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*Easily Missed
Sports Injuries*



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The Cover Shot



This photo is taken in shutter priority mode with the exposure time set to 1/60 second, aperture f/9, ISO 200, focal length 105 mm. The most important technique is to pan the camera with a speed synchronized with the subject movement, so that only the face of the focused subject is clear and sharp, while the others blurred due to movement. Nowadays digital camera is so powerful and it becomes not so difficult to capture a crystalline sharp image. But in sport photo, it's equally important to keep the motion elements by lowering shutter speed.



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New Year Message from the President

Dr. Raymond SK LO

President

The Federation of Medical Societies of Hong Kong



Dr. Raymond SK LO

New Year Greetings to all our friends and colleagues of the Federation. It is my great honour and privilege to be able to serve the Federation, especially following the footsteps of our exemplary past Presidents. I would take on this new role and capacity with humility and determination. The Federation has over forty years of history and reputation, for which we are all proud of and privileged to belong. I would continue to rally the stern support from our Officers, EXCO, Council, and above all our member societies, and it is only through your collective efforts that the Federation can build from strength to strength. We would especially look forward to enhancing the fraternity of professionals, through engaging and embracing colleagues of wide-ranging specialties and disciplines from our 127 member societies, both professionally and socially. Together with our community partners, we hope to be able to commit in meaningful projects and endeavours for our society at large. We are particularly keen to contribute more through our affiliated Foundation, in charitable work for health and wellness promotion. In the coming years, we hope to focus more on four categories of our population in need: the old, the young, the sick and the disadvantaged. We shall call for participation from friends and volunteers.

Meanwhile, the Federation is poised to provide valuable services to our member societies. We have just renovated all our premises, upgrading the facilities for meetings, courses or seminars. Our secretariat can provide administrative support for members, either on a regular basis or project-based. The certificate courses held jointly with member societies have proved popular, and covered diverse topics and areas. Our publication, the Medical Diary, is of professional interest with concise reviews and update of knowledge, as well as communications from member societies. Annual scientific meetings will continue to address important fields of medicine. Forums can be held if needed, for discussions on key health or policy issues. Socially, our soccer five events add much to friendship and fun, while our Annual Dinner on New Year's Eve is a perfect occasion for colleagues and families to gather together and celebrate. Further ideas or suggestions are most welcome, and the Federation is ready to serve and to lead.

As the umbrella organisation for all medical, dental, nursing and allied health societies of Hong Kong, the Federation will continue to uphold its commitment in promoting the common good of fellow health professionals. Thank you in anticipation of your support, and looking forward to working alongside with you in the near future. Once again, on behalf of the Federation, our best wishes to you and your family for a happy, healthy and prosperous year ahead.

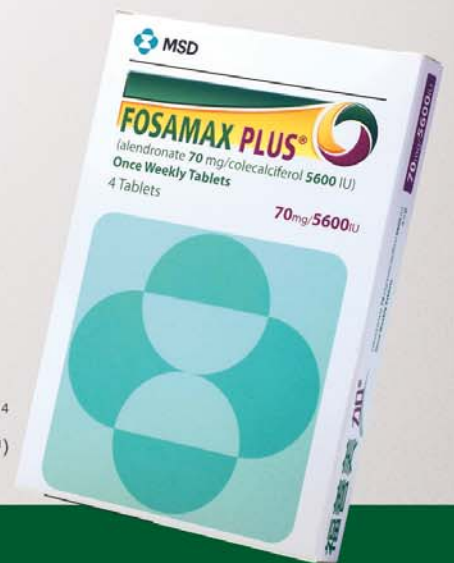
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Editorial

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With increasing sports participation, there is now a sharp increase in the prevalence of sports injuries. In Hong Kong, sports-related injuries account for a significant proportion of the attendance at family practice, A&E Departments and Orthopaedic clinics. Injuries of the shoulder, knee and back are by far the most common problems at a sports medicine set up. About 90 percent of sports injuries are minor soft tissue traumas. The most common soft tissue injury is a contusion. Ligament sprains account for one third. Muscle and tendon injuries account for the rest. Serious injuries, such as fractures and dislocations, account for about 10% of all sports injuries. Overuse injuries belong to another category. Tennis elbow, Achilles tendinopathy and iliotibial band friction syndrome are some common examples. Lower limb bones are most susceptible to stress fractures. Among these, which are the easily missed diagnoses? What are the consequences if the diagnoses are missed?

Even very common diagnoses, like anterior cruciate ligament tears as well as labral lesions of the shoulder, can be very challenging at times. Diagnoses of other, less common, sites for injuries pose even more daunting tasks for doctors and therapists who may see these athletes. In this climate of increasing malpractice claims, missing a diagnosis, be it common or not, may result in a heavy burden, both financially and psychologically. This series of articles aim at highlighting some easily missed diagnosis of orthopaedic sports injuries. They try to provide insight into obtaining a detailed history, performing a focused physical examination and understanding the pathoanatomy of the affected joints in order to help the readers in avoiding a misdiagnosis. With good initial assessment of these conditions and, when appropriate, referring patients promptly to an orthopedic surgeon, appropriate and minimally invasive treatment would be possible and long-term disabling conditions can in turn be prevented.

Another commonly over-looked issue concerning competitive athletes is the World Anti-Doping Code. Doping is one of the most important and difficult problems confronting sports today. Doping threatens athletes' health and the integrity of sports. Doping affects not just top athletes, but youths influenced by what the stars do. It is a growing problem of public health proportion that cannot be ignored by any country, any sport or any medical practitioner. A medical doctor who may treat competitive athletes has an important role to play. As a member of the TUE panel of the Hong Kong Anti-Doping Committee, under the chairmanship of Dr. Tse Tak Fu, I feel obliged to ask the Committee to write an article in this issue to outline the importance of medical doctors in helping athletes in anti-doping issues.

May I take this opportunity to thank all the authors for the time, effort and experience in turning this issue into a reality. In particular, Dr. YC Wun gave a great deal of effort and input in editing the issue. Dr. Yvonne Yuan, from the Hong Kong Anti-Doping Committee (HKADC), helped in preparing the anti-doping article. Last but not the least, I hope readers will find this issue interesting and appropriate. May I wish the readers enjoy sports participation themselves as well as treating athletes as much as we (the authors) do. I would like to thank Dr. CO Mok for giving us an opportunity and wish the Hong Kong Medical Diary every success in the future.

Easily Missed Hand & Wrist Injuries

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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 one CME credit under the programme upon returning the completed answer sheet to the Federation Secretariat on or before 31 January 2010.

The hand and wrist are used in almost all sports and the hand is often the least protected part of the upper extremity, leaving it vulnerable to injuries. Therefore, the hand is the most frequently injured part of the athlete's upper extremity. These injuries vary widely; diagnosis is straightforward for many but not for others. When not diagnosed early and managed appropriately, these injuries may result in long-term disabling conditions. Evaluation begins with a careful physical examination, including localisation of swelling and tenderness and functional testing of joint stability. Radiographic studies are often needed. Treatment of the injuries ranges from immobilisation to surgery.

Anatomical Snuff-box Pain - Scaphoid Fracture

One of the most important and most often missed carpal injuries is a scaphoid fracture. The scaphoid is the most frequently fractured carpal bone. With a precarious blood supply of being retrograde from distal to proximal, fracture at the scaphoid waist may lead to nonunion, and has a higher chance of developing osteonecrosis in the proximal fragment. An intact scaphoid is crucial to normal wrist function. Undiagnosed and untreated scaphoid fractures can cause chronic wrist pain, loss of grip strength, and accelerated degenerative changes of the wrist joint.

The mechanism of fracture usually is a fall on an outstretched hand with the wrist in hyperextension. There should be no obvious deformity. The patient may feel a little discomfort, and range of motion is only slightly limited. Palpation is one of the key diagnostic tools in identifying a scaphoid fracture. Tenderness at the anatomic snuff-box is considered pathognomonic for a scaphoid fracture (figure 1). Diagnosis is difficult and should always be suspected in a typical presentation. Radiographs of the wrist should include a scaphoid view that is anteroposterior with 30 degrees supination and ulnar deviation (figure 2). An x-ray study is usually helpful, but fractures can be missed or misdiagnosed even with good films. If radiographs are negative for fracture but a fracture is suspected clinically, the patient should be placed in a thumb spica splint. Clinical symptoms and radiographs are then rechecked in one to two weeks. Plain radiographs may not be able to show an undisplaced fracture line

initially; a bone scan or computerised tomography (CT) can be helpful in arriving at the diagnosis.

Treatment of a scaphoid fracture depends on the location and stability of the fracture. Conservative treatment for a non-displaced fracture with a thumb spica cast is acceptable. A displaced fracture is indicated for surgical fixation. Technological advances have improved union rates and accelerated the time to union. Percutaneous screw fixation can provide better compression strength and rigid internal fixation, thus allowing earlier mobilisation and return to usual activities (figure 3).

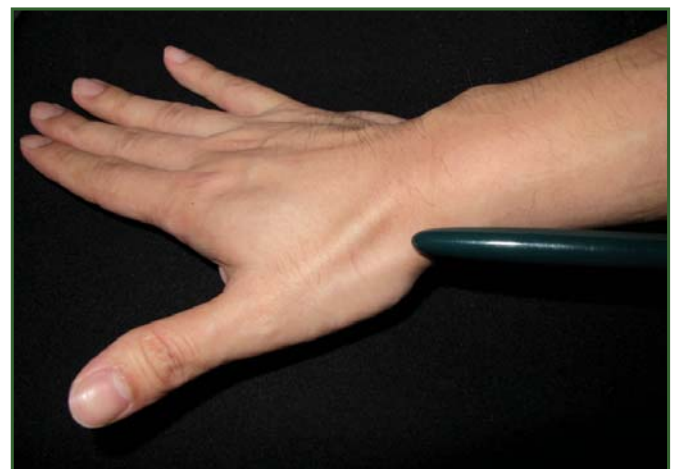


Figure 1



Figure 2



Figure 3

Hypothenar Eminence Pain - Hook of Hamate Fracture?

The hamate is the medial bone in the distal row of carpal bones, located beneath the base of the little finger. Fractures at the hook of the hamate most often are a diagnostic problem in patients who sustain a direct blow against the hamate from the handle of a tennis racket or golf club during an unbalanced swing. Radiation of pain to the dorsum of the hand is common, and the patient will have point tenderness over the hook of the hamate, located at the ulnar aspect of the palm near the base of the fourth metacarpal. The mechanism of injury can provide a clue to the diagnosis, but the injury could also be a stress injury with a less obvious initiating event.

The diagnosis is often missed or delayed because the x-ray views of the wrist that are usually taken do not demonstrate the lesion. In suspected cases, a carpal tunnel x-ray view or a CT scan may be needed to make the diagnosis of a hook of the hamate fracture (figure 4). Once the diagnosis is confirmed, a trial of casting for 4 to 6 weeks is indicated if symptoms are relieved by simple immobilisation. Operative excision of the fracture fragment is indicated to relieve pain and improve grip strength if the patient remains symptomatic after 6 to 8 weeks of cast immobilisation.



Figure 4

Wrist Sprain - Carpal Instabilities

Dislocations at and around the lunate are often misdiagnosed as severe wrist sprain. When left unrecognised and untreated, these injuries lead to a high incidence of long-term functional disability and chronic pain. Avascular necrosis of the lunate is a potential complication of lunate dislocation. Carpal instabilities represent a continuum of wrist injury that can lead to lunate or perilunate dislocation. These generally are the result of high-energy traumas to the wrist, with the most common mechanism being a fall on the outstretched hand with the wrist in hyperextension and ulnar deviation.

Scapholunate dissociation is the first stage of carpal instability. This is also the most common and most easily missed type of carpal instabilities. This is characterised by widening of the scapholunate joint on the posteroanterior (PA) view (figure 5). This has been given the eponym the "Terry Thomas sign" after the British comedian with a gap between his front teeth. Standard radiographs are usually normal, so when a scapholunate ligament injury is suspected clinically, additional stress views (ulnar deviation with a clenched fist) will accentuate widening of the scapholunate joint. Perilunate and lunate dislocations are progressions of the same pathologic process. The mechanism is a progressive pattern of carpal ligamentous injuries caused by wrist hyperextension and ulnar deviation. The dislocations may also be associated with specific bony fractures. The hallmark and defining feature of perilunate dislocation is a dislocation of the head of the capitate from the distal surface of the lunate (figure 6). The defining feature of lunate dislocation is disruption of the association between the lunate and the lunate fossa of the distal radius (figure 7).

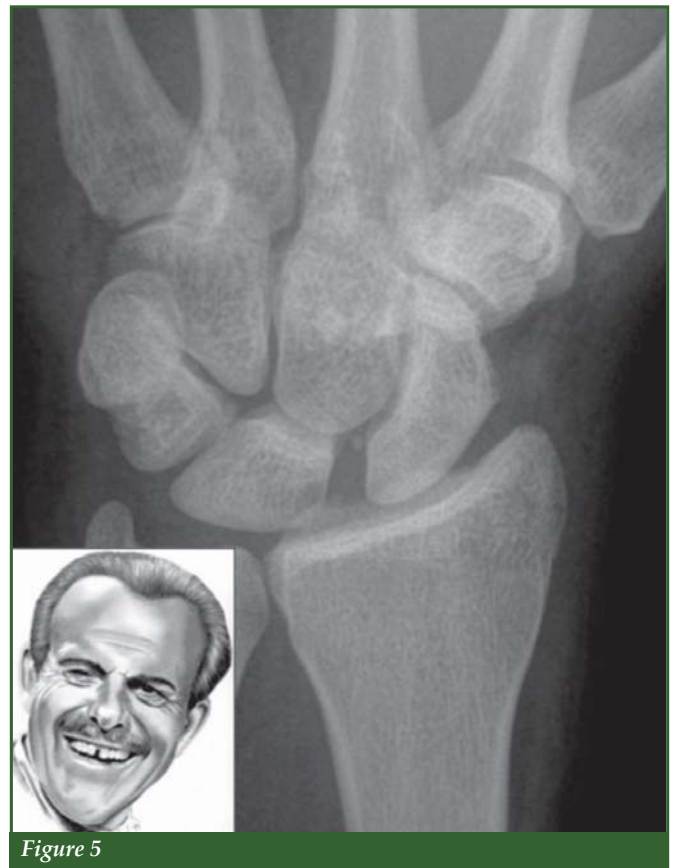


Figure 5



Figure 6



Figure 7



Figure 8

The patient may have diffuse pain on palpation that is difficult to distinguish from other causes of wrist pain. Plain x-rays of the wrist, both PA and lateral views, are essential to diagnose wrist dislocations (as well as other carpal instabilities). On a PA view, 2 arcs should be identified (figure 8). The first arc consists of the radiocarpal row, which should be smooth and continuous. Disruption is suggestive of a lunate dislocation. The second arc consists of the midcarpal row, which also should be smooth and continuous. Disruption of this arc is suggestive of a perilunate dislocation. The appearance of the lunate is important on the PA view. Normally, the lunate is quadrangular. With lunate dislocations, it becomes triangular. This may be an additional clue to dislocation. On the lateral view, visualise the column, which consists of the radius, lunate, and capitate. The lunate should lie within the

radius cup and the capitate should rest within the lunate cup. Loss of this normal column implies lunate or perilunate dislocation. Reduction and stabilisation are mandatory for patients suffering from carpal instability injuries.

Mallet Fingers - Extensor Tendon Injuries

A mallet finger is one of the most common injuries of the tendon and joint structures of the digit. The mechanism of injury is generally forced flexion of an actively extended distal interphalangeal (DIP) joint. Most commonly, an axial loading force, such as a ball, an opponent, or a wall, will cause the DIP joint to acutely flex, rupturing the extensor tendon insertion at the dorsal base of the distal phalanx. Examination will reveal a DIP joint held in some degree of flexion, hence the term "mallet finger". Tenderness and swelling may be localised over the dorsum of the DIP joint. The patient will not be able to fully extend this joint actively; however, passive extension should be easily accomplished in a mallet finger. Radiographs should be obtained in suspected mallet fingers to check for bony avulsion.

Treatment involves immobilisation of the DIP joint in an extended position for tendon healing. For a pure tendon rupture, the recommended period of immobilisation is 6 to 8 weeks. The most important instruction given to the patient is that the DIP joint needs to remain in complete extension continuously throughout the splinting period. If the DIP joint is allowed to bend, even once, the entire splinting period is needed to start all over again. For a bony avulsion off the dorsal lip of the distal phalanx, the treatment is similar to that for a pure tendon rupture if the bony fragment is less than 30 percent of the articular surface. For a larger bony avulsion fragment, the DIP joint is potentially unstable and may require surgical treatment.

Jersey Fingers - Flexor Digitorum Profundus Avulsions

Avulsion of the flexor digitorum profundus (FDP), or jersey finger, is commonly seen in rugby and football injuries that most often affects the ring finger. This injury is caused by forced extension of a maximally flexed DIP joint, commonly as a result of having a finger caught on the jersey of another player who struggles to pull away quickly. Frequently, jersey finger presents as a swollen "jammed" finger and goes unrecognised because proximal interphalangeal (PIP) flexion is still possible. Unless a high index of suspicion is maintained, these injuries can, and often are, missed. The diagnosis can be made easily by noting the absence of active DIP joint flexion. Tenderness and swelling may be noted over the volar aspect of the DIP joint, or may be present more proximally over the flexor sheath at the area or retraction of the ruptured tendon.

Treatment is always operative, involving reattachment of the FDP tendon. Best results are obtained within the first few days; it is difficult to treat a chronic or late-



presenting FDP tendon rupture. FDP tendon reconstruction techniques are available, but results are not uniformly optimal.

Gamekeeper's or Skier's Thumb - Ulnar Collateral Ligament Tear

The ulnar collateral ligament (UCL) of the thumb is essential for stabilisation of the first metacarpophalangeal (MCP) joint when the thumb is adducted against the index and middle fingers when gripping objects. The UCL is injured during a forced hyperabduction and/or hyperextension stress of the thumb MCP joint, generally from a fall landing onto the thumb. In skiers who fall with their thumb in an extended position, the ski pole, which is caught between the thumb and the index finger, can force the MCP joint into such a hyperextended position. This may cause a partial or complete rupture of the UCL and resulting in loss of pinch strength.

Clinically, the joint is swollen and the thumb is tender in the region of the ligament. Stress testing is performed by deviating the thumb radially while stabilising the MCP joint in slight flexion. More than 30 degrees deviation or more than 20 degrees deviation compared with the opposite side suggests significant damage to the UCL. Ideally, radiographs should be taken before stress testing because, if an avulsion fracture is present, stress testing may cause further displacement of the fragment. Stress radiographs (stress tests performed under x-ray) can be helpful in assessing the degree of deviation but are not definitive.

An acute partial tear can be managed with 4 to 6 weeks of thumb spica cast immobilisation. A completely ruptured UCL may or may not heal with splinting. The aponeurosis of the adductor pollicis muscle can become interposed between the two torn ends of the UCL. This is known as a Stener lesion. There is no reliable clinical method to distinguish those complete tears with Stener lesions from those complete tears without Stener lesions. Therefore, if a complete UCL tear is suspected, an adductor aponeurosis interposition preventing the possibility of healing has to be considered and surgical exploration and repair is indicated. Surgical results are generally better with early intervention than late reconstruction. An improperly treated complete UCL rupture can result in long-term instability of the MCP joint and weakness in pinch strength.

Jammed Fingers - Boutonniere Deformity

The term "boutonniere" comes from the French word for "buttonhole." This injury involves a disruption of the central slip of the extensor tendon at its insertion on the middle phalanx. The mechanism of injury is a blow to the dorsum of the PIP joint, such as when a patient's hand is stepped on. Occasionally, a small fleck fracture of the middle phalanx is seen at the central slip insertion. Volar dislocation of the PIP joint is thought to be a component in many cases. Little deformity may be noted immediately after an injury that results in a boutonniere deformity. The lateral bands may still act

weakly to aid joint extension. Left untreated, the central slip retracts and the lateral bands displace volarly below the axis of rotation, becoming flexors of the PIP joint. Thus, the classic deformity of PIP joint flexion and DIP joint hyperextension is produced (figure 9). Once a deformity becomes chronic or fixed, it presents as a difficult surgical challenge, with potentially permanent functional deficits. Because of the volar dislocations may be reduced spontaneously and the subtle symptoms and signs of such injuries, a high index of suspicion for central slip disruption must be maintained when evaluating any PIP joint injury. Patients may have more pain at the dorsal side, and there is usually weakness or inability to fully extend the PIP joint.

Treatment of an acute central slip injury consists of splinting the PIP joint in full extension for 6 weeks, and DIP joint range of motion exercises are encouraged. Any dislocation that cannot be easily reduced by the usual means may indicate the interposition of soft-tissue structures. This is an indication for open reduction and surgical repair. Surgical reconstruction is the treatment of choice for chronic boutonniere deformity.

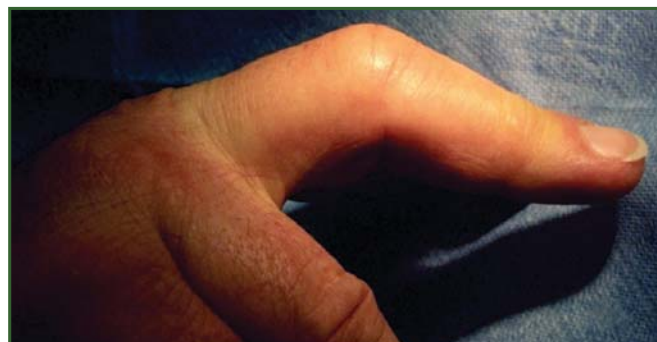


Figure 9

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MCHK CME Programme Self-assessment Questions

Please read the article entitled "Easily Missed Hand & Wrist Injuries" by Dr. Alex KC POON and complete the following self-assessment questions. Participants in the MCHK CME Programme will be awarded 1 CME credit under the Programme for returning completed answer sheets via fax (2865 0345) or by mail to the Federation Secretariat on or before 31 January 2010. Answers to questions will be provided in the next issue of The Hong Kong Medical Diary.

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

1. The scaphoid is the most frequently fractured carpal bones.
2. Tenderness at the anatomic snuff-box is not pathognomonic for a scaphoid fracture.
3. Tenderness of hypothenar eminence is considered pathognomonic for hook of hamate fracture.
4. Avascular necrosis of the lunate is the only complication of lunate dislocation.
5. On plain PA view X-ray of the wrist, lunate is triangular. With lunate dislocation, it becomes quadrangular.
6. The mechanism of mallet finger injury is generally forced flexion of an actively extended distal interphalangeal (DIP) joint.
7. Jersey finger is caused by forced extension of a maximally flexed DIP joint and leads to avulsion of flexor digitorum superficialis.
8. An improperly treated complete UCL rupture of the MCP joint of the thumb can result in long-term instability of the MCP joint and weakness in pinch strength.
9. Boutonniere deformity involves a disruption of the central slip of the extensor tendon at its insertion on the middle phalanx.
10. Boutonniere deformity produce PIP joint flexion and DIP joint hyperextension. Surgery is the mainstay in the treatment of acute boutonniere deformity.

ANSWER SHEET FOR JANUARY 2010

Please return the completed answer sheet to the Federation Secretariat on or before 31 January 2010 for documentation. 1 CME point will be awarded for answering the MCHK CME programme (for non-specialists) self-assessment questions.

Easily Missed Hand & Wrist Injuries

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



Power to Protect From NSAID-associated Upper GI Side Effects¹⁻³

Presentation: Esomeprazole film-coated tablet. **Indications & Dosage:** Treatment of erosive reflux esophagitis 40mg once daily for 4 weeks. Long-term management of patients with healed esophagitis to prevent relapse 20mg once daily. Symptomatic treatment of GERD 20mg once daily. In combination with an appropriate antibacterial therapeutic regimen for the eradication of *Helicobacter pylori*: Healing of *H. pylori* associated duodenal ulcer OR as prevention of relapse of peptic ulcers in patients with *H. pylori* associated ulcers: 20mg esomeprazole with 1g amoxicillin & 500mg clarithromycin, all bd for 7 days. Patient requires continued NSAID therapy. Healing of gastric ulcers associated with NSAID therapy: 20mg once daily for 4-8 weeks. Prevention of gastric & duodenal ulcers associated with NSAID therapy in patients at risk 20mg once daily. **Contraindications:** Hypersensitivity to esomeprazole; substituted benzimidazoles; hereditary fructose intolerance; glucose-galactose malabsorption or sucrase-isomaltase insufficiency. **Precautions:** Maximum dose for severe liver impairment is 20mg; Long-term treatment; Pregnancy & lactation. **Interactions:** Ketoconazole; itraconazole; drugs metabolized by CYP2C19 (eg diazepam, citalopram, imipramine, clomipramine, phenytoin); warfarin, cisapride, clarithromycin. **Undesirable effects:** Headache, abdominal pain, diarrhoea, flatulence, nausea/vomiting, constipation. Full local prescribing information is available upon request. API.HK.NEX.1104

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A Guiding Star in Gastroenterology

Shoulder Instability and Related Problems - Diagnostic Pearls and Management Updated

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Introduction

Shoulder instability and related problems are common injuries in orthopaedic sports medicine. Emergency physicians often manage acute dislocations in trauma scenario while primary care physicians may encounter patients presenting with symptoms of the relevant functional impairment. With the recent advances in injury biomechanics, arthroscopic surgery and MRI imaging, clinicians should be aware of the fact that shoulder instability composed of a wide spectrum of conditions with variable presentations which warrant specific attention to details in pathoanatomy and their outcome implications. The potential diagnostic pitfalls are discussed as follows.

Misdiagnosis

Types of Instability

A misdiagnosis of the type of instability leads to incorrect surgical procedures and results in treatment failure. Clinicians should conduct a thorough history and full shoulder examination for patients presenting with instability symptoms with or without previous dislocation. Accurate physical examination can help to differentiate anterior instability, posterior instability and multi-directional instability (MDI). Arm position, at the time of the initial injury and during onset of symptoms, can help differentiate the direction of the instability. The commonly performed anterior apprehension test, if positive, will indicate deficiency of the anterior anatomical restraint involving the anteroinferior capsulolabral complex (e.g. Bankart lesion or variants). Posterior jerk test is useful for evaluation of posterior instability. Another useful finding is the sulcus sign in symptomatic shoulder which demonstrates evidence of inferior instability and the diagnosis of MDI should be considered.

Paradoxical Presentation

Shoulder instability at times may occur without any preceding significant traumatic event or any recalled injury by patients. A missed shoulder dislocation is not rare and will give rise to treatment delay and irreversible complications.

Neglected shoulder dislocations usually present as loss of active motion. Anteriorly dislocated shoulders are not able to be internally rotated, and posteriorly dislocated shoulders are locked in internal rotation.

Posterior shoulder dislocations are much less common, accounting for only 2% to 3.8% of all shoulder dislocations but are missed in up to 50% of cases on initial evaluation.¹ The loss of range of motion, particularly passive external rotation and forward flexion, is a typical sign on initial presentation. This paradoxical presentation of shoulder stiffness might lead to a misdiagnosis of "frozen shoulder" and therefore delay the patient's referral to an orthopaedic specialist for definitive treatment.

Idiopathic frozen shoulder should be a diagnosis by exclusion. Differential diagnoses including neglected posterior shoulder dislocation, glenohumeral joint osteoarthritis and post-surgical shoulder stiffness ought to be considered prior to making the diagnosis of frozen shoulder.

A posterior shoulder dislocation can be confirmed by plain radiography but it can still be missed if the film is not properly interpreted. Although helpful, the anteroposterior radiograph can often be misleading. (fig 1) There is often an overlap of the humerus with the glenoid fossa seen typically on malpositioned anteroposterior radiographs. Such a view will not demonstrate the posterior dislocation.

Typical findings on an anteroposterior radiograph include distortion of the normal elliptical radiodense region created by overlapping of the humeral head and glenoid fossa, a vacant glenoid cavity, internal rotation of humerus (light bulb sign), impaction fracture (trough sign) and loss of parallelism between the articular surface of the glenoid cavity and the humeral head.²



Fig (1): Anteroposterior view - posterior dislocation of Left shoulder



The traditional lateral or Y-view of the scapula if not positioned accurately will also result in misinterpretation.¹ Axillary view is the method of recommendation. CT scan of course is even more diagnostic and informative if available (fig 2).

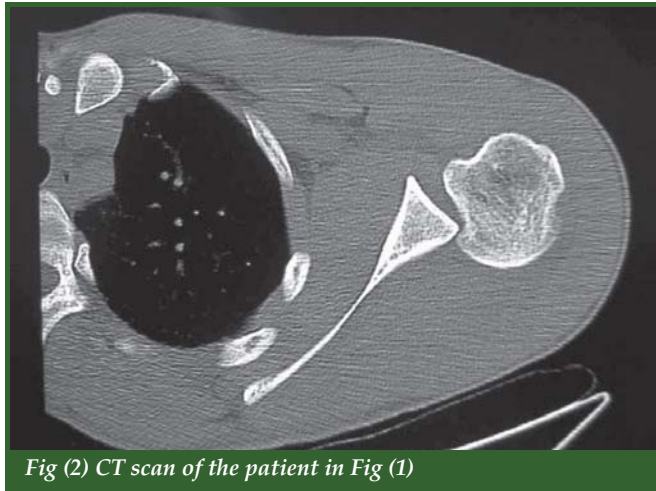


Fig (2) CT scan of the patient in Fig (1)

Dead Man Syndrome

Painful shoulder conditions in young athletes, particularly in sports involving overhead throwing or spiking, are most often caused by subtle shoulder instability. The classical features of "dead arm syndrome" were described by Rowe and Zarins.³ A functional summary of the observation stated that throwers with a "dead arm" had pain or popping with the arm in the abducted and externally rotated position.

The current concept of the "dead arm syndrome" is known to be related to labral lesion of the shoulder, particularly for Type II posterior SLAP lesion (Superior labrum Anterior Posterior), which contributes to posterosuperior shoulder instability and articular side cuff tear.⁴ Arthroscopic repair of the labral lesion to correct the instability is the definitive treatment of choice.

Neglecting the instability as a root cause in athletes with painful shoulders will prolong the disabling symptoms and prevent early return to original sports.

Failure to Recognise and Address Concomitant Pathologies

Nowadays, a successfully reduced dislocated shoulder is definitely not the end of the story but the beginning of a fascinating journey of in-depth evaluation of the magnitude of the injury and long term outcome.

Understanding the concomitant pathologies and their outcome implication is crucial for clinicians to conduct accurate patient communication, maintenance of good patient rapport and initiate timely referral to orthopaedic specialists.

Associated pathologies commonly include various types of labral tears from anterior (Bankart lesion) to superior (SLAP lesion) and posterior (Kim's lesion). Capsular lesions include plastic deformation of the joint capsule, rotator interval deficiency and specific lesions

like humeral avulsion of the anterior glenohumeral ligament (HAGL lesion).

Labral Lesions

Making a diagnosis of labral lesion before surgery is important for specific and more exact communication with the patient, specific patient consent and better pre-operative preparation for both the surgical instruments and surgeons themselves.

The three clinical tests most predictive of labral pathology are the apprehension test, the Jobe relocation test, and O'Brien test.⁵ The apprehension test is conducted with the examiner applying only passive abduction and external rotation to the supine patient that results in either apprehension or pain on the patient's shoulder. The Jobe's relocation test requires the patient be supine with the affected arm abducted and externally rotated to 90° followed by the examiner applying posteriorly directed thrust at the proximal humerus. When the pressure is released, if the patient experiences pain it is a positive indication of labral pathology. The O'Brien test is a two-phase clinical examination that involves an upright patient with the arm adducted at least 10° with 90° forward elevation. The first phase is resisted forward elevation with the thumb down (pronation of extremity), and the second phase is done likewise with the thumb up (supination of extremity). Pain with the first phase and not the second is a positive test consistent with labral pathology. False positive of this test may be due to acromioclavicular joint symptoms since it recreates an arm crossover chest test. The sensitivity and specificity of these clinical tests are not great when used individually, but when the test results are combined the specificity ranges in the 90 percentile but the sensitivity remains low at around 34%.⁵

A recent systemic review also concluded that there are no good physical examination tests that exist for effectively diagnosing a labral lesion.⁶

A clinical examination alone is not good enough to decide for surgery. Although the sensitivity and specificity for using MRI arthrography is better than physical tests, arthroscopic examination remains the best diagnostic tool for labral tears.

In order to avoid encountering a surprise in arthroscopic findings during surgery, combination of positive signs with MR arthrography can yield a more accurate pre-operative diagnosis.

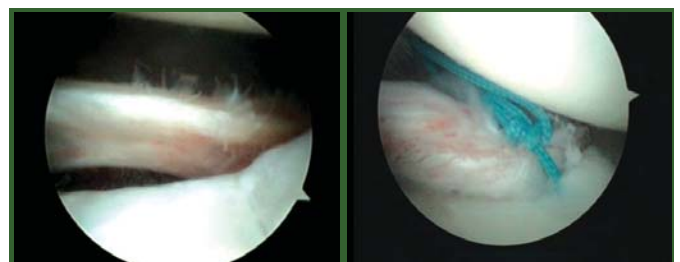


Fig (3a) Arthroscopic view of a typical Bankart lesion

Fig (3b) Arthroscopic Repair of a typical Bankart lesion



Bony Defects

Most cases of instability of the shoulder usually do not involve a significant osseous lesion. When a contributory bony lesion is involved, however, it can easily be missed and result in failure of attempted surgical repairs.⁷ Bony defects, occurred after acute traumatic dislocations or chronic instability, are found in either the proximal humerus which is known as the Hill-Sachs lesion or the inferior glenoid rim defect also known as the bony Bankart lesion.

The Hill-Sachs lesion is the chondral impaction injury in the posterosuperior humeral head secondary to traumatic contact with the glenoid rim. It occurs in 80% of cases of traumatic dislocation. The lesion is best visualised with a Stryker notch view or an AP view in internal rotation. Bony Bankart lesions can be visualised with a West Point view.

For the concern of surgical decision, smaller bony lesions may be amenable to arthroscopic treatment, but larger lesions often require open surgery and bone grafting to prevent recurrent instability. Standardised quantification of the size of the bone defects becomes critical for surgical management.

Traditionally, the West Point and Stryker notch views can provide some details about the bony deformity. In many cases, however, plain radiographs will not lead to an accurate diagnosis. A recent study identified that almost 60% of operative bony lesions were missed by plain radiographs alone.⁸

A CT scan, preferably with 3-Dimensional reconstruction, is a useful method for quantifying the size of bone defects. Glenoid index calculated from 3D CT scan was reported to be predictive of the need for a bone grafting procedure.⁹

Failure to Recognise the Associated Complications

Associated injuries are usually accompanied by acute traumatic shoulder dislocations. Careful evaluation and documentation is essential for the planning of subsequent management and medico-legal concerns. However, a detailed physical examination is obviously difficult during the painful episode of acute injury. To avoid the pitfall of missing the associated injuries, the attending clinician should maintain a high degree of awareness on these common but easily neglected associated injuries.

Associated Fractures

Associated proximal humeral fractures can occur for shoulder dislocations causing by high energy trauma. Ferkel¹⁰ reported on two cases of proximal humerus fracture missed by emergency department personnel and subsequently wide displacement of the fracture with reduction manoeuvres.

Frontline clinicians or team physicians on the field should actively avoid performing joint reduction for an acutely dislocated shoulder without good quality radiographs available.

Acute shoulder dislocations with fractures should be better managed by orthopaedic surgeons after full acknowledgment of the associated risks and obtaining a proper informed consent from the patient on the plan of management. The well planned reduction should be performed under adequate analgesics and sedation or even under general anaesthesia.

Axillary Nerve Injury

The axillary nerve is a common associated injury in shoulder dislocations. The incidence can be as high as 35%.¹¹ Skin sensation in the distribution of the axillary nerve and lateral antebrachial cutaneous nerve should be assessed and documented before and after reduction attempts.

The nerve palsy more commonly occurs in patients of advancing age.

Most of the axillary nerve injuries are due to neurapraxia and will recover in 4 to 6 months. Performing electromyography in the acute phase is not vital to confirm the diagnosis of acute nerve injury. However, an electromyography performed 3 to 4 weeks post-injury may help differentiate whether any persistent abduction weakness is due to axillary nerve palsy or rotator cuff tear.

Rotator Cuff Tear

Due to advancing age, the rotator cuff and greater tuberosity complex are getting weaker and being more prone to be disrupted during anterior shoulder dislocations.¹²

The reported incidence of associated rotator cuff tears is variable which depends on the age distribution of the studied population. There is a consensus that the overall incidence of associated rotator cuff tears is increased in patients that are older than 40 years old.¹³

Physical examination for assessing the integrity of the rotator cuff in the acute injury episode is difficult because of the acute pain or associated axillary nerve traction neurapraxia.

Excellent results are achieved for prompt rotator cuff repairs after shoulder dislocations.¹⁴ Therefore a more aggressive approach for early diagnosis and surgical repair of any associated rotator cuff is recommended.

A rotator cuff injury should be considered as the diagnosis until excluded if symptoms of weakness in the shoulder remain at 2-4 weeks. It is wrong to assume that all these symptoms are caused solely by an axillary nerve palsy.¹³

As mentioned earlier, electromyography at 2-3 weeks post-injury may help to study the status of the axillary nerve function but it cannot rule out the possibility of concomitant rotator cuff injuries. Early ultrasonography cuff imaging and MR arthrography in symptomatic patients are useful tools to achieve early diagnosis of associated cuff tears. (fig 4)

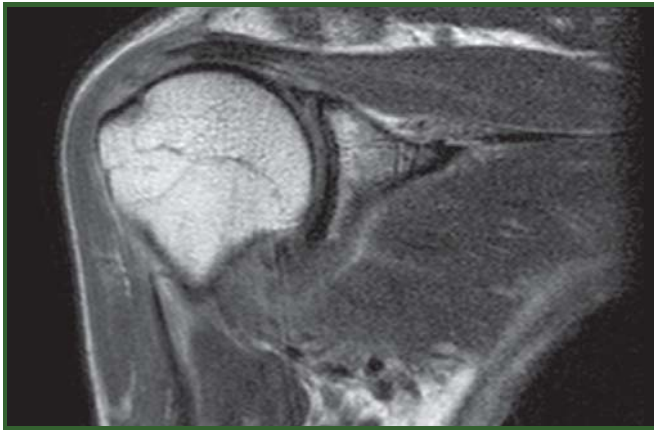


Fig.4: MR image of a rotator cuff tear after anterior shoulder dislocation in a 43 years old patient

Conclusion

The swiftly evolving knowledge in basic sciences and evidence-based clinical studies on shoulder instability poses a great challenge to orthopaedic surgeons on patient evaluation and problem solving. Inevitably, lots of diagnostic pitfalls accompany it.

Currently, the less invasive arthroscopic stabilisation surgery is the preferred method of choice as opposed to traditional open surgery. However, the success of this arthroscopic approach depends on appropriate case selection. Cutting edge technology will only work on the right client with the right decision and under the hands of the right expertise.

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Easily Missed Lower Limb Sports Injuries

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With the effects of 2008 Beijing Olympic Games, there has been a progressive growing of importance of sports at all ages. The widespread popularity of sports among the general public recruits more and more people to enjoy participating in a great variety of sports as a source of recreational or professional activities. On one hand, when people who have few opportunities to engage in sports suddenly take part in these functions without sufficient preparation and training, many different kinds of injuries or disorders can occur. On the other hand, those who have already enjoyed in athletic sports and are playing at a higher level can also suffer from a series of potential musculoskeletal problems.

Among all sorts of sports injuries, lower limb injuries are the most common sites of the body affected. In 1998, ML Leung from Hong Kong Baptist University reported that 52% of their 514 samples were lower limb injuries¹⁷. In another study conducted in Tseung Kwan O & Sai Kung in 2008, nearly 60% of their secondary school students had at least one instance of lower limb sport injuries in the past year¹².

Missed ACL Injury

Introduction

The knee joint is the central weight-bearing joint of the lower limb, where various types of injuries and disorders can be caused by sports activities. They include anterior / posterior cruciate ligament injury, medial / lateral collateral ligament injury, meniscal injury, articular cartilage injury, acute / recurrent patellar dislocation / subluxation and a number of chronic or recurrent conditions such as overuse syndrome. An accurate differential diagnosis of each injury is paramount for the proper care of a patient as well as the ultimate goal of rehabilitation³.

Injury to the anterior cruciate ligament is the most widely known sport injury, where the healing mechanism hardly works¹. Many cases of this injury require surgical treatment due to the persistent recurrent instability which greatly affects athletes in their sport performances and sometimes even daily life⁴.

Why It Is Easily Missed

The injury can be missed at the acute, subacute or chronic stages. In the acute stage, patients usually come to the clinic with a limping gait and a painful swollen knee. History sometimes cannot provide any clue. Due

to the pain and swelling, good muscle relaxation is often difficult. Therefore, correct physical signs cannot be elicited easily.

In the subacute stage, patients may seek medical attention a few days or weeks later. They may have already received a course of conservative management by themselves or commonly in Hong Kong by a bone setter. As there is a prolonged period of knee immobilisation, the stiffness of the knee may mask the true laxity. Any forceful manipulation of this type of knee can induce reflex muscle contraction. Thus, this can reduce the chance of accurate clinical assessment. Moreover, a plain X-ray of an isolated ACL injury usually gives no gross bony lesion.

Basically, isolated chronic ACL deficiency causes no pain at all. It is only when complications appear, and then the patients may have symptoms such as pain, swelling, locking or even giving way⁶. Therefore, in the chronic or recurrent stage, patients usually come to the clinic for painful complications of chronic ACL deficiency rather than knee instability alone. This may distract the clinician's point of concentration upon physical examination. Furthermore, apprehension of anticipation of knee pain can prevent the patient from adequate relaxation and minimise the sensitivity of the ACL test. In addition, there is often residual ACL scar or stump bridging across the knee joint contributing partial anterior-posterior translation constraint upon testing. Besides, radiological investigation of chronic ACL deficiency can be essentially normal as well. Subtle early degenerative changes of the knee can be detected only in cases of associated major meniscal tears or secondary cartilage damage.

Diagnostic Pearls

To minimise the chance of missing an ACL injury, a detailed history and careful physical examination with appropriate investigations can safeguard our patients' care.

Classical acute ACL injury occurs through non-contact type of sports injuries during jumping, landing or quick turning with mid-range of knee flexion. It also occurs when the knee is excessively rotated during a landing while playing football or basketball. Up to 50% of patients may hear a subjective "pop" sound when they are injured. The pain, which gradually increases after the injury, is often severe enough to force most athletes to quit the game. They usually obtain medical advice on the same or following day. Throughout follow-up, the



pain is largely relieved to the point where the patient has no trouble in most of his daily life, but it is difficult to resume sports activities because of the knee instability. If the athletes continue their sport activities, re-injuries will mostly occur and can cause a combined injury of the meniscus and even articular cartilage.

Since most patients experience the classical injury mechanism, a detailed interview about the mechanism and history of symptoms will often be helpful in its diagnosis. In most acute injuries, the severe haemarthrosis can be frequently seen. Actually, from clinical literatures, 70% of haemarthrosis can be associated with ACL injuries²⁰.

The most sensitive clinical examination is the anterior drawer test with knee flexion at about 20 to 30 degrees (Lachman's test). The results are positive in most cases of injury. However, in acute cases, owing to gross swelling and pain, involuntary muscle contraction can indirectly give a negative Lachman's test. Repeated examinations after acute swelling and pain have subsided are highly recommended. The other commonly used clinical tool is the anterior drawer test with knee flexion at 90 degree (Anterior drawer test). Unfortunately, it is not always possible to have our patient's knee bended to 90 degree in the acute or subacute stage. The pivot shift test is also an important clinical examination that aims to reproduce the functional rotatory instability^{8, 9}. In correct pivot shift test, axial load together with valgus and internal rotation is applied to the fully extended knee, and then the knee is passively flexed. If the ACL deficiency is serious, this will induce tibial anterior and internal rotatory subluxation²¹. A rapid tibial reduction can be achieved with knee flexion. Again, to achieve positive pivot shift test, the patient has to have a pain-free knee and good relaxation of the muscle. To some extent, the grade of the pivot shift test correlates with the clinical functional symptoms of our patients. The majority of our ACL deficiency patients can be diagnosed from a clinical assessment. A MRI and diagnostic arthroscopy is significant in the diagnosis of complications of ACL injuries but not essential for the primary diagnosis of ACL injury.

As a result of recurrent knee instability and associated meniscal or articular cartilage lesion, a chronic ACL deficiency patient requires surgical stabilisation to regain knee stability. Nowadays, arthroscopic-assisted intra-articular ACL reconstruction with use of autologous tendon grafts gives consistent and reproducible clinical outcomes. Up to 95% patients express satisfaction upon follow-up¹¹.

Missed Meniscal Injury

Introduction

The meniscus is a fibrous cartilage tissue located between the femur and tibia in the knee joint¹⁰. It is associated with local transmission, shock absorption and stability of the joint.

Meniscal injuries frequently occur particularly among young people during sport activities.

The mechanism of meniscal injuries can be considered

as a combination of flexion and rotation of the knee. In young people, these combined forces are frequently generated in most sports activities. In middle-aged and elderly people with co-existing degenerated knee joints, minor injuries or undetectably slight external forces may give rise to meniscal tears. In addition, meniscal injuries are associated with anterior cruciate ligament injuries. Most patients complain of instability from ACL insufficiency and pain due to meniscal injuries. Major neglected meniscal tears cannot heal by themselves and can progress to displaced fragments and result in "locking" in which full extension of the knee joint is impossible.

Why It Is Easily Missed

Meniscal injuries can also be missed easily at both the early and late stages. In the early stages, the painful and swollen knee cannot allow for a correct physical examination. In the late stages, patients complain of residual on and off knee pain. However, it is rather non-specific ranging from resting mild discomfort to pain upon exertion.

Diagnostic Pearls

A high clinical suspicion is important for diagnosis of meniscal tears⁵. Any persistent knee pain after sport activities in young athletes or a minor sprain to a degenerative knee should undergo detailed clinical examination. Mild quadriceps wasting and mild to moderate effusion are highly suggestive of possible meniscal injuries. We find that local tenderness along the respective painful joint line is a consistent and reliable physical sign suggestive of meniscal tear. The McMurray test is a specific but relative low sensitive test and a MRI is both highly sensitive and specific for the diagnosis of meniscal tears.

Early referral to an orthopaedic surgeon is necessary as 50% of meniscal tears are amenable to surgical repair. Any nonunion meniscal tear is prone to displacement and results in locking of the knee. The majority of repairs can be done via the arthroscopic technique with use of one to two stab wounds². The overall union rate after successful repairs can be up to 70% in an isolated repair and over 90% in combined ACL reconstruction operations.²²

Missed Closed Rupture of Achilles Tendon

Introduction

The Achilles tendon is the largest tendon in the human body and ruptures due to sudden contraction of the gastrocnemius muscle. In younger patients, blood flow disturbance induces interstitial tears and overt rupture in the hypovascular zone¹⁶. In middle-aged population, Achilles tendinitis is a common cause due to degeneration of the tendon and inadequate warming up¹². This condition is generally associated with volleyball, basketball, gymnastics, tennis and especially badminton in our locality, in which repeated jumping, landing, forceful forward / backward stepping and cutting motions are routine movements¹⁹. Patients often describe the sensation at the movement of rupture as

being "kicked from behind" and usually hear a rupturing "pop" sound or feel a popping sensation at their heel.

Why It Is Easily Missed

Closed rupture of the Achilles tendon can be unnoticed at both acute and chronic cases. Remarkably, up to 25% of Achilles tendon ruptures have been missed completely on clinical examination.⁷ At acute stages, pain is mild in most cases particularly for those athletes who have history of pre-existing tendinitis. Most patients can still walk flat-footed to your clinic. However, they cannot tiptoe.

In acute partial tear cases, a gap may not be clearly felt at the ruptured site. In chronic cases, patients seek medical advices for weakness upon sudden and quick propelling rather than heel pain. This can greatly mislead the attention of the attending doctor. At the same time, the ruptured site may have already been covered by fibrous tissues. In both situations, radiological investigations of the heel and ankle are often normal.

Missed closed rupture of the Achilles tendon at an early stage can progress the partial tear into a complete tear and lose the golden time for primary surgical repair. Missed rupture cases in the late stage can greatly retard the potential restoration of the normal ankle plantar flexion thrust.

Diagnostic Pearls

To avoid missing the correct diagnosis of closed rupture of the Achilles tendon, careful taking of the patient's history is essential. Prodromal symptoms of on and off heel pain after exertion may undercover the story of tendinitis. Asking the patient to try tiptoe is crucial for early diagnosis. When the calf is grasped with the knee joint flexed at 90 degrees in a prone position, the ankle joint normally flexes, but this does not occur with a ruptured Achilles tendon (Thompson's squeeze test).

Early referral to an orthopaedic surgeon is recommended for both acute and chronic cases in order to restore the overall functional recovery of the ankles²². In the acute stage, primary surgical repair is preferred when treating younger and more athletic patients and those in whom adequate tendon apposition is not obtained through closed means. The recent literature has suggested that early gradual return to function after surgical repair is effective and may not increase the rate of rerupture^{14, 15}. In chronic cases, when there is a significant gap, a good result can be achieved only by surgically approximating the musculotendinous unit near its normal resting length. The choice of surgical strategy depends on the level of rupture and the amount of stump separation. In difficult neglected cases, surgical reconstruction with use of flexor digitorum longus or the flexor hallucis longus has been reported to provide satisfactory clinical results.



Residual ACL stump bridging across left knee.



Post-operative arthroscopic view of ACL reconstruction with use of autologous hamstring tendons graft of left knee.



A displaced bucket-handle tear of medial meniscus of right knee which produces a negative Lachman's test upon clinical examination.



All-inside repair of bucket-handle tear of medial meniscus of left knee.



Loss of physiological plantar flexion of left ankle suggestive of chronic closed rupture of Achilles tendon.


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

¹Duration of protection has been demonstrated for up to 7.3 years.
²CIN1+, CIN2+, ASCUS
³References: 1. Schwartz IF, Leo G. *Gynecol Oncol* 2008; 110(3):S1-S10; 2. Harper D. *Future Medicine Therapy* 2008; 5(3): 313-324; 3. Wheeler CM, et al. *ESPD May 13-16 2008, Graz, Austria, Abstract presented, P16-Poster Session, 4. Gall SA, et al. 2007 AACR Annual meeting, Los Angeles CA, 2007; April 14-18; abstract 4900; 5. Sellers JW, Karwalivya TL, Kaczorowski J, et al. *CMAJ* 2003; 169: 421-425; 6. GlaxoSmithKline Cervarix™ International data sheet, 2007; 7. Australian National Cervical Screening Program. <http://www.health.gov.au/internet/standby/publishing.nsf/Content/young-women-SP16/youngwomen-brochure.pdf>. Accessed on 13th February 2009; 8. CDC. The Pink book. <http://www.cdc.gov/vaccines/pubs/pinkbook/downloads/hpv-0308.pdf>. Accessed on 13th February 2009; 9. UK Department of Health. The Green book. http://www.dh.gov.uk/en/PublicHealthVHealthProtection/Immunisation/Greenbook/DH_40872547. Comment_ID=40872547&chc=ISTRGX. Accessed on 13th February 2009.*

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

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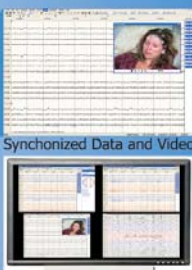
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Distal Clavicle Fractures and Acute Acromioclavicular Joint Injuries

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Introduction

Clavicle fractures constitute 44% of all shoulder girdle injuries. Most of them are mid-clavicle fractures that unite satisfactorily with non-operative treatment. In contrary, fractures of the distal one third of the clavicle is an exception that carry a high non-union rate. Therefore it is important to recognise this distinct clavicle fracture as different from those commonly encountered mid-clavicle fractures.

Distal clavicle fractures account for 15% of all clavicle fractures. Neer classified this fracture into two types based on the status of the coracoclavicular (CC) ligament.

- Type I - Minimally displaced fractures that occur lateral to the CC ligament
- Type II - Displaced fractures that the proximal fragment is detached from the CC ligament

The type I fracture is a stable injury with an intact CC ligament that prevents the fragments from significant displacement. In Type II fractures, the distal clavicle fragment is subjected to the distal pull by the weight of the arm and medial pull by the strong pectorii muscles as well as the Latissimus dorsi muscle while the proximal fragment is dragged posteriorly by the trapezius. These disturbing forces contribute to the fracture displacement and the unstable nature of Type II fractures.

The type II fracture is further sub-categorised into Type IIA in which the fracture occurs medial to the CC ligament and Type IIB in which the fracture occurs more laterally with the CC ligament disrupted from the proximal fragment. With identification of more subtypes, the Neer classification of distal clavicle fractures was later modified to include up to five types.

- Type III - Fracture extension into acromioclavicular joint (ACJ)
- Type IV - Fracture with periosteal disruption occurring in children
- Type V - Avulsion fracture of the distal clavicle with the inferior cortical fragment remains attached to the CC ligament

How to Evaluate this Injury Clinically and Radiologically?

Most of the distal clavicle fractures are due to a direct blow or fall on the shoulder. Ecchymosis, abrasion wounds and associated swellings are commonly seen. If

there is significant fracture displacement, the skin may be subjected to too much tension by the bone spike of the proximal fragment that needs urgent attention. In case of high energy trauma such as road traffic accidents, a detailed examination is needed to exclude other associated injuries. Head and neck injuries are found in up to 10% of cases while ipsilateral rib fractures as well as associated chest injuries are not uncommon.

A shoulder trauma series including AP view, scapular Y view and axillary view of the injured shoulder should be the standard radiographs taken. Classification of the fracture could be made based on the fracture displacement. An axillary view is useful in evaluating the AP translation of the fracture. Computer tomography is sometimes needed in cases of complex and comminuted fracture patterns. Ultrasound and MRI are seldom necessary except associated soft tissue injuries such as a rotator cuff tear is suspected.

What will Happen if we Leave the Distal Clavicle Fractures Untreated?

Natural history tells us that a Type I fracture of the distal clavicle without disruption of the CC ligament is inherently stable and usually will heal with a favourable outcome after conservative treatment. Only a very small percentage of patients will have residual shoulder symptoms.

Due to the unstable nature of Type II fractures, the risk of fracture non-union is high with an average of 30%. But are these fracture non-unions all symptomatic that necessitate surgical intervention? Nordqvist in his largest series of distal clavicle fractures found that there were 10 nonunions out of an overall 23 type II fractures, only two cases were symptomatic. When we review Neer's report, only one non-union case ultimately required surgery. Other literatures also pointed out that patients could still have satisfactory shoulder functions even when the fractures are not united radiologically.

Neer suggested that Type III fractures are subjected to a higher chance of ACJ arthrosis with late painful symptoms. However Nordqvist did not note any long term problems in his 15 (11-21) years' follow-up results.

What is the Current Management Strategy?

There is no doubt that the initial treatment for Type I and Type III fractures will be non-operative. An arm sling is offered to support the weight of the arm. A figure of eight splint is not necessary. Pendulum exercises could be started as pain is tolerated. The arm sling could be taken off when the pain has subsided with active assisted and passive mobilisation exercises to start shortly thereafter. Strengthening exercises can be commenced when a pain-free full shoulder range-of-motion achieved.

Despite the excellent prognosis of Type I and III fractures, patients should be informed about the remote chance of late residual shoulder symptoms; especially in type III fractures, patients will have a higher chance in the development of ACJ arthrosis. For those patients who have significant residual symptoms, operative treatment with distal clavicle resection may be needed to alleviate the symptoms.

Management of Type II fractures is always the focus of debate. With a high risk of non-union, some clinicians will suggest operative treatment for all type II fractures while proponents for non-operative treatment will argue that a lot of these non-unions are asymptomatic. For patients who have marked fracture displacements, potential overlying skin compromise and open injuries, they are clearly indicated for surgery. Others may have the right to opt for non-operative treatment.

When non-operative treatment is selected, patients must be carefully counselled and informed of the followings:

- The average risk of non-union is 30%
- Most distal clavicle fracture non-unions will end up with mild symptoms and functional loss is usually low
- For those patients who do develop symptomatic non-unions, late reconstructive surgery such as the Weaver Dunn procedure may be necessary

Judging from the above, each and every patient who has Type II fractures should be considered individually. For young and active patients who do not accept the risk of late reconstruction surgery will tend to have operative treatment early. In contrary, patients who have multiple medical co-morbidities with associated high peri-operative risks would best choose an initial conservative approach.

Operative Treatment for Distal Clavicle Fractures

There are numerous operative techniques reported in the past. The methods of surgical treatment could be summarised as follows:

- Transacromial or intramedullary fixation in terms of K-wires and different pins such as the Steinmann pin, Hagie pin and Knowles pin. This fixation could also be augmented with concomitant tension band wires
- Coracoclavicular indirect fixation with the use of screws, suture anchors, Dacron graft or Mersilene tape
- Open reduction and clavicular plate fixation with the use of different plate systems such as the Balsler plate, Wolter hook plate, AO hook plate, etc.

Different surgical techniques have their own advantages and disadvantages as tabulated (Table 1). With more than 20 techniques described so far, no single fixation is ideal and perfect. There is still no consensus regarding the best surgical method to fix these fractures. Whichever method is chosen, careful operative planning and familiarity with the features of that particular operative technique are essential for the best clinical outcomes.

Method of Fixation	Advantages	Disadvantages
Transacromial or Intramedullary	<ul style="list-style-type: none"> • Simple • Could be augmented with other fixation devices such as tension band wires / suture anchors • Minimally invasive 	<ul style="list-style-type: none"> • Fixation not rigid enough - loss of reduction risk, slow rehabilitation • Migration of the implant with lethal outcomes had been reported in the past • Premature ACJ arthrosis • Removal of the implant needed
Coracoclavicular Indirect Fixation	<ul style="list-style-type: none"> • More rigid fixation • Does not disturb the fracture site • Does not cross the ACJ • No need to remove the implant (except screw) • Allows minimally invasive techniques 	<ul style="list-style-type: none"> • Pull out of the implant reported • Osteolysis of the clavicle or coracoid
Open reduction and clavicular plate fixation	<ul style="list-style-type: none"> • Most rigid fixation • Allows early active mobilisation of the shoulder • High union rate 	<ul style="list-style-type: none"> • Extensive dissection needed • Shoulder impingement • Rotator cuff tear • Acromion fracture • Hook cut out • Removal of the implant necessary

Rehabilitation after Operation

The arm is placed in a sling for 3 weeks after operation in order to avoid early failure. Rigid fixation using plate and screws allows earlier active mobilisation without protection.

Pendulum shoulder mobilisation exercises should be started as the pain is tolerated. We will not wait for radiological bone union as it may take up to 12 weeks and passive and active assisted shoulder mobilisation exercises should be commenced once the sling has been taken off. Contact sports should be avoided until evidence of solid bony union. Removal of implants such as plate and screws is needed once the fracture has united.

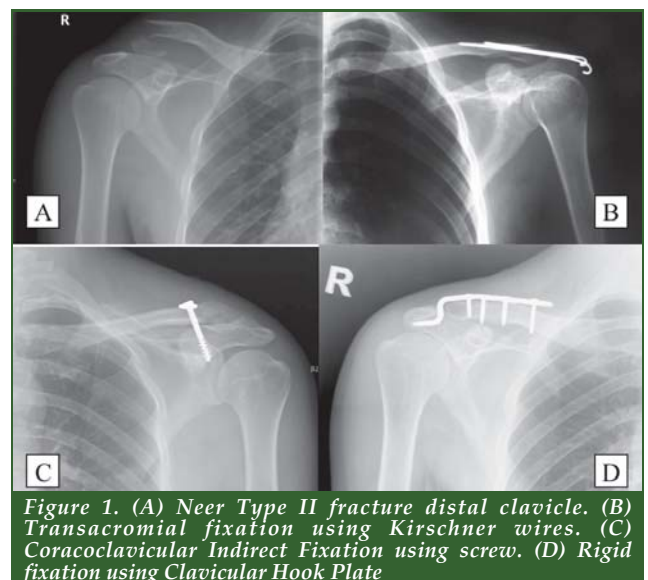


Figure 1. (A) Neer Type II fracture distal clavicle. (B) Transacromial fixation using Kirschner wires. (C) Coracoclavicular Indirect Fixation using screw. (D) Rigid fixation using Clavicular Hook Plate



Acute Acromioclavicular Injuries

Introduction

The acromioclavicular joint (ACJ) is the articulation between the clavicle and the acromion of the scapula. It is covered by a thin capsule with a meniscus-like disc inside. The joint is reinforced by the surrounding acromioclavicular (AC) ligament. This is further strengthened by the overlying delto-trapezius fascia and the coracoclavicular (CC) ligament. As it is the key linkage between the clavicle and the scapula which couples the glenohumeral and scapulothoracic motion, integrity of the ACJ is important for a smooth coordinated shoulder motion.

ACJ injuries could be considered as the "soft tissue" injury counterparts in which the clavicle remains intact with variable degrees of traumatic disruption around the ACJ. They account for about 12% of all shoulder girdle injuries. The true prevalence is expected to be even more as many patients with minor ACJ sprains may not seek medical advice. This incomplete ACJ disruption is actually even commoner than complete dislocations.

Pathology and Classification

Injuries to the ACJ should be regarded as a spectrum of injuries instead of a single entity, from minor sprains to complete ACJ dislocations and even complex injuries that involve the disruption of the delto-trapezius fascia. It is important to be familiar with the different forms of injuries as their management are different.

Three types of ACJ injuries were initially described by Tossy et al. and was later modified into six types by Rockwood. This Rockwood classification is mainly based on the extent of ACJ disruption as well as the state of the CC ligament and the resulting clavicular displacement. All six types of ACJ injuries could be differentiated using standard radiography as shown in Table 2 below:

Rockwood Types	Features	X-ray appearance
I	ACJ sprain with incomplete disruption the AC ligament	Normal
II	ACJ subluxation with complete disruption of the AC ligament and incomplete disruption of the CC ligament	ACJ subluxation with increase in CC distance <25%
III	Complete ACJ dislocation with complete disruption of the AC ligament as well as the CC ligament	ACJ dislocation with increase in CC distance at 25-100%
IV	Complete ACJ dislocation with clavicle displaced posteriorly	ACJ dislocation with evidence of significant displacement of clavicle posteriorly
V	Complete ACJ dislocation with disruption of overlying the delto-trapezial fascia	ACJ dislocation with increase in CC distance by more than 100% and up to 300%
VI	Complete ACJ dislocation with the distal clavicle displaced anteriorly to lie underneath the coracoid process	ACJ dislocation with the clavicle displaced anteriorly to lie below the coracoid process

Clinical and Radiological Diagnosis

The clinical presentations of ACJ injuries are quite similar to fractures of the distal clavicle as both of them share similar injury mechanisms. Most of the patients fell on their shoulder with direct contusion. Local abrasions, ecchymosis and swellings are commonly noted in acute ACJ injuries. Depending on the types of injury, the position of the distal clavicle will be different as described above. For ACJ subluxations/dislocations (II-V), the distal clavicle will look prominent and will be mobile with the so-called "piano-key" sign. Despite that there is a prominent lateral clavicular end, acute threatening to the overlying skin is not common. Concomitant injuries to surrounding neurovascular structures are also not a usual presentation as well.

Standard radiographs of a shoulder trauma series are essential for the initial diagnosis of ACJ injuries. For better delineation of the vertical displacement, a true AP view of the ACJ (Zanca view) with the X-ray beam tilted 10 degrees cephalad centring on the ACJ is sometimes necessary. Concerning the use of weight-bearing view to classify ACJ injuries, some clinicians may not use it especially for those minor ACJ sprains and incomplete subluxations. An axillary view is important for the assessment of AP displacement of the clavicle which could be easily missed. CT scan and MRI are seldom needed in acute ACJ injuries.

Could ACJ Injuries be Treated Conservatively?

For mild degrees of ACJ injuries (i.e. Type I and II), these are invariably treated with non-operative treatment. Rest, ice therapy and the use of analgesics is helpful in relieving the acute symptoms. Protection with an arm sling is useful in supporting the weight of the arm and hence reduces the stress on the ACJ. In contrary, a collar and cuff tends to apply additional traction force to the ACJ and therefore should not be used. Sophisticated shoulder immobilisers are deemed not necessary as there is no evidence showing that they could help in reducing the subluxation.

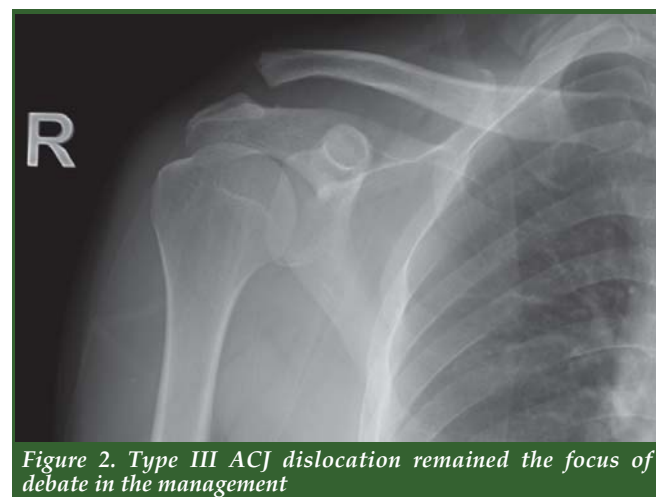


Figure 2. Type III ACJ dislocation remained the focus of debate in the management

Concerning the rehabilitation, the arm sling could be taken off at 1-2 weeks after injury when acute symptoms have subsided. Pendulum exercises of the shoulder should be started as early as the pain can be

tolerated. Active assisted mobilisation and passive mobilisation of the shoulder is to be commenced afterwards. Patients should avoid contact sports for at least 3 months after injury.

The prognosis of this mild form of ACJ injuries is excellent. Stiffness and weakness of the shoulder is uncommon. Patients sometimes may complain of residual discomfort and pain on activity around the ACJ. This could be due to the resulting ACJ instability and arthritis. Only to those with significant persistent symptoms will further operative treatment be needed.

For Type IV, V and VI ACJ injuries, operative treatment is indicated as the soft tissue damage around the shoulder girdle is more severe. Management of Type III ACJ dislocations still remains controversial as it stays somewhere in between. Again we will need to ask ourselves what will happen if we treat all Type III injuries conservatively. Definitely the subluxation/dislocation will persist with prominence over the distal end of the clavicle. Whether it will pose any cosmetic problems is rather subjective, but the functional outcome is usually satisfactory. Literature shows that injured shoulder strength and endurance are comparable to the contralateral side after rehabilitation, and most patients could return to their previous level of activities. This reminds us the wisdom shared by Allman in 1967:

"Patients with poor anatomical results may have no symptoms, whereas anatomical restoration of the joint does not always relieve symptoms".

Proponents for conservative treatment opine that operative anatomical reduction is not necessary for achieving adequate shoulder function, yet surgery will pose possible operative complication risks to our patients. However others argue that we should treat those patients with high shoulder demands differently as a delayed reconstruction is associated with less favourable outcomes. Despite the lack of hard evidence, it is often suggested that this group of patients should receive surgery early.

Therefore each patient should be considered individually in Type III ACJ dislocations. When conservative treatment is chosen, patients should be well informed about possible persistent ACJ deformity but that the functional result is usually satisfactory. Still there is the risk of persistent shoulder symptoms. Under such circumstances, a delayed reconstruction with excision of the distal part of the clavicle may be needed.

Is There Any Gold Standard for Operative Treatment?

There are hundreds of operative techniques described to treat high grade ACJ dislocations. In other words there is no technique that could be singled out with significant superior operative results. Conventional open reductions in the form of a shoulder strap incision is the most common surgical approach. As the ACJ is inherently unstable, internal fixation to maintain reduction and to stabilise the joint is necessary. With different kinds of internal fixation reported, the fixation techniques could be categorised as below:

- Transacromial fixation across the ACJ using pins, K-wires
- Coracoclavicular indirect fixation using Bosworth screws, suture anchors or endobutton system. Other coracoclavicular cerclage techniques with the use of autografts such as hamstring tendons and toe extensors and synthetic materials such as Mersilene tape and Dacron graft have also been reported.
- Rigid fixation by plating across the ACJ using a hook plate

All these techniques have their own pros and cons as listed in the previous Table 1. Orthopedic surgeons should be familiar with the techniques used in order to achieve good clinical results and prevent complications.

Do we Need to Repair the Disrupted Ligaments During Acute ACJ Reconstruction?

Open ACJ reconstructions that are done within the first two weeks theoretically offer the opportunity to repair the torn AC and CC ligaments. In practical scenarios, complicated attempts at repairs in a sophisticated manner is often difficult because the ligaments are usually contused, shredded and even sometimes not recognisable. Some have reported the technique of transferring the coracoacromial (CA) ligament for substitution. On the other hand, any damage to the delto-trapezial fascia and muscle should be repaired as this contributes to significant stability.



Figure 3. Operative treatment is indicated in Type V ACJ dislocation with disruption of delto-trapezius fascia

Rehabilitation after Surgery

As soft tissue repair takes a longer time to heal, the operated shoulder should be supported with an arm sling for 4-6 weeks. Passive and active assisted mobilisation could be started afterwards. Any rigid fixations such as Bosworth screws and plate should be removed once the biological healing of ACJ has consolidated as implant failures may result. However too early removal of the implant will result in re-displacement of the ACJ. Therefore the average timing of removal is around 12 weeks after surgery.

Is There Any Operative Innovation Recently?

With technological innovation plus better implants, new minimally invasive and arthroscopic-assisted operative techniques have been reported. Development of these techniques reduces the surgical trauma that was introduced by conventional open techniques. With theoretical advantages of a smaller scar, better cosmesis and less postoperative pain, it offers an attractive option



for both surgeons and patients. Although their early reports are quite encouraging, more clinical outcome studies are needed to prove their long term efficacy.

Conclusion

Distal clavicle fractures and acromioclavicular joint injuries form a distinct group of shoulder girdle injuries. Natural history shows that conservative treatment may still give satisfactory functional outcomes even in some unstable Neer Type II fractures and Type III ACJ dislocations. This reminds us the importance of "Treat the patient, not the X-rays". The management plan of each patient should be individualised. For operative treatments, there are numerous surgical techniques described while no single one stands up to be the gold standard.

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A Guide to Anti-Doping Regulations for Physicians

Hong Kong Anti-Doping Committee (HKADC)

Under the auspices of the Sports Federation & Olympic Committee of Hong Kong, China, the HKADC is an independent committee responsible for the anti-doping programme in Hong Kong.

Introduction

The use of performance enhancing drugs, or doping practice, is not allowed for athletes. In Hong Kong, the role of the physician in anti-doping work is underrated. With increasing exposure and the important role Hong Kong plays in the international sporting arena, local physicians should better prepare themselves to deal with the anti-doping work. This article aims at increasing the awareness of the physicians' role and responsibilities in the present international efforts in the fight against doping.

Anti-Doping Rule Regulations

It is a common myth that only the athlete will be punished if his/her urine sample is tested positive for Prohibited Substances. However, according the anti-doping regulations as set out by the World Anti-Doping Agency (WADA), administering prohibited substances to an athlete or assisting in anti-doping violation is also considered an anti-doping offence and persons involved will be banned from participation in the sport in any form.

Physicians play an important role in the anti-doping work of the sporting community. It all begins when a patient, who happens to be an athlete, walks into the clinic looking for medical attention. If the athlete uses the medications or treatments prescribed by the physician and if they are considered Prohibited Substances or Methods (as defined on the Prohibited List by WADA), the athlete would have committed an anti-doping offence. Under the World Anti-Doping Code and in accordance with the principle of strict liability, athletes are responsible for what they ingest or use. Penalties for the offence may ruin the athlete's sporting career. In order to serve the best interests of athletes, physicians must avoid prescribing athletes medications containing Prohibited Substances.

The Prohibited List

The WADA annually reviews and publishes a new Prohibited List which governs the substances and methods that are prohibited for athletes. It is important to ensure that only the Prohibited List for the current year is being referred to. The latest Prohibited List can be found and downloaded on www.wada-ama.org. The following list outlines the categories of substances or methods that are included in the 2010 Prohibited List which will take effect on 1 January 2010.

Substances and Methods Prohibited at ALL TIMES (in- and out-of-competitions):

Prohibited Substances
S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS) & Other Anabolic Agents <i>Athletes may use them for promoting lean muscle growth and gaining strength and power.</i>
S2. Peptide Hormones, Growth Factors and Related Substances <i>Erythropoietin (EPO) is included in this category. Endurance athletes may use EPO and related substances or methods to enhance oxygen carrying capacity.</i>
S3. Beta-2 Agonists <i>The use of beta-2 agonists for treating athletes suffering from asthma requires Therapeutic Use Exemption (TUE) (see below).</i>
S4. Hormone Antagonists and Modulators
S5. Diuretics and Other Masking Agents <i>Athletes may use diuretics for acute reduction of weight to meet weight class limits such in weightlifting and boxing. The cheaters may also use diuretics or other masking agents to avoid a positive drug test.</i>

Prohibited Methods
M1. Enhancement of Oxygen Transfer <i>Intravenous administration of blood products containing red blood cells are not permitted. Emergency blood transfusion should be followed by a retrospective TUE application.</i>
M2. Chemical and Physical Manipulation
M3. Gene Doping

Substances and Methods Prohibited IN-COMPETITION (include S1 to S5 and M1 to M3 defined above, as well as):

Prohibited Substances
S6. Stimulants <i>Pseudoephedrine has been re-introduced into the 2010 Prohibited List. Cold medicine prescribed for athletes during competition should not contain stimulants.</i>
S7. Narcotics
S8. Cannabinoids
S9. Glucocorticosteroids <i>Different levels of restrictions are applied depending on the route of administration. Please check and complete the required TUE or Declaration of Use as appropriate.</i>

Substances Prohibited in PARTICULAR SPORTS:

Prohibited Substances
P1. Alcohol <i>Alcohol is prohibited during competition for certain sports e.g. motorcycling and powerboating.</i>
P2. Beta-Blockers <i>Beta-blocker is prohibited in sports where steady action is required such as archery and shooting.</i>



Therapeutic Use Exemption

If an athlete has to be prescribed with medications or treatments that are on the Prohibited List, a Therapeutic Use Exemption (TUE) application must be submitted.

TUE will be granted only if the following criteria are met:

1. the athlete would experience significant impairment to health without using the prohibited substance or method,
2. the therapeutic use of the prohibited substance or method would produce no additional enhancement of performance, and
3. there is no reasonable therapeutic alternative to the use of the otherwise prohibited substance or prohibited method.

Athletes are required to obtain a valid TUE before the start of using any prohibited substance or methods. The application should be completed as soon as an athlete is prescribed a prohibited substance or method for a medical condition and no later than a minimum of 21 days in advance (sometimes 60 days in advance) before the athlete needs the approval (for instance before entering a competition). Physicians must complete the application form (available from the Hong Kong Anti-Doping Committee (HKADC) or respective International Federation) on behalf of the athlete, attach evidence of the diagnosis such as laboratory results and/or image studies, and attest to the necessity of the otherwise Prohibited Substance or Method in the treatment of the athlete.

An application for TUE will not be considered for retroactive approval except in cases where emergency treatment is necessary or due to other special circumstances.

Conclusion

Many Prohibited Substances or Methods can be found in treatments for common illnesses. Physicians need to be cautious and not place athletes' sporting career at risk. Together with all other stakeholders including HKADC, physicians can contribute to preserving a doping-free environment for fair play in sport. For more information on anti-doping issues, please visit HKADC's website on www.antidoping.hk.

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*Better Healthcare by
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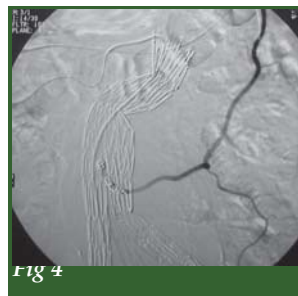
Radiology Quiz

Dr. WK TSO

COS, Department of Radiology,
Queen Mary Hospital



Dr. WK TSO



Clinical data:

- M/79
- infrarenal abdominal aortic aneurysm (AAA) with endovascular aneurysm repair (EVAR) performed
- enlarging AAA detected on follow up CT scan

Questions:

What do you find on the CT scan (selected images)?
How would you manage the problem?

(See P. 34 for answers)



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

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



News from Member Societies

The Hong Kong Pain Society Limited

Updated office-bearers for the year 2009-2010 are as follows: President: Dr. Tak-yi CHUI; Honorary Secretary: Ms. Mary Man-lai CHU; Honorary Treasurer: Dr. Anne Miu-han CHAN

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



The Hong Kong College of Family Physicians Annual Scientific Meeting 2010

"Meeting the Challenges of Non-Communicable Diseases"

It is our great pleasure to announce that the Hong Kong College of Family Physicians' Annual Scientific Meeting 2010 (HKCFP ASM 2010) will take place on 29 - 30 May 2010 at the Hong Kong Academy of Medicine Jockey Club Building, Wong Chuk Hang, Hong Kong.

Non-communicable disease prevention and management is an emerging global challenge with the past decade witnessing local and international initiatives aiming to improve care for non-communicable diseases, with the focus being on the community, family medicine, general practice and primary care. With our ASM 2010, we hope to provide a forum for family physicians and other health care professional colleagues to exchange their experiences and ideas, and to foster collaboration towards meeting the challenges posted by chronic illnesses in our communities.

We now cordially invite you to submit abstracts for free paper presentations and posters at the HKCFP ASM 2010, as well as to participate in our full paper competition. Instructions for abstract submission and full paper competition are available on our College's website (www.hkcfp.org.hk) or you may contact the secretariat on 2528 6618 for more information. I hope that you will join and enrich our ASM in May 2010 and I very much look forward to welcoming you.

Dr. Man-kuen CHEUNG
Chairlady
HKCFP ASM 2010 Organising Committee

Upcoming Certificate Courses of the Federation of Medical Societies of Hong Kong

Date	Course No	Course Name	Target Participants	CME/CNE
6 Jan 2010 - 10 Feb 2010	C154	Certificate Course on Paediatric Nutrition	Medical & Health Professionals, Child-care Professionals	9 CNE Points / CME Accreditation in application
28 Jan 2010 - 18 Mar 2010	C156	Certificate Course on Updates in Cervical Cancer Prevention	Medical and Health Professionals	9 CNE Points / CME Accreditation in application
5 Mar 2010 - 19 Mar 2010 (Every Fri)	C157	催眠治療臨床應用工作坊 (基礎培訓)	從事醫療及護理工作的專業人士	10 CNE Points / CME Accreditation in application
16 Apr 2010 - 30 Apr 2010 (Every Fri)	C153	催眠治療臨床應用工作坊 (進階培訓)	從事醫療及護理工作的專業人士	9 CNE Points / CME Accreditation in application



The Federation's Annual General Meeting

The Federation's 24th AGM was successfully held on 19th November 2009 with the election of a new President. After serving as President for six consecutive years, Dr. Dawson FONG handed over the leadership to the new President, Dr Raymond LO, who has been serving the Federation since 2001. He was then the Deputy Honorary Secretary and after two years, he served as the Honorary Secretary for another 4 years. In the previous term, Dr. LO was the 1st Vice President. Other office bearers elected:

- 1st Vice-President** : Dr. CHAN Chi Fung, Godfrey
- 2nd Vice-President** : Dr. LO Sze Ching, Susanna
- Hon Secretary** : Dr. CHAN Sai Kwing
- Hon Treasurer** : Mr. LEE Cheung Mei, Benjamin

New Executive Committee Members:

- Dr. CHAN Chi Wing, Timmy
- Dr. CHAN Hau Ngai, Kingsley
- Dr. CHIM Chor Sang, James
- Dr. CHOI Kin
- Dr. HUNG Che Wai, Terry
- Ms. KU Wai Yin, Ellen
- Dr. LEUNG Ka Kit, Gilberto
- Dr. MAN Chi Wai
- Dr. MOK Chun On
- Dr. NG Yin Kwok
- Dr. YU Chau Leung, Edwin
- Dr. WONG Mo Lin, Maureen

New Directors of the HKFMS Foundation Limited

- President** : Dr. LO See Kit, Raymond
- 1st Vice-President** : Dr. CHAN Chi Fung, Godfrey
- 2nd Vice-President** : Dr. LO Sze Ching, Susanna
- Hon Secretary** : Dr. CHAN Sai Kwing
- Hon Treasurer** : Mr. LEE Cheung Mei, Benjamin
- Directors** : Mr. CHAN Yan Chi, Samuel
- Dr. CHIM Chor Sang, James
- Ms. KU Wai Yin, Ellen
- Dr. WONG Mo Lin, Maureen
- Dr. YU Chak Man, Aaron



*Back row from left to right:
Mr. Gordon CHEUNG, Dr. NGAI Wai Tat, Dr. Timmy CHAN, Dr. YU Chak Man, Dr. Vincent LEE, Dr. MAN Chi Wai, Dr. SHUM Kwok Yan, Dr. Edwin YU, Dr. Jane CHAN, Ms. Ellen KU, Dr. MOK Chun On, Dr. Terry HUNG*

*Seated from left to right:
Ms. Tina YAP, Dr. CHAN Sai Kwing, Dr. Raymond LO, Dr. Dawson FONG, Dr. Susanna LO, Mr. Nelson LAM, Mr. Benjamin LEE*



Immediate Past and New Presidents: Dr. Dawson FONG and Dr. Raymond LO



The Federation Premises Have Been Renovated!

For quite a while we were aware that the Federation premises fell short of keeping our customers satisfied and badly needed a renovation. Attempts were made to seek sponsors for such a project but it had not been easy. Seeing the importance of upkeeping our service to members, we decided to proceed with the renovation.



Since 1996



The New Look

Office space for our secretariat was rearranged to make available one additional room - the Multi-function Room and storage spaces for members. People visiting our office now will have a hospitality corner where memorabilia are on display - adding much warmth to our services. The Lecture Hall was given a bright new look equipped with a brand new set of audio-visual equipment - a change that will certainly please the thousands of delegates attending our certificate courses throughout the year. The lift lobby was totally redesigned not only to house our Federation emblem and flags but also to serve as a gallery for artistic pieces of our members. Currently the front covers of the Medical Diary are on display.



The artistic lift lobby



The hospitality corner



The Lecture Hall with well equipped AV system



A new Multi-function Room for small group meetings

This renovated premises will truly reflect the quality service we deliver to our clients who are members and at the same time remain competitive in the rental market for those who are not.



Date / Time	Function	Enquiry / Remarks
4 6:30pm - 9:30pm (11,18,25) MON	Certificate Course on Cardiac Care (Code no: TC-CC-1001) Organiser: College of Nursing, Hong Kong	Secretariat Tel: 2572 9255 Fax: 2838 6280 24 CNEs
5 8:00 pm - 10:00pm TUE	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. Paulina TANG Tel: 2527 8898 Fax: 2865 0345
6 1:30 pm WED	HKMA CW&S Community Network - Certificate Course on Dermatology (III) Organiser: HKMA CW&S Community Network, Chairman: Dr. LAW Yim Kwai, Speaker: Dr. WONG Sai Siang, Venue: The HKMA Dr. Li Shu Pui Professional Education Centre, 2/F, Chinese Club Building, 21-22 Connaught Road Central, Hong Kong	Miss Alice TANG Tel: 2527 8285 2 CME Points
7 6:30pm - 9:30pm (14,21,28) THU 8:00 pm	Certificate Course on Ward Management Module I - Understanding Management Issues in the Workplace (Code no: TC-WM-I-1001) Organiser: College of Nursing, Hong Kong HKMA Council Meeting Organiser: The Hong Kong Medical Association, Chairman: Dr. H.H. TSE, HKMA Head Office, 5/F., Duke of Windsor Social Service Building, 15 Hennessy Road, Hong Kong	Secretariat Tel: 2572 9255 Fax: 2838 6280 24 CNEs Ms. Christine WONG Tel: 2527 8285
9 SAT 7:00 pm	5th HKMA Sports Night Organiser: The Hong Kong Medical Association, Venue: Wanchai Ho Choi Banquet & Seafood Restaurant Hong Kong Surgical Forum - Winter 2010 Organiser: Department of Surgery, the University of Hong Kong, Queen Mary Hospital & Hong Kong Chapter of American College of Surgeons, Venue: Underground Lecture Theatre, New Clinical Building, Queen Mary Hospital, Pokfulam, Hong Kong	Ms. Dora HO Tel: 2527 8285 Forum Secretariat Tel: 2855 4855 / 2855 4886 Fax: 2819 3416 Email: hksf@hkucc.hku.hk Website: http://www3.hku.hk/surgery/forum/php
12 TUE 1:45 pm	HKMA-Kowloon West Community Network - Management of Drug Abuse Patients (Session 2) Organiser: HKMA-Kowloon West Community Network, Speakers: Dr. CHOW Lok Yee & Dr. LAM Ngam	Miss Alice TANG Tel: 2527 8285
13 WED 7:30 am 1:30 pm 1:30 pm	Hong Kong Neurosurgery Society Monthly Academic Meeting - Craniostomosis Organiser: Hong Kong Neurosurgical Society, Chairman: Dr. WONG Sui To, Speaker: Dr. LAM Si Kei Samuel, Venue: Seminar Room, G/F., Block A, Queen Elizabeth Hospital, Kowloon HKMA CW&S Community Network - Certificate Course on Dermatology (IV) Organiser: HKMA CW&S Community Network, Chairman: Dr. CHAN Hau Ngai Kingsley, Speaker: Dr. SHIH Tai Cho Louis, Venue: The HKMA Dr. Li Shu Pui Professional Education Centre, 2/F, Chinese Club Building, 21-22 Connaught Road Central, Hong Kong Practical Course to Computerize Your Clinic: CMS 3.0 Maintenance and Future Development Organiser: The Hong Kong Medical Association, Speaker: Mr. Edmund TSE & Mr. Michael CHIU, Venue: Lecture Theatre, 1/F, Block J, Alice Ho Miu Ling Nethersole Hospital, 11 Chuen On Road, Tai Po, NT	Dr. Y.C. PO Tel: 2990 3788 Fax: 2990 3789 2 CME Points Miss Alice TANG Tel: 2527 8285 2 CME Points Miss Carman WONG Tel: 2527 8285 2 CME Points
14 THU 2:00 pm	HKMA Structured CME Programme with Hong Kong Sanatorium & Hospital Year 2010 - The Role of Ultrasound in Obstetrics Organiser: The Hong Kong Medical Association, Speaker: Dr. LAM Sze Wing Helena, Venue: The HKMA Dr. Li Shu Pui Professional Education Centre, 2/F, Chinese Club Building, 21-22 Connaught Road Central, Hong Kong	Miss Viviane LAM Tel: 2527 8452 1 CME Point
16 SAT 2:30 pm	Refresher Course for Health Care Providers 2009/ 2010 Organiser: The Hong Kong Medical Association, Speaker: Dr. CHAN Wai Lam, Venue: Training Room II, 1/F., OPD Block, Our Lady of Maryknoll Hospital, 118 Shatin Pass Road, Wong Tai Sin, Kowloon	Ms. Clara TSANG Tel: 2354 2440 2 CME Points
17 SUN 2:00 pm	HKMA Certificate Course on Family Medicine 2010 Organiser: The Hong Kong Medical Association, Speakers: Dr. CHENG Chi Man & Dr. CHEUNG Kin Leung Ben, Venue: Seminar Room, G/F., Block D, Queen Elizabeth Hospital, Kowloon	Miss Viviane LAM Tel: 2527 8452 3 CME Points
19 TUE 6:30pm - 8pm (26) 7:00 pm - 8:00 pm 7:45 pm	Seminar on "Nurses Career Progression Path (1) & (2)" Organiser: College of Nursing, Hong Kong FMSHK Executive Committee Meeting Organiser: The Federation of Medical Societies of Hong Kong, Venue: Council Chambers, 4/F., Duke of Windsor Social Service Building, 15 Hennessy Road, Wanchai, Hong Kong HKMA Choir 觀摩音樂會 Organiser: The Hong Kong Medical Association, Venue: Lecture Hall, Sheung Wan Civic Centre	Secretariat Tel: 2572 9255 Fax: 2838 6280 1.5 CNEs Ms. Paulina TANG Tel: 2527 8898 Fax: 2865 0345 Ms. Candy YUEN Tel: 2527 8285
21 THU 7:00 pm	Joint Professional Sports Night Organiser: The Hong Kong Medical Association, Venue: Lippo Chiuchow Restaurant	Ms. Dora HO Tel: 2527 8285
27 WED 1:30 pm	HKMA CW&S Community Network - Certificate Course on Dermatology (V) Organiser: HKMA CW&S Community Network, Chairman: Dr. CHAN Yee Shing Alvin, Speaker: Dr. CHAN Hin Lee Henry, Venue: The HKMA Dr. Li Shu Pui Professional Education Centre, 2/F, Chinese Club Building, 21-22 Connaught Road Central, Hong Kong	Miss Alice TANG Tel: 2527 8285 2 CME Points

Date / Time	Function	Enquiry / Remarks
28 THU 1:45 pm 8:00 pm - 10:00 pm	HKMA NT West Community Network - Management of Atopic Dermatitis Organiser: HKMA NT West Community Network, Speaker: Dr. CHEUNG Hing Cheong Hugh, Venue: Plentiful Delight Banquet, Yuen Long HKFMS Foundation Meeting Organised by: The Federation of Medical Societies of Hong Kong, Venue: Council Chambers, 4/F., Duke of Windsor Social Service Building, 15 Hennessy Road, Wanchai, Hong Kong	Ms. Sally CHAN Tel: 9628 6890 1 CME Point Ms. Paulina TANG Tel: 2527 8898 Fax: 2865 0345

催眠治療臨床應用課程 (基礎訓練)

課程編號:C157

合辦機構：



香港醫學組織聯會

適健中心
The Centre on
Health & Wellness

(香港復康會屬下單位)

催眠是一種心理治療介入方法之一，對於紓減壓力、處理失眠和一些情緒的困擾如：抑鬱等癥狀甚為有效。此外，催眠在改善身心健康亦有顯著的效果。現代醫療及心理輔導已將之歸納於心理治療，在歐美及台灣十分流行。本課程更專為從事護理專業的人士，目的是將催眠治療的基本技巧：如自我催眠應用於臨床工作中。

目的：

1. 協助參加者掌握正確的催眠治療知識及自我催眠的運用
2. 學習運用自我催眠技巧於相關的臨床工作
 - 改善睡眠質素
 - 舒導情緒(一)
 - ▶ 平衡與轉化情緒
 - ▶ 紓減壓力

內容：

- 一般人對催眠的誤解
- 催眠的定義、歷史及用途
- 催眠對身心的效用
- 催眠與潛意識
- 認識潛意識的力量
- 催眠能力的測試
- 自我催眠的基本概念及運用技巧
- 導入催眠意境的基本技巧
- 漸進式放鬆技巧
- 催眠治療提示的運用(直接提示)
- 改善睡眠質素的技巧
- 平衡與轉化情緒的方法
- 紓減壓力的技巧

導師：

尹婉萍小姐

(認可催眠培訓導師、註冊社工)

尹小姐擁有香港中文大學社工學士，香港大學社會科學碩士學位。她從事社區復康工作十五年，為慢性健康問題人士及其家屬提供個案輔導及小組治療服務，尤精於情緒舒導、壓力處理、家庭關係等，現時她更為香港大學社會工作及社會行政學系的臨床實習導師，教授修讀行為與身心健康碩士的學生於催眠治療與心理輔導的臨床應用。

日期：2010年3月5日至3月19日及4月9日(逢星期五)
時間：晚上7:00至9:30
地點：香港灣仔軒尼詩道15號溫莎公爵社會服務大廈4字樓演講廳
教授語言：廣東話
名額：40人
費用：\$1,000
如對此課程有任何查詢，可致電香港醫學組織聯會秘書處2527 8898
或電郵至info@fmshk.org

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

延續醫學教育(CME)/持續專業發展(CPD)之學分正在申請中
學員成功修畢整個課程可獲10個持續護理教育(CNE)學分
或按出席時數獲取所得之學分





Answer to Radiology Quiz

Answer:

Type II endoleak (retrograde flow from superior mesenteric artery to inferior mesenteric artery).

CT Findings:

Contrast leakage is noted at the IMA origin, entering into the abdominal aortic aneurysm on contrast CT scan (Fig 1, 2). This is confirmed on angiogram study with selective catheterisation of the superior mesenteric artery (Fig 3). Embolisation of the retrograde flow is performed with metal coils (Fig 4).

Type II endoleak is the most common type of endoleak. Type II endoleaks occur when blood flow takes a circuitous route travelling through aortic branches proximal or distal to the endovascular repair through anastomotic connections into vessels with a direct communication with the aneurysm sac. These blood vessels, before aortic exclusion via the stent graft, carried blood from the aorta to nutrient beds of lower resistance. When the native ostia reside within the excluded aneurysm sac, the flow dynamics change, resulting in flow reversal. This does not occur following traditional surgical repairs as these vessels are ligated from within the opened aneurysm sac. Typical culprits include the inferior mesenteric and lumbar arteries. This type of endoleak occurs in approximately 20% of patients and is a problem unique to EVAR.

References

Baum RA et al. Diagnosis and management of type 2 endoleaks after endovascular aneurysm repair. *Tech Vasc Interv Radiol* 2001;4(4):222-226.

Baum RA, et al. Endoleaks after endovascular repair of abdominal aortic aneurysms. *J Vasc Interv Radiol* 2003;14(9 Pt 1):1111-1117.

Dr. WK TSO

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Certificate Course on Updates in Cervical Cancer Prevention

Jointly organised by



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



The Hong Kong Society for Colposcopy
& Cervical Pathology
香港陰道鏡及子宮頸病理學會

Objective

To update the recent information on the cervical cancer prevention to all medical & health care professionals

Date	Topic	Speaker
28 January 2010 (Thur)	Cervical cancer and precursors 子宮頸癌及前期病變 Recent Advances in cervical cancer screening & prevention – HPV vaccines 子宮頸癌篩查及預防的新發展 - HPV 疫苗	Prof. Annie CHEUNG 張雅賢教授 Queen Mary Hospital 瑪麗醫院
4 February 2010 (Thur)	Cervical cancer screening programme in Hong Kong 香港子宮頸普查計劃	Dr. Luna KO 高月晶醫生 Department of Health 衛生署
25 February 2010 (Thur)	Laboratory processing of cervical cytology specimens and pathology reporting 子宮頸細胞的實驗室程序及病理報告	Dr. Philip IP 葉品正醫生 Queen Mary Hospital 瑪麗醫院
4 March 2010 (Thur)	Cervical Smear taking – techniques & tricks 子宮頸抹片 - 取樣方法及技巧 Training & Experience of smear taker 護士於子宮頸細胞採樣之經驗及培訓	Dr. Grace WONG 王靜妍醫生 Ms. K.M. LAI 黎嘉敏小姐 The Family Planning Association of Hong Kong 香港家庭計劃指導會
11 March 2010 (Thur)	Abnormal cervical cytology & colposcopy 異常子宮頸細胞及陰道子宮頸鏡檢查	Dr. S.K. LAM 林兆強醫生 Kwong Wah Hospital 廣華醫院
18 March 2010 (Thur)	Difficult colposcopy - techniques & tricks 陰道子宮頸鏡檢查於較難個案之技巧 Training & Experience of Nurse Colposcopist 護士於陰道子宮頸鏡檢查之經驗及培訓	Dr. S.F. YIM 嚴素芬醫生 Ms. K.Y. SIU 蕭家儀小姐 Prince of Wales Hospital 威爾斯親王醫院
Time	7:00 p.m. – 8:30 p.m.	Course Fee HK\$750 (6 sessions)
Venue	Lecture Hall, 4/F, Duke of Windsor Social Service Building, 15 Hennessy Road, Hong Kong	Enquiry The Secretariat of the Federation of Medical Societies of Hong Kong
Language Media	English (May Supplement with Cantonese)	
Certificate	Awarded to participants with a minimum attendance of 70%	

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