Dr. Li Shu Pui Professional Education Centre, 2/F, Chinese Club Building, 21-22 Connaught Road, Central, Hong Kong	HKMA CME Dept. Tel: 2527 8452 2.5 CME points
6:00 pm	**Joint Professional Tennis Tournament 2013** Organiser: The Hong Kong Medical Association, Venue: SCAA Kingspark Tennis Courts	Ms. Dorothy KWOK Tel: 2527 8285
5 TUE 1:00 pm	**HKMA Tai Po Community Network - Advances Prevention on Meales, Mumps, Rubella & Varicella in Community** Organiser: HKMA Tai Po Community Network, Speaker: Dr. LEE Cheuk Hon, Venue: Uptown Plaza Tai Po Chiu Chow Garden Restaurant	Mr Steve WONG Tel: 9045 5134
8:00 pm	**FMSHK Officers' Meeting** Organiser: The Federation of Medical Societies of Hong Kong, Venue: Gallop, 2/F., Hong Kong Jockey Club Club House, Shan Kwong Road, Happy Valley, Hong Kong	Ms. Nancy CHAN Tel: 2527 8898
8:00 pm	**HKMA Council Meeting** Organiser: The Hong Kong Medical Association, Chairman: Dr. TSE Hung Hing, Venue: HKMA Head Office (5/F, Duke of Windsor Social Service Building, 15 Hennessy Road, Hong Kong)	Ms. Christine WONG Tel: 2527 8285
6 WED 11:00 am	**Joint Professional Golf Tournament 2013** Organiser: The Hong Kong Medical Association, Venue: Jockey Club Kau Sai Chau Public Golf Course	Ms. Dorothy KWOK Tel: 2527 8285
6:30 pm	**MPS Workshop – Mastering Shared Decision Making** Organiser: The Hong Kong Medical Association, Speaker: Dr. Anthony FUNG, Venue: HKMA Dr. Li Shu Pui Professional Education Centre, 2/F, Chinese Club Building, 21-22 Connaught Road, Central, Hong Kong	HKMA CME Dept. Tel: 2527 8452 2.5 CME points
7 THU 6:30 pm	**MPS Workshop – Mastering Your Risk** Organiser: The Hong Kong Medical Association, Speaker: Dr. Danny LEE, Venue: HKMA Dr. Li Shu Pui Professional Education Centre, 2/F, Chinese Club Building, 21-22 Connaught Road, Central, Hong Kong	HKMA CME Dept. Tel: 2527 8452 2.5 CME points
9 SAT 2:00 pm	**MPS Workshop – Mastering Professional Interactions** Organiser: The Hong Kong Medical Association, Speaker: Dr. Danny LEE, Venue: Holiday Inn	HKMA CME Dept. Tel: 2527 8452 2.5 CME points
2:30 pm	**Refresher Course for Health Care Providers 2012/2013** Organiser: The Hong Kong Medical Association, Speaker: Dr. Ronson Chi Tang LI, Venue: OLMH	HKMA CME Dept. Tel: 2527 8452 2 CME points
10 SUN 12:00 nn	**HKMA Football Day 2013** Organiser: The Hong Kong Medical Association, Venue: CUHK Sir Philip Hadden–Cave Football Field	Ms. Dorothy KWOK Tel: 2527 8285
2:30 pm	**MPS Workshop – Mastering Adverse Outcomes** Organiser: The Hong Kong Medical Association, Speaker: Dr. Ares LEUNG, Venue: HKMA Dr. Li Shu Pui Professional Education Centre, 2/F, Chinese Club Building, 21-22 Connaught Road, Central, Hong Kong	HKMA CME Dept. Tel: 2527 8452 2.5 CME points
11 MON 8:00 pm	**HKMA Choir Family Concert** Organiser: The Hong Kong Medical Association, Venue: Theatre, Sheung Wan Civic Centre	Ms. Candy YUEN Tel: 2527 8285
12 TUE 1:00 pm	**HKMA Kowloon West Community Network– Chronic Prostatitis and Related Problems** Organiser: HKMA Kowloon West Community Network, Chairman: Dr. CHAN Siu Man, Bernard, Speaker: Dr. KWOK Tin Fook, Venue: Crystal Room I-III, 30/F., Panda Hotel, 3 Tsuen Wah Street, Tsuen Wan, N.T.	Ms. Candice TONG Tel: 2527 8285
13 WED 7:30 am	**Hong Kong Neurosurgical Society Monthly Academic Meeting –Advanced Imaging for Brain Tumour** Organiser: Hong Kong Neurosurgical Society, Chairman: Dr. LEUNG Kar Ming, Speaker: Dr. CHU Chi Ho, Alberto, Venue: Seminar Room, Ground Floor, Block A, Queen Elizabeth Hospital	Dr. Gilberto LEUNG Tel: 2255 3368 1.5 CME points
6:30 pm	**MPS Workshop – Mastering Difficult Interactions with Patients** Organiser: The Hong Kong Medical Association, Speaker: Dr. Justin CHENG, Venue: HKMA Dr. Li Shu Pui Professional Education Centre, 2/F, Chinese Club Building, 21-22 Connaught Road, Central, Hong Kong	HKMA CME Dept. Tel: 2527 8452 2.5 CME points
14 THU 1:00 pm	**HKMA Kowloon East Community Network – A Sharing Session on How to Manage Children with Autism** Organiser: HKMA Kowloon East Community Network, Chairman: Dr. MA Ping Kwan, Danny, Speaker: Mr. PANG Chi Wa, Fritz, Venue: East Ocean Seafood Restaurant,Shop 137, 1/F, Metro City Plaza 3,8 Mau Yip Road, Tseung Kwan O, Kowloon	Miss Hana YEUNG Tel: 2527 8285

Date / Time	Function	Enquiry / Remarks
14 THU 2:00 pm	**HKMA Structured CME Programme with Hong Kong Sanatorium & Hospital Year 2013 – The Management of Abnormal Vaginal Bleeding** Organiser: The Hong Kong Medical Association, Speaker: Dr. TAM Kar Fai, Venue: HKMA Dr. Li Shu Pui Professional Education Centre, 2/F, Chinese Club Building, 21-22 Connaught Road, Central, Hong Kong	HKMA CME Dept. Tel: 2527 8452 1 CME point
6:30 pm	**MPS Workshop – Mastering Adverse Outcomes** Organiser: The Hong Kong Medical Association, Speaker: Dr. Emily HUNG, Venue: Eaton Smart	HKMA CME Dept. Tel: 2527 8452 2.5 CME points
7:00 pm	**Dietary Manipulation in Skin Disorders** Organiser: Association for Integrative Aesthetic Medicine, Hong Kong, Chairman: De. HAU Kwun Cheung, Speakers: Dr. CHAN Wai Ming, Dr. TANG Yuk Ming, Prof. HUANG Feili & Dr. YU Chau Leung, Edwin, Venue: HKMA Dr. Li Shu Pui Professional Education Centre, 2/F, Chinese Club Building, 21-22 Connaught Road, Central, Hong Kong	Ms Themis CHIU Tel: 3575 8600 2 CME points
15 FRI 1:00 pm	**HKMA Yau Tsim Mong Community Network – Advancement in the Treatment of IBS** Organiser: HKMA Yau Tsim Mong Community Network, Chairman: Dr. LAM Tzit Yuen, David, Speaker: Prof. Pere CLAVÉ, Venue: Jade Ballroom, Level 2, Eaton Smart, Hong Kong380 Nathan Road, Kowloon	Ms. Candice TONG Tel: 2527 8285
16 SAT 2:00 pm	**MPS Workshop – Mastering Your Risk** Organiser: The Hong Kong Medical Association, Speaker: Dr. Danny LEE, Venue: Holiday Inn	HKMA CME Dept. Tel: 2527 8452 2.5 CME points
17 SUN 2:00 pm	**MPS Workshop – Mastering Shared Decision Making** Organiser: The Hong Kong Medical Association, Speaker: Dr. Justin CHENG, Venue: Holiday Inn	HKMA CME Dept. Tel: 2527 8452 2.5 CME points
20 WED 6:30 pm	**MPS Workshop – Mastering Shared Decision Making** Organiser: The Hong Kong Medical Association, Speaker: Dr. Anthony FUNG, Venue: HKMA Dr. Li Shu Pui Professional Education Centre, 2/F, Chinese Club Building, 21-22 Connaught Road, Central, Hong Kong	HKMA CME Dept. Tel: 2527 8452 2.5 CME points
21 THU 1:00 pm	**HKMA New Territories West Community Network - Long Duration and Real Effectiveness of Quadrivalent HPV Vaccine** Organiser: HKMA New Territories West Community Network, Chairman: Dr. CHAN Lam Fung, Lambert, Speaker: Dr. KUN Ka Yan, Venue: Plentiful Delight Banquet, 1/F, Ho Shun Tai Building, 10 Sai Ching Street, Yuen Long	Miss Hana YEUNG Tel: 2527 8285
6:30 pm	**MPS Workshop – Mastering Professional Interactions** Organiser: The Hong Kong Medical Association, Speaker: Dr. HAU Kwun Cheung, Venue: HKMA Dr. Li Shu Pui Professional Education Centre, 2/F, Chinese Club Building, 21-22 Connaught Road, Central, Hong Kong	HKMA CME Dept. Tel: 2527 8452 2.5 CME points
8:00 pm	**FMSHK Executive Committee Meeting** Organiser: The Federation of Medical Societies of Hong Kong, Venue: Council Chamber, 4/F, Duke of Windsor Social Service Building, 15 Hennessy Road, Wanchai, Hong Kong	Ms. Nancy CHAN Tel: 2527 8898
24 SUN 2:00 pm	**HKMAPS 1st Seasonal Competition & Sharing** Organiser: The Hong Kong Medical Association, Venue: HKMA Head Office (5/F, Duke of Windsor Social Service Building, 15 Hennessy Road, Hong Kong)	Miss Nadia HO Tel: 2527 8285
26 TUE 1:00 pm	**HKMA Kowloon West Community Network – Allergic Rhinitis & Asthma: An Update** Organiser: HKMA Kowloon West Community Network, Chairman: Dr. LAM Ngam, Raymond, Speaker: Dr. WAI Kin Hang, Talen, Venue: Crystal Room I-III, 30/F, Panda Hotel, 3 Tsuen Wah Street, Tsuen Wan, N.T.	Ms. Candice TONG Tel: 2527 8285
27 WED 1:00 pm	**HKMA Shatin Doctors Network – Penile Surgery under LA in a Surgical Clinic** Organiser: HKMA Shatin Doctors Network, Chairman: Dr. MAK Wing Kin, Speaker: Dr. LEE Yiu Kee, Alan, Venue: Star Floating Seafood Restaurant, 55-57 Tai Chung Kiu Road, Sha Tin	Ms. Candice TONG Tel: 2527 8285
28 THU 1:00 pm	**HKMA Kowloon East Community Network - New Approach to Cardiovascular Risk Management – From Heart to Kidney** Organiser: HKMA Kowloon East Community Network, Chairman: Dr. MA Ping Kwan, Danny, Speaker: Dr. WONG Ming Ho, Venue: East Ocean Seafood Restaurant,Shop 137, 1/F, Metro City Plaza 3,8 Mau Yip Road, Tseung Kwan O, Kowloon	Miss Hana YEUNG Tel: 2527 8285
29 FRI *(30,31,1,2)*	**HKMA Luoyang Peony Tour** Organiser: The Hong Kong Medical Association, Venue: Luoyang	Miss Phoebe WONG Tel: 2527 8285
30 SAT *(31)*	**9th CT Coronary Angiography Teaching Course 2013– Intermediate & Advanced Level** Organiser: Hong Kong College of Radiologists, Speakers: Dr. Szilard Voros, Dr. Stephen Cheung, Dr. Jack Shu, Dr. Sonny Chiu & Dr. John Hoe, Venue: Pamela Youde Nethersole Eastern Hospital, Chai Wan	Ms. Lai Wai Yee, Ada Tel: 2871 8788

Upcoming Meeting

10-13/7/2013	**9th Asian Dermatological Congress 2013** Organisers: Asian Dermatological Association, Hong Kong College of Dermatologists & the Hong Kong Society of Dermatology and Venereology, Chairman: Prof. Henry HL CHAN, Venue: Hong Kong Convention & Exhibition Centre, Enquiry: ADC 2013 Secretariat Tel: 3151 8900
26-27/4/2013	**The 7th Annual Scientific Meeting- Enhancement and Removal of Memory** Organiser: Hong Kong Society of Biological Psychiatry, Venue: Eaton Smart Hong Kong, Enquiry: Secretariat Tel: 9658 9650

藥品實務技能提升課程

課程對象：

- 獸醫診所助理
- 西藥店營業員
- 零售藥房櫃台員
- 新入藥業行業行政人員
- 外國回流藥劑師
- 資本市場投資行政人員
- 任職分發藥物之醫療專業人士，如診所護士及安老院舍護理員

課程編號：C221

課程目的：

- 經過課程專業指導重點法規、了解香港零售藥品、保健品等共十萬項目的貨架銷售法規要求；
- 提升「零拆」銷售的專業知識；
- 提升「原盒」Original Pack藥品銷售的市場知識；
- 提升「一盤貨」銷售管理和配套供銷實務；
- 藥房開業實務；
- 怎樣聯繫醫生、牙醫、獸醫藥品實務管理。

聯合主辦：

香港醫學組織聯會

香港醫藥經銷業協會

日期	主題	講師
4月20日	• 藥品分類、保健品實務 • 危險藥品	Mr. Nelson Lam
4月27日	• 專業和員工法規守則	Mr. Stanley Wong
5月4日	• 藥品零售、批發管理 • 法規修訂、進出口規範	Mr. Stanley Wong Mr. Nelson Lam
5月11日	• 連鎖藥房實習 • 零售收銀系統和報表實務	Mr. Nelson Lam Mr. Chester Cheng
5月18日	• 牙醫和獸醫專題 • 怎樣與醫生藥師實務溝通	Mr. Nelson Lam Mr. Stanley Wong
5月25日	• 獸醫醫院（藥品）實習 • 中國醫藥保（省、市、鐵路）實務與香港的醫改發展	Mr. Nelson Lam

講師：

Chief Tutor

Mr. Nelson Lam
課程策劃人 - 香港醫藥經銷業協會
連鎖藥房總監
香港中文大學藥劑經濟學哲學碩士（2006）
藥劑學士（英國巴富大學藥劑學院藥學士）（1978）
註冊行政財務規劃師（2010）

Member Tutors

Mr. Stanley Wong
美國香港執業註冊藥師
The University of Hong Kong,
Master of Medical Science-Pharmacology

Dr. Gavin Liu
獸醫連鎖醫院總監
Bachelor of Veterinary Medicine

Mr. Chester Cheng
醫療軟件開發總工程師
Bachelor of Computer Information Systems

日期：2013年4月20, 27日及5月4, 11, 18, 25日(逢星期六)
時間：晚上7：30至9：00（每課1.5小時）
地點：香港灣仔軒尼詩道15號溫莎公爵社會服務大廈4樓演講廳
授課語言：廣東話
費用：港幣 $980
查詢：香港醫學組織聯會秘書處 電話：2527 8898 傳真：2865 0345 電郵：info@fmshk.org

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有興趣之人士可登入本網站www.fmshk.org下載報名表格，填妥後連同有關費用以郵寄或親身交回本秘書處

Answers to Dermatological Quiz

1. This elderly man presented with this hyperkeratotic nodule of about 1.3cm in diameter with crateriform centre and a keratotic core. The lesion was quite sharply defined at the edges and was most compatible with keratoacanthoma. This type of lesion typically develops over a period of a few weeks and progressively increases in size quite rapidly. Other differential diagnoses include squamous cell carcinoma which usually grows much slowly over a period of years. Basal cell carcinoma could be considered but the pearly telangiectatic edge was lacking.

2. Excisional biopsy and histological examination to confirm the typical morphology is essential in order to rule out squamous cell carcinoma (SCC). The whole lesion should be excised to preserve the symmetrical volcano-like architecture that will be helpful to differentiate it from SCC. The tumour is comprised of well-differentiated keratinocytes with brightly eosinophilic glassy cytoplasm surrounding the core filled with cornified material. Lymphocytic and eosinophilic inflammatory infiltrates are usually present at the dermis. Small intratumoural abscesses of neutrophils are common. As the lesion regresses, the dome-shaped architecture flattens and fibrosis develops at the base of the lesion. Cytologic atypia is minimal in keratoacanthoma. If hyperchomatic nuclei or abnormal mitoses are prominent, then the diagnosis of invasive SCC should be considered.

Dr. Ka-ho LAU
MBBS(HK), FRCP(Glasg, Edin), FHKCP, FHKAM(Med)
Private Dermatologist

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Moderate Risk

Hypertension

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of nonfatal MI + fatal CHD in patients with hypertension (p=0.0005)[1]

Diabetes

37% RRR

time to first occurrence of major CV events in patients with diabetes (p=0.0005)[2]

High Risk

CHD

59% RRR

of nonfatal MI in patients with CHD (p=0.0001)[3]

CHD

22% additional RRR

of major CV events in patients with CHD (p<0.001)[4]

Highest Risk

ACS

16% RRR

of major CV events in patients with ACS (p=0.005)[5]

References: 1. Sever PS, Dahlöf B, Poulter nR, et al; for the ASCOT investigators. Prevention of coronary and stroke events with atorvastatin in hypertensive patients who have average or lower-than-average cholesterol concentrations, in the Anglo-Scandinavian Cardiac Outcomes Trial-lipid lowering Arm (ASCOT-lla): a multicentre randomised controlled trial. Lancet. 2003;361(9364):1149-1158. **2.** Colhoun hm, Betteridge DJ, Durrington Pn, et al; on behalf of the CARDS investigators. Primary prevention of cardiovascular disease with atorvastatin in type 2 diabetes in the Collaborative Atorvastatin Diabetes Study (CARDS): multicentre randomised placebo-controlled trial. Lancet. 2004;364(9435):685-696. **3.** Athyros VG, Papageorgiou AA, mercouris BR, et al. Treatment with atorvastatin to the national Cholesterol education Program goal versus 'usual' care in secondary coronary heart disease prevention: the GReek Atorvastatin and Coronary-heart-disease evaluation (GREACE) study. Curr Med Res Opin. 2002;18(4):220-228. **4.** laRosa JC, Grundy Sm, waters DD, et al; for the Treating to new Targets (TnT) investigators intensive lipid lowering with atorvastatin in patients with stable coronary disease. N Engl J Med. 2005;352(14):1425-1435. **5.** Cannon CP, Braunwald e, mcCabe Ch, et al; for the Pravastatin or Atorvastatin evaluation and infection Therapy-Thrombolysis in myocardial infarction 22 investigators intensive versus moderate lipid lowering with statins after acute coronary syndromes. N Engl J Med. 2004;350(15):1495-1504. **Detailed information is available upon request.**

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- Sets a new standard for PPI therapy, with dual releases of active drug to provide significantly extended heartburn control[1,2]
- Effective across the spectrum of GERD[3,4]
- Maintain long-term healing and therefore quality of life[5,6]
- Lifestyle-friendly PPI: once daily, taken with or without food[1,7,8]

Dexilant Abbreviated Product Information

Presentation: Dexilant 30mg and 60mg capsules. Indication: Healing of all grades of erosive esophagistis (EE) for up to 8 weeks, maintenance of healed erosive esophagistis for up to 6 months, treatment of heartburn associated with symptomatic non-erosive gastroesophageal reflux disease (GERD) for 4 weeks. Dosage and administration: 60mg once daily for up to 8 weeks for healing of EE, 30mg once daily for maintenance of healed EE, 30mg once daily for 4 weeks for symptomatic non-erosive GERD. Dexilant can be taken without regard to food and should be swallowed in whole. Contraindication: contraindicated in patients with known hypersensitivity to any component of the formulation. Interaction: atazanavir, ampicillin esters, digoxin, iron salts, ketoconazole, warfarin, Tacrolimus. Precaution: gastric malignancy. Adverse reaction: diarrhea, abdominal pain, nausea, upper respiratory tract infection, vomiting, flatulence.

Reference:1. Dexilant prescribing information (DEX051 HK1 TT, HK Branch). 2. Wittbrodt ET et al., Clin Exp Gastroenterol 2009;2:117-28. 3. Fass R et al., Aliment Pharmacol Ther 2009;29:1261-72. 4. Sharma P et al., Aliment Pharmacol Ther 2009;29:731-41. 5. Metz DC et al., Aliment Pharmacol Ther 2009;29:742-54. 6. Howden CW et al., Aliment Pharmacol Ther 2009;30:895-07. 7. Lee RD et al., Aliment Pharmacol Ther 2009;29:824-33. 8. Lee RD et al., Aliment Pharmacol Ther 2010;31:1001-11.

For further information, consult full prescribing information.

* 96% of patient on Dexlansoprazole 60mg achieved 24-h heartburn-free days[6]

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