

膝關節是人體最大的關節，由大腿骨（股骨）、小腿骨（脛骨）、膝蓋骨（髌骨）、前後十字韌帶及半月板組成，用以支撐身體大部份的重量，是下肢的活動樞紐。在大腿骨的末頂與小腿骨的頂端各有軟骨包着，軟骨有着潤滑及吸震作用，同時減輕骨與骨之間的磨擦。

隨着年齡增長，膝關節軟骨會逐漸退化，而體重過重、行動姿勢不良或膝部曾受傷、長期勞損都會加速膝關節退化，造成退化性關節炎。不單經常感疼痛，關節僵硬、變形，連步行都感吃力，嚴重影響生活質素。

病況如屬較輕微，可利用藥物和減輕負重，配合適量運動或物理治療來減輕關節疼痛，或改善活動能力。如上述方法無法改善情況，或病況較嚴重，可考慮人工膝關節置換手術。隨着醫療儀器愈趨進步，新的技術能減低手術的出血量，並減輕術後的痛楚，部份病人甚至可考慮兩邊膝蓋於同一次手術更換人工關節。

| Artificial Knee Joint Replacement Surgery 人工膝關節置換手術 | |
|--|---|
| Wound 傷口 | About 7 to 10 cm 約7至10厘米 |
| Surgical Procedure 手術過程 | General or spinal/epidural anesthesia is required. An incision is made at the middle of the knee and the damaged cartilage at the distal end of the femur and the proximal end of the tibia is removed. Artificial metal joint components are fitted into the joint and fixed with acrylic (polymethylmethacrylate, PMMA) cement. A wear-resistant plastic is then placed between the two artificial joint components so that the joints can move smoothly. 需全身或半身麻醉，於膝部正中開刀，切除大腿骨末端及小腿骨頂部的受損關節軟骨，套上金屬製的人工關節。再以骨水泥將人工關節固定，然後在兩個人工關節之間加入一塊耐磨塑膠，令關節能順暢運作。 |
| Length of Hospital Stay 住院時間 | About a week 約1星期 |

Minimally Invasive Bone Grafting and Reduction 微創植骨復位手術

The shoulder joint, also known as the ball-and-socket joint, is the human joint that offers the largest range of motion. If the shoulder is pulled externally or is subjected to sudden impact, the upper part of the humerus can dislocate from its normal position. This is known as a dislocated shoulder. Shoulder dislocation is a common sports injury, and is often seen in sports such as basketball, rugby, and cycling.

The younger the patient is at the time of his or her first shoulder dislocation, the greater the risk of recurrence. Each occurrence causes damage to the joint and ligaments. A lack of appropriate treatment following the first dislocation episode can also increase the risk of recurrence, causing easier shoulder dislocation in the future. To avoid recurrent dislocation, surgical procedures to fix the joint are generally recommended. This can be done with traditional open surgery or minimally invasive surgery.



肩關節又稱球窩關節，是人體活動幅度最大的關節，當肩部突然受到外力拉扯、撞擊，令肱骨上部移離正常位置，就是肩關節脫臼。肩關節脫臼是頗常見的運動創傷，多見於籃球、檯球、單車等運動。

初次脫臼時的年紀愈輕，日後復發的風險愈大。每次脫臼，都會對關節、韌帶造成傷害。如第一次脫臼後沒有適當治療，復發機會又會再增加，變得愈來愈容易脫臼。要避免再次脫臼，一般會採用手術將關節固定，可採用傳統開刀或微創復位手術。

| | Traditional Open Surgery 傳統開刀 | Minimally Invasive Surgery 微創手術 |
|----------------------------|--|--|
| Wound 傷口 | About 10 cm 約10厘米 | A few incisions of about 1cm each 數個約1厘米的切口 |
| Surgical Procedure 手術過程 | The ligament tissues are fixed to the bone with metal or plastic anchors. 利用金屬或塑膠錨釘，將韌帶組織固定在骨上。 | Damaged ligaments and bone tissues are repaired through arthroscopy to provide support for the glenoid fossa (glenoid cavity). 以關節鏡修補韌帶及受損的骨組織，為關節窩提供承托力。 |
| Blood Loss 出血量 | Significant 大 | Minimal 小 |
| Trauma and Scarring 創傷性 | Involves a large incision and cutting of the muscles 需要切開肌肉，創傷性高 | Minimal 創傷性低 |
| Pain 疼痛 | Significant 大 | Minimal 小 |
| Recovery Period 康復時間 | About 6 months 約半年 | About 6 weeks 約6星期 |

Appointments and Enquiries 預約及查詢

For further information or appointment with our orthopaedics specialist Services, please contact us on the telephone number below.

如想進一步了解，或預約本院骨科專科醫生，請致電與本院職員聯絡。

Tel 電話 : (852) 2275 6888

Website 網站 : www.twah.org.hk



Map 路線圖



Bus 巴士

39A Tsuen Wan West Station 荃灣西站
39M Tsuen Wan MTR 荃灣港鐵站
30X Whampoa Gardens 黃埔花園
30 Cheung Sha Wan 長沙灣
A38 Hong Kong International Airport 香港國際機場

To the Hospital Via Castle Peak Road:
+ Alight at Tsuen King Circuit Flyover
+ Take the bus in front of Tsuen King Circuit Police Station

所有行經青山公路荃灣段之巴士：
+ 於荃景圍天橋站下車，
+ 然後步行至荃景圍警署轉乘巴士到醫院。

Minibus 專線小巴

95M Tsuen Wan MTR 荃灣港鐵站
95 Nina Tower 如心廣場
84 Tsuen Wan Chung On Street 荃灣眾安街

24 小時急診中心 Hour Urgent Care Center

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The Hospital reserves the right to change or amend details without prior notification. For the latest information, please visit our website at www.twah.org.hk 如有任何資料調整或變更，本院毋須另行通知。如欲查閱最新資料，請瀏覽本院網站www.twah.org.hk。

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Health 安
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Orthopedics & Traumatology Service 骨科專科服務



4 Your Professional Medical Team 您的專業醫療團隊

Hong Kong Adventist Hospital - Tsuen Wan offers comprehensive orthopedics & traumatology services that include examinations, treatments, surgery, and rehabilitation, covering the areas of general orthopedics, joint surgery, sports medicine, and post-surgery rehabilitation. All services are managed by our highly experienced orthopedic surgeons with the support of our friendly and attentive staff, and state-of-the-art facilities and equipment, ensuring that our patients receive the best possible care.

香港港安醫院—荃灣骨科專科服務由經驗豐富的骨科專科醫生主理，加上親切友善的護理人員，配合精良的設備及儀器，由檢查、治療、手術到復康訓練都照顧周到，涵蓋基本骨科、關節手術、運動創傷，乃至手術後的復康治療等等，為病人提供專業、貼心的醫療服務。

4 Overview of Services 服務範圍

- + Treatment of general trauma, such as fractures; reduction and fixation of joint dislocation; treatment of shoulder, elbow, or wrist pain.
- + Treatment of sports injuries, such as muscle strains, joint sprains, ligament tears, chronic tendonitis due to overuse (such as tennis elbow), and fasciitis.
- + Treatment of common spinal conditions including spinal degeneration, disc herniation, disc degeneration, spinal stenosis, and sciatica.
- + Treatment of degenerative arthritis and other types of arthritis.
- + 一般創傷，如骨折、甩脫復位及固定、肩膊、手肘、手腕痛症。
- + 運動創傷，如肌肉拉傷、關節扭傷、韌帶撕裂、勞損性肌腱炎（如網球肘）、筋膜炎等。
- + 脊椎問題，常見有脊椎關節退化、椎間盤突出、椎間盤退化、椎管狹窄、坐骨神經痛等。
- + 退化性關節炎及其他關節炎。

4 Common Orthopedic Surgeries 常見骨科手術

The hospital offers a variety of minimally invasive arthroscopic surgeries, minimally invasive orthopedic surgeries, and endoscopic surgeries, including:

- + Anterior cruciate ligament reconstruction
- + Meniscus repair surgery
- + Artificial knee replacement
- + Minimally invasive reduction and bone grafting

本院提供多種微創關節鏡手術、骨科微創手術及內視鏡手術：

- + 前十字韌帶重建手術
- + 半月板重建手術
- + 人工膝關節置換手術
- + 微創植骨復位手術



Anterior Cruciate Ligament Reconstruction 前十字韌帶重建手術

The anterior cruciate ligament (ACL) is the fibrous tissue connecting the femur and tibia. Its function is to limit the forward movement of the tibia and maintain the stability of the knee joint. If the knee is overextended, over-rotated or sustains high impact trauma, it may be torn. This subsequently undermines a patient's ability to move and exercise.

An ACL tear is a very common sports injury. It is often seen in sports that require frequent and rapid changes in direction and jumping, such as football and basketball.

Treatment depends on the severity of the injury. If the tear is not serious, conservative treatment (such as physiotherapy) is generally recommended. Traditional arthroscopic ACL reconstruction or the newly introduced artificial cruciate ligament reconstruction may be considered if the tear is severe, involves a meniscus tear, or if the patient is active in sports. Surgery restores the stability and mobility of the patient's knee joint.

前十字韌帶是連接股骨和脛骨的纖維組織，功用是限制小腿骨向前移動及維持膝關節穩定，如果膝部伸展過度或旋轉，或受到猛烈撞擊，有機會意外撕裂，影響活動能力。

前十字韌帶撕裂是十分常見的運動創傷，多見於經常急速轉向、跳躍的運動如足球，籃球。

治療方法視乎受傷程度。如果撕裂不嚴重，一般採取保守治療，如物理治療；如果撕裂較嚴重，或半月板同時受傷，又或病人需要經常做運動，可因應本身情況考慮傳統的關節鏡前十字韌帶重建術，或近年引入的人工十字韌帶重建術。完成手術能讓病人的膝關節恢復穩定，從而回復活動能力。

| | Traditional Arthroscopic Anterior Cruciate Ligament Reconstruction 傳統前十字韌帶重建手術 | Artificial Cruciate Ligament Reconstruction 人工十字韌帶重建術 |
|----------------------------|---|---|
| Wound 傷口 | 1 surgical wound of about 3cm 1個約3厘米的傷口 | 3 surgical wounds of about 1cm each 3個約1厘米的傷口 |
| Surgical Procedure 手術過程 | An accessory hamstring or part of the patellar ligament of the knee is transplanted to the injured knee to connect the femur and tibia, replacing the torn ACL. | The artificial cruciate ligament (artificial fibers), which has similar tenacity to a human ligament, is inserted into the knee as a scaffold through arthroscopy. The original ligament tissues regrow along the supporting artificial cruciate ligament and ultimately bond together. |
| | 開刀從膝蓋的髕骨或膕繩肌取出筋腱，移植到受傷膝蓋的股骨和脛骨之上，代替斷裂的十字韌帶。 | 透過關節鏡，將韌度與人體韌帶相若的人工十字韌帶（人造纖維）放進膝蓋，擺放形式如同一個支架，原本的韌帶組織會沿着人工十字韌帶生長，最終合而為一。 |

Meniscus Reconstruction 半月板重建手術

The meniscus is a crescent-shaped fibrocartilaginous structure in the knee. There are two menisci in each knee - one at the inner side (medial) and one at the lateral side (outside) of the knee to stabilize the knee joint. The menisci also act as buffers and shock absorbers.

A meniscus tear is a common sports injury. The menisci can be torn if the knee is twisted or rotated forcefully.

Treatment depends on the location and severity of the meniscal injury. The outside (periphery) of the meniscus is well-supplied with blood vessels and can usually heal well. Therefore, a lateral (peripheral) tear can be repaired by arthroscopy and the injury will then heal gradually.

If the tear is more serious, surgical removal of the torn meniscus may be required. Artificial meniscal reconstruction can be considered though this procedure is not suitable for everyone. Reconstruction is usually only recommended to patients aged between 18 and 50 with intact meniscus corners and intact or partially degraded articular cartilage in the knee. Physiotherapy is required after surgery.

半月板是膝部一塊新月型的纖維軟骨，膝關節內外側各有一塊，幫助穩定膝關節，也有緩衝和吸震作用。

半月板撕裂是頗為常見的運動創傷。當膝部突然大幅度地扭動或旋轉，就有機會令半月板撕裂。

其治療方法取決於半月板的受損位置和程度。半月板外側佈滿血管，康復能力較強。因此，較輕微的外側撕裂可利用關節鏡縫補，傷口其後會慢慢癒合。

若撕裂較嚴重，就需手術切去受損組織，或考慮人工半月板重建。不過，並非所有人士都適合後者，只有年齡介乎18至50歲、半月板的兩角未受損，膝關節軟骨未完全退化的人士才建議進行，手術後也需要配合物理治療。

| | Meniscus Repair 微創半月板修補手術 | Artificial Meniscus Reconstruction (MIS) 微創人工半月板重建手術 |
|---------------------------------|--|---|
| Wound 傷口 | A few small surgical wounds 數個細小的傷口 | A few small surgical wounds 數個細小的傷口 |
| Surgical Procedure 手術過程 | General or regional anesthesia is required. Through arthroscopy, the torn meniscus is repaired with special sutures. | General or regional anesthesia is required. An artificial meniscus, composed of aliphatic polyurethane, is implanted with arthroscopy into the knee joint and sutured to the original meniscus. The artificial meniscus is full of sponge-like holes. Tissue cells of the original meniscus will grow to fill up the holes in the artificial meniscus and form a new meniscus over the course of about 18 months. The artificial meniscus will decompose after about a year and will be absorbed by the body. |
| Blood Loss 出血量 | Minimal 小 | Minimal 小 |
| Trauma and Scarring 創傷性 | Minimal 小 | Minimal 小 |
| Pain 疼痛 | Minimal 小 | Minimal 小 |
| Length of Hospital Stay 住院時間 | A few days 約數天 | A few days 約數天 |

Total Knee Replacement Surgery 全人工膝關節置換手術

The knee joint is the largest joint in the human body. It consists of the thighbone (femur), the shinbone (tibia), the patella, the anterior and posterior cruciate ligaments, and the menisci. It supports most of the weight of the body and acts as a pivot for the lower leg. The distal end of the femur and the proximal end of the tibia are covered with cartilage, which act as lubricants and shock absorbers while reducing friction and wearing between bones.

Knee cartilage degenerates gradually with age. Degradation of the knee joint may be accelerated if a person is overweight, has poor posture, suffers from knee injuries, or subjects the knees to long-term overuse, resulting in degenerative arthritis (osteoarthritis). Common symptoms include frequent pain, joint stiffness, and deformation, and in some cases, it may even be difficult for a person to walk, affecting his or her quality of life.

In minor cases, drugs combined with weight reduction, adequate exercise, or physiotherapy can reduce joint pain and improve mobility. If the above methods do not relieve symptoms or if the condition is more serious, patients can consider artificial knee joint replacement surgery. New technology has reduced the amount of blood loss during surgery and postoperative pain. Some patients can even consider replacing both knees with artificial joints during the same operation.

