



Press Release

Alcohol Abuse Can Lead to Osteonecrosis, Possibly Requiring Hip Replacement Precision Robotic-Assisted Hip Surgery Speeds Up Recovery and Reduces Postoperative Pain

Many people hold stereotypical views about hip replacement surgery, believing it is only related to joint degeneration and trauma. Some even mistakenly think that the recovery time for hip replacement surgery is long, causing patients to avoid seeking medical help and endure pain silently, which affects their daily lives. Local research indicates that osteonecrosis is the primary cause for patients requiring hip replacement surgery, with alcohol abuse identified as the most common contributing factor¹. This condition not only impacts patients' quality of life but may also lead to long-term physical disability. To address this challenge, Hong Kong Adventist Hospital - Stubbs Road (HKAH-SR) has introduced precision robotic-assisted hip replacement surgery. This technology not only enhances surgical accuracy but also reduces postoperative pain and speeds up recovery. Studies show that patients undergoing robotic-assisted surgery experience significantly shorter recovery times and less postoperative pain², offering new hope for those in need of surgery and helping them improve their daily lives more quickly.

Alcohol Abuse is the Most Common Cause of Ischemic Osteonecrosis

Dr. Cheung Man Hong, Clinical Director Of Robotic Surgery (Joint Replacement) and Consultant In Orthopedic at HKAH-SR, pointed out that hip joint problems are becoming increasingly common in modern society. Patients who notice symptoms such as persistent pain, stiffness, limited mobility, joint noises, or leg length discrepancy should be aware that these may be early signs of hip joint disease³. If left untreated, the condition may worsen. According to a study conducted by a local university hospital, which analyzed 419 patients requiring hip replacement surgery, ischemic osteonecrosis was identified as the primary cause among local patients, with alcohol abuse being the most common factor leading to ischemic osteonecrosis¹.

¹ Chan et al. Hong Kong Med J 2016 Feb;22(1):11-5

² Shibamura et al. BMC Musculoskeletal Disorders (2021) 22:314

³ <https://www.mayoclinic.org/zh-hans/diseases-conditions/hip-labral-tear/symptoms-causes/syc-20354873>



Dr. Cheung explained that long-term or excessive alcohol consumption can cause hypertrophy and proliferation of bone marrow fat cells, thinning the bone structure and increasing the spaces between bone cells, thereby raising the risk of osteonecrosis¹. Another study suggested that consuming approximately 400ml of anhydrous alcohol per week (equivalent to about 4.5 bottles of red wine) significantly increases the risk of osteonecrosis^{4,5}. Therefore, individuals with drinking habits should pay more attention to hip joint health, identify symptoms early, and seek professional medical advice to reduce the risk of severe health issues in the future. Additionally, poor lifestyle habits such as overworking, excessive exercise, obesity, and previous joint injuries can exacerbate joint damage⁶. Understanding the root cause is key to successful treatment, and early detection can effectively prevent the condition from worsening and improve treatment outcomes.

Hip Replacement Surgery: A New Option to Improve Quality of Life

Hip joint treatment is crucial for improving daily living habits, as the health of the hip joint directly affects an individual's mobility and quality of life. Treatment methods include not only improving daily habits but also medication and physical therapy. If patients experience hip pain, stiffness, or discomfort even at rest, and if medication and physical therapy fail to provide relief, they should pay special attention. In such cases, patients may need to consider hip replacement surgery to improve their quality of life⁷.

Dr. Cheung noted that hip replacement surgery is an effective medical procedure designed to provide solutions for patients whose hip joint function is impaired due to disease or injury. This surgery can significantly alleviate symptoms and enhance the patient's quality of life. Studies have shown that patients who undergo hip replacement surgery experience notable improvements in the WOMAC joint function scale (including pain, stiffness, and physical function scores) within five years post-surgery. These advanced technologies not only improve joint function but also help patients regain mobility and enhance their quality of life⁸. For those whose lives are affected by hip joint problems, this surgery offers a new path to health.

⁴ Cruess et al. Clin Orthop Related Res 1986;(208):30-9

⁵ Jones et al. Instr Course Lect 1994;43:499-512

⁶ <https://www.cuhk.edu.hk/ipro/010306e.htm>

⁷ <http://www.orthoinfo-hkcos.org/?route=injuries-detail&c=5&i=21&t=69>

⁸ Neuprez et al. Clin Rheumatol (2020) 39:861-871



During the procedure, the damaged hip joint is replaced with an artificial one, typically made from safe and highly wear-resistant materials⁹, ensuring long-term safety and stability for the patient.

Precision Personalized Treatment to Reduce Subsequent Risks

Unfortunately, due to the limitations of traditional surgery, the accuracy of conventional hip replacement surgery is only around 80%. "Doctors often cannot ensure the precise placement of the prosthesis. Additionally, postoperative complications such as joint dislocation and leg length discrepancy may occur." Dr. Cheung added.

However, with advancements in medical technology, robotic-assisted hip replacement surgery has emerged in recent years, offering patients precision personalized treatment. Before the surgery, doctors conduct thorough planning and CT scans for the patient, creating a pre-surgical 3D bone model based on the patient's individual anatomy. This assists doctors in accurately planning the size and position of the artificial joint and simulating the surgical outcome. During the surgery, the robotic arm allows doctors to perform the procedure with precision, reducing trauma to surrounding soft tissues and errors, increasing the accuracy of prosthesis placement from 80% to 98%, an improvement of nearly 20%¹⁰. Furthermore, this technology reduces the risk of postoperative complications. Compared to traditional surgery, robotic-assisted hip replacement surgery reduces the risk of joint dislocation by four times¹¹ and leg length discrepancy by 26%¹².

⁹ https://www3.ha.org.hk/ahnh/content/physio/physio_chi/e_resource/TJR_Pre_chi/hip-op/hip-op_c.htm

¹⁰ https://www.hku.hk/press/press-releases/detail/c_21111.html

¹¹ <https://pubmed.ncbi.nlm.nih.gov/35143923/>

¹² <https://pubmed.ncbi.nlm.nih.gov/37344859/>



Speeding Up Recovery and Reducing Postoperative Pain

In addition, this surgery not only improves accuracy but also shortens surgical time and reduces blood loss, enabling faster recovery for patients. Studies show that compared to traditional computer-navigated surgery, robotic-assisted surgery significantly reduces postoperative pain², allowing patients to return to daily life more quickly. "Most patients experience less pain post-surgery and recover faster, with many able to get out of bed on the same day as the surgery." Dr. Cheung added.

Finally, Dr. Cheung reminded patients that postoperative care, including maintaining proper posture, is essential for joint recovery. Additionally, different treatment options have their own efficacy, side effects, and risks, so patients should discuss with their attending doctor to choose the most suitable treatment plan.

Case Study

Mr. Cheng (pseudonym), around 50 years old, works in the media industry

Medical History

- Suffered from pain in the right pelvic area for 2 to 3 years
- Consulted various doctors and underwent multiple tests but could not identify the cause of the pain
- Tried massage therapy, but the pain did not improve
- Condition worsened, with increasing pain and difficulty walking, eventually leading to leg length discrepancy
- Later consulted an orthopedic specialist and was diagnosed with severe degeneration and damage to the right hip joint, causing the leg length discrepancy
- Accepted the doctor's recommendation and underwent robotic-assisted hip replacement surgery

Surgery Details

- The surgery was completed smoothly within 2 hours
- Mr. Cheng was able to get out of bed 2 to 3 hours after the surgery

Postoperative Condition

- Currently in recovery, with significant improvement



- Due to long-term leg length discrepancy before surgery, he is undergoing rehabilitation therapy to further improve his gait

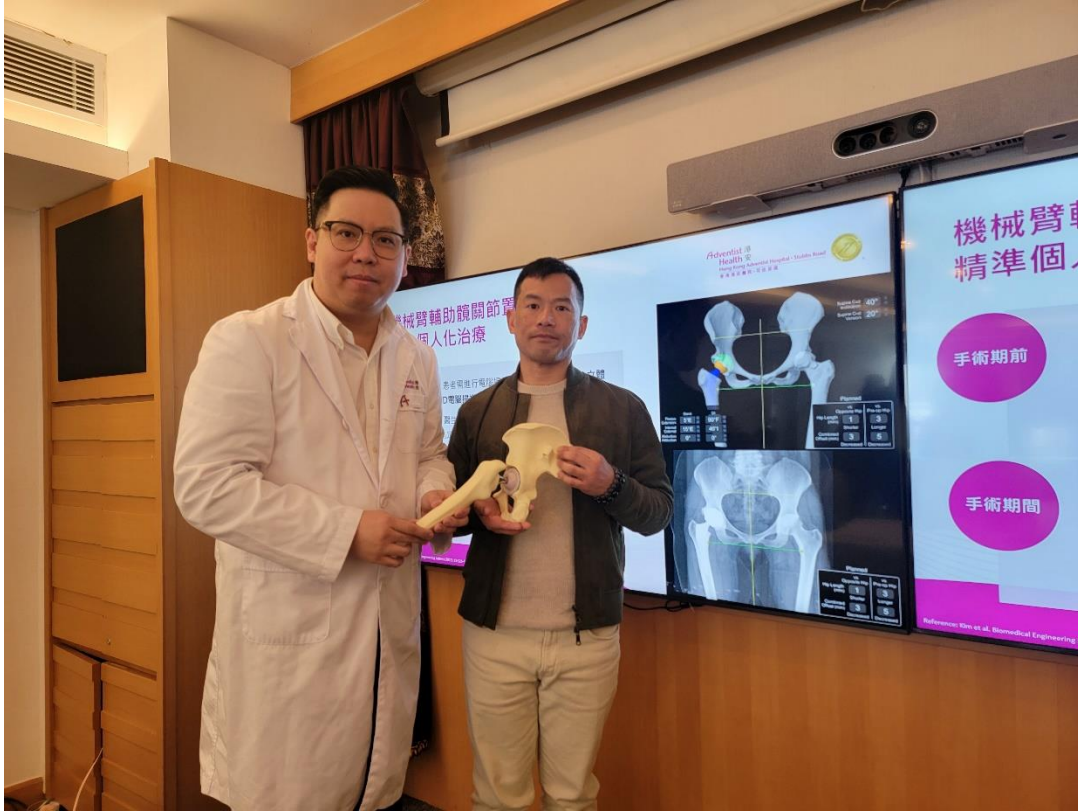
Views on the Condition and Robotic-Assisted Surgery

- Advises against avoiding medical treatment and recommends seeking opinions from different doctors early to find the most suitable treatment plan
- Believes that robotic-assisted surgery allows for quicker completion, reduces the risk of complications, and promotes a faster recovery process

About Hong Kong Adventist Hospital - Stubbs Road Robotic Surgery Center

The Robotic Surgery Center at Hong Kong Adventist Hospital is equipped with the most advanced robotic systems, specializing in total knee replacement, total hip replacement, and full spinal robotic surgery, among other procedures. The center offers comprehensive pre-surgical check-ups and health assessments to enhance surgical safety and reduce patient anxiety and the risk of complications. For example, anesthesiologists develop personalized anesthesia plans tailored to each patient's specific condition, particularly for elderly patients, to minimize side effects and ensure precise use of anesthesia, speeding up recovery. Through advanced medical technology and holistic patient care, the Robotic Surgery Center is committed to providing efficient and precise surgical services, ensuring every patient receives proper care and support.





Media Enquiry

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酗酒可致骨壞死 或需要置換髖關節 精準機械臂髖關節手術 加快復原速度 減術後痛楚

不少人對髖關節置換手術存有刻板印象，以為這僅與關節退化及創傷因素有關，甚至誤以為髖關節置換手術康復時間長，令患者諱疾忌醫，默默忍受痛楚，影響日常生活。有本地研究指出，骨壞死是需要接受髖關節置換手術患者的最主要病因，並推斷酗酒是其最常見的因素¹。這病症不僅影響患者的生活質素，還可能導致長期的身體殘疾。為了應對這一項挑戰，香港港安醫院—司徒拔道（香港港安）引入了精準的機械臂輔助髖關節置換手術。這項技術不僅能提高手術的準確性，還能減少術後痛楚，加快患者的復原速度。研究顯示，使用機械臂進行手術的患者，其康復時間顯著縮短，並且在術後經歷的痛感較低²。這為需要接受手術的患者帶來新的希望，有助他們能夠更快地改善日常生活。

酗酒是引發缺血性骨壞死的最常見成因

香港港安的機械臂外科手術系統（關節置換）醫務主管、骨科顧問張文康醫生指出，髖關節問題在現今社會中愈來愈普遍。患者若發現有任何不適徵狀，例如持續的疼痛、僵硬、活動受限、關節發出聲響或長短腳現象，這些都可能是髖關節疾病的先兆³。如果不及時處理，可能會導致病情惡化。根據本港一所大學醫院的研究，分析了 419 位需要接受髖關節置換手術的患者作病例分析，發現缺血性骨壞死是本港患者的主要病因，研究更分析酗酒是引發缺血性骨壞死的最常見成因¹。

張醫生表示，長期或過度飲酒，可導致骨髓脂肪細胞肥大及增生，更令骨質結構變薄，及令骨細胞之間的空隙增加，增加骨壞死的風險¹。另有研究推斷，每週飲用約 400 毫升無水酒精（相當於約 4.5 支紅酒）會大幅增加骨壞死的風險^{4,5}。因此，對於有飲酒習慣的人士，更應重視髖關節健康，及早識別徵狀並尋求專業醫療建議，以減少未來可能面臨的嚴重健康問題。此外，不良生活習慣，如工作或運動過度、過重、關節舊患等，也會加劇關節受損⁶。因此，了解病因是成功治療的關鍵，及早發現可以有效預防病情惡化，提高治療效果。

髖關節置換手術 改善生活質素的新選擇

髖關節治療對於改善日常生活習慣至關重要，因為髖關節的健康直接影響到個人的活動能力和生活質素。治療方法不僅包括改善日常生活習慣，還有藥物治療和物理治療等。如果患者出現髖關節疼痛、僵硬或在休息時也感到不適，甚至藥物和物理治療也無法緩解，則需要特別注意。在這些情況下，患者可能需要考慮髖關節置換手術，以改善日常的生活質素⁷。

張醫生指出，髖關節置換手術是一種有效的醫療程序，旨在為因病變或受傷而導致髖關節功能受損的患者提供解決方案。這項手術能夠顯著舒緩患者的不適徵狀，並提升其生活質素。有研究指出，接受髖

¹ Chan et al. Hong Kong Med J 2016 Feb;22(1):11-5

² Shibanuma et al. BMC Musculoskeletal Disorders (2021) 22:314

³ <https://www.mayoclinic.org/zh-hans/diseases-conditions/hip-labral-tear/symptoms-causes/syc-20354873>

⁴ Cruess et al. Clin Orthop Related Res 1986;(208):30-9

⁵ Jones et al. Instr Course Lect 1994;43:499-512

⁶ <https://www.cuhk.edu.hk/ipro/010306e.htm>

⁷ <http://www.orthoinfo-hkcos.org/?route=injuries-detail&c=5&i=21&t=69>



關節置換手術的患者在手術後五年內，其 **WOMAC** 關節功能評分量表（包括疼痛、關節僵硬、身體功能評分）均有明顯改善。這些先進技術不僅改善了患者的關節功能，還幫助他們重拾活動能力，提高生活質素⁸。對於那些因髖關節問題而影響生活的人來說，這項手術提供了一條通往健康的新道路。

而在手術過程中，醫生會將受損的髖關節替換為人工髖關節，這些人工關節通常由無害且具高抗磨蝕力的材料製成⁹，確保能為患者在長期使用關節期間保持安全和穩定。

精準個人化治療 減少後續風險

可惜，受傳統手術的限制，因此一般的髖關節置換手術準確度只有八成，「醫生往往無法確保置入假體位置準確無誤。此外，術後或有機會出現併發症，如關節脫位（俗稱「甩髖」）、腿長不均（長短腳）。」張醫生補充。

不過，隨著醫學技術的進步，近年發展出機械臂輔助髖關節置換手術，可為患者提供精準的個人化治療，醫生會在術前為患者進行充分規劃及電腦掃描，並根據患者的個人體態制定術前三維骨模型，協助醫生準確規劃患者的人工關節尺寸和位置，模擬手術效果；而在手術期間，醫生透過機械臂的輔助，能夠精細地操作手術步驟，減少周邊軟組織創傷及誤差，令假體放置準確性由 **80%** 提升至 **98%**，即提高近兩成¹⁰；此外，更可減少術後併發症風險，與傳統手術對比，機械臂輔助髖關節置換手術可減少關節脫位（俗稱「甩髖」）風險四倍¹¹，及腿長不均減少 **26%**¹²。

加快復原速度 減術後痛楚

此外，這種手術不僅能提高手術的準確性，還能縮短手術時間和減少出血量，使患者的康復速度更快。研究顯示，與傳統電腦導航手術相比，機械臂輔助手術能顯著降低患者在術後經歷的痛感²，讓他們能夠更快地回復日常生活。「普遍患者術後疼痛感比傳統手術較輕，恢復時間更快，大多患者可以於手術即日下床活動。」張醫生補充。

最後，張醫生提醒患者，術後亦需配合適當護理，包括保持正確姿態等，有助關節復元。此外，不同治療方案都各有其成效、副作用及風險，患者應與主診醫生商討，選擇最適合自己的治療方案。

⁸ Neuprez et al. Clin Rheumatol (2020) 39:861-871

⁹ https://www3.ha.org.hk/ahnh/content/physio/physio_chi/e_resource/TJR_Pre_chi/hip-op/hip-op_c.htm

¹⁰ https://www.hku.hk/press/press-releases/detail/c_21111.html

¹¹ <https://pubmed.ncbi.nlm.nih.gov/35143923/>

¹² <https://pubmed.ncbi.nlm.nih.gov/37344859/>



個案分享

程先生（化名），約 50 歲，從事傳媒工作

患病經過

- 於右邊盆骨位置，受疼痛困擾 2 至 3 年
- 曾向不同醫生求醫，及進行不同檢查，亦未能找出疼痛原因
- 曾接受推拿，但痛感未有改善
- 病情惡化，程先生的痛楚感覺愈來愈嚴重，更影響步行，及出現長短腳現象
- 期後向骨科專科求醫，發現右邊的髖關節嚴重退化及受到破壞，因此導致長短腳
- 程先生接受醫生建議，進行機械臂輔助髖關節置換手術

手術情況

- 手術過程順利，於 2 小時內完成手術
- 於術後 2 至 3 小時後，便可下床活動

術後情況

- 現在術後復康當中，情況大有改善
- 由於術前長期有長短腳問題，需要接受復康治療，進一步改善步姿

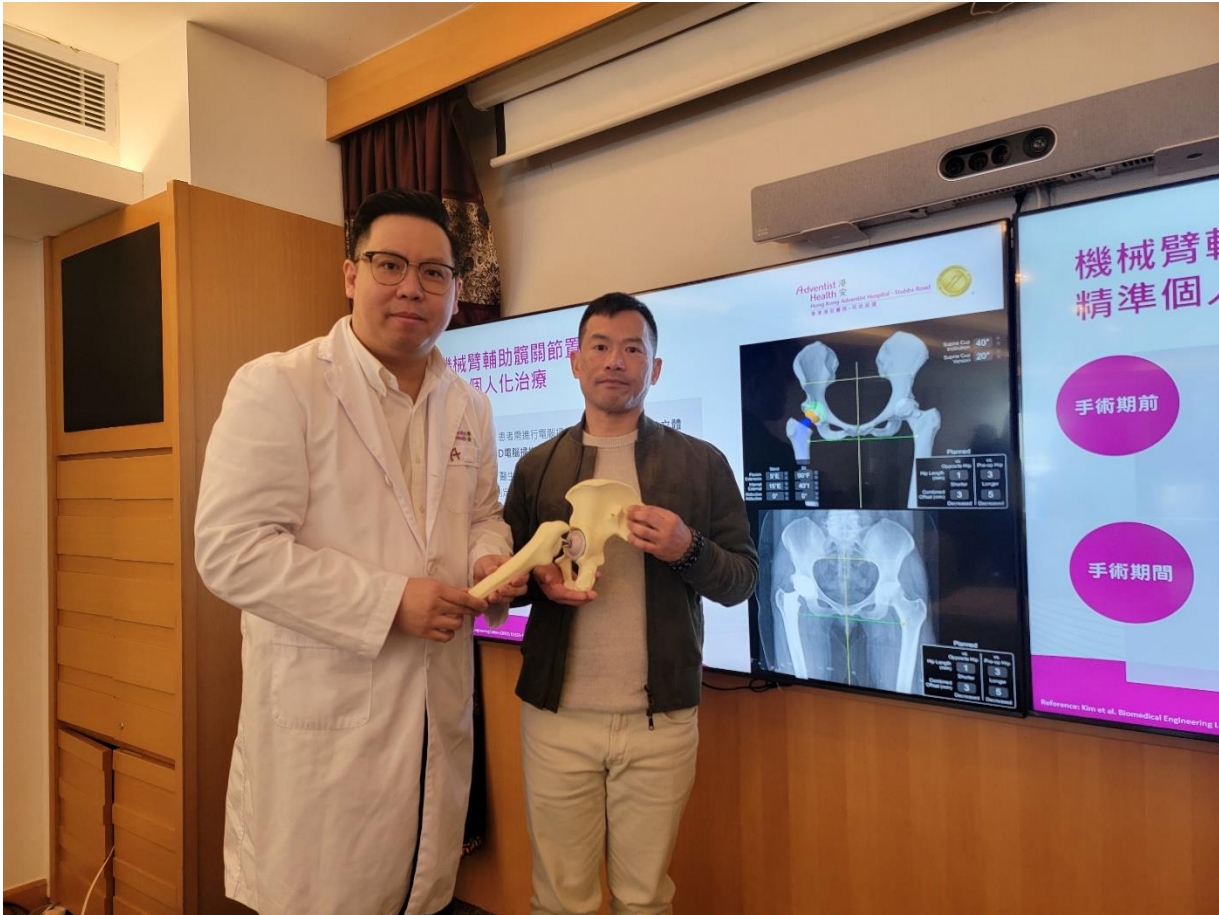
對病情及機械臂手術的看法

- 勿諱疾忌醫，及早諮詢不同醫生意見，找出最合適自己的治療方案
- 透過機械臂輔助，可快速完成手術，減低出現相關併發症機會，促進康復過程

有關香港港安醫院—司徒拔道機械臂外科中心

香港港安醫院成立的機械臂外科中心，引入了最先進的機械臂系統，專注於全膝關節置換、全髖關節置換及全脊椎機械臂手術等多種手術。這個中心不僅提供術前一站式檢查服務，還進行全面的健康和病情評估，以提升手術的安全性並減低患者的焦慮感及手術併發症風險，例如麻醉科醫生會根據患者的具體情況制定個人化的麻醉方案，特別針對長者，這樣可以有效減少副作用並精確使用麻醉藥物，加快病人的康復進程。機械臂外科中心透過引入先進的醫療技術和全面關懷患者所需，致力於提供高效、精準的手術服務，以確保每位患者均能獲得妥善的護理和支持。





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