



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

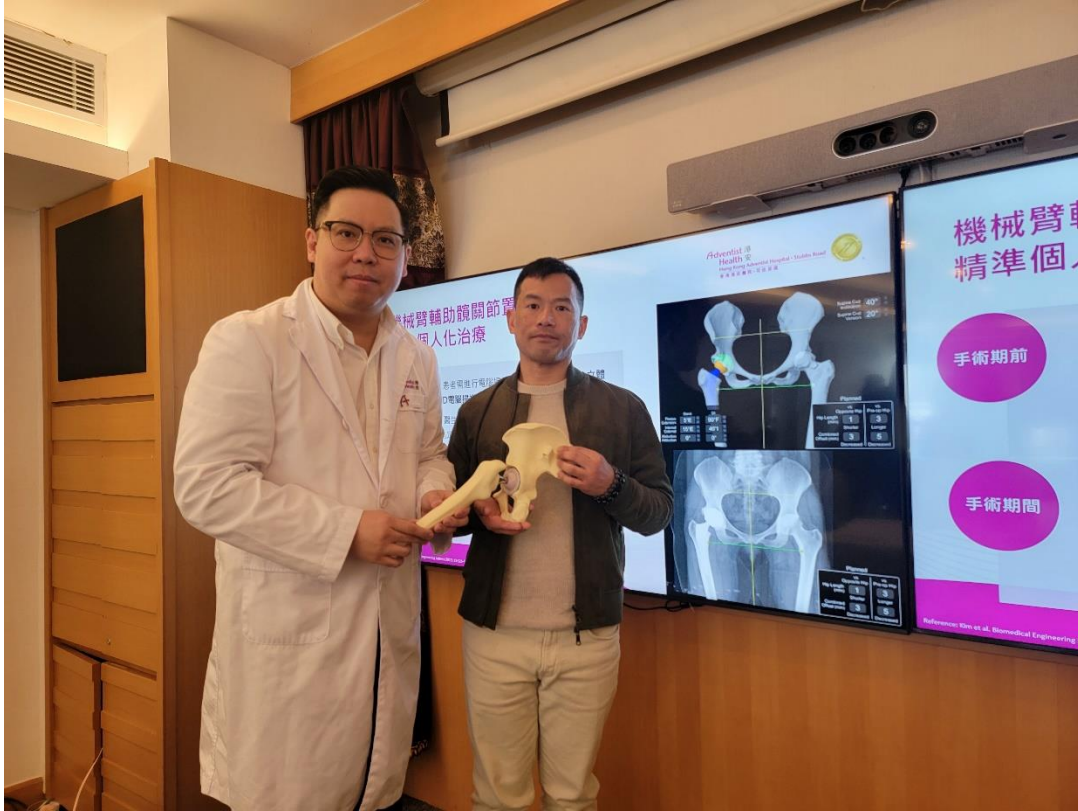
Views on the Condition and Robotic-Assisted Surgery

- 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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