

## PRESS RELEASE

### **Significant decrease in incidence of periprosthetic joint infection after total knee arthroplasty, a cohort study shows**

(Hong Kong, 17 April 2026) – **A team from the Department of Orthopaedics and Traumatology at The University of Hong Kong has reported a notable decline in periprosthetic joint infection (PJI) after total knee arthroplasty (TKA), with the incidence reaching 0.64% between 2014 and 2021. This represents a significant decrease compared with figures recorded at the same institution between 1993 and 2013. The study was recently published in the *Hong Kong Medical Journal*.**

Periprosthetic joint infection, an uncommon but severe complication of TKA, is the leading cause of revision arthroplasty and can significantly diminish quality of life, often necessitating complex and costly treatment. A study at Queen Mary Hospital (QMH) reported a PJI incidence of 1.34% between 1993 and 2013, predominantly caused by methicillin-sensitive *Staphylococcus aureus*. The current study, which analysed data from 2171 QMH patients, found that the incidence of PJI after TKA was 0.64% between 2014 and 2021. There was no significant difference in the incidence of early-onset infection. Methicillin-sensitive *S aureus* remained the most common causative organism in cases of PJI, affecting 57.1% (n=8) and 26.5% (n=9) of patients in the current and previous cohorts, respectively.

The study presents updated local data on the incidence of PJI following elective primary TKA. It also identifies shifts in the microbiological landscape of PJI, providing insights that may inform future treatment and prevention strategies. Moreover, the significant decrease in PJI incidence highlights the effectiveness of interventions aimed at reducing its occurrence and promotes their broader implementation. Ultimately, preventing PJI enhances patient outcomes and helps alleviate the burden on the healthcare system.

The article “Has the bacteriology of periprosthetic joint infection after total knee arthroplasty changed over time? A retrospective cohort study of 2171 patients” was published in the *Hong Kong Medical Journal*. <https://doi.org/10.12809/hkmj2310702>

## 新聞稿

### 隊列研究顯示全膝關節置換術後周圍關節感染率大幅下降

(香港，2026 年 4 月 17 日) — 一項由香港大學矯形及創傷外科學系進行的研究發現，**2014 至 2021 年間全膝關節置換術後周圍關節感染率為 0.64%，較 1993 至 2013 年間同院錄得的感染率顯著下降。研究結果已在《香港醫學雜誌》發表。**

周圍關節感染是全膝關節置換術中一種不常見但嚴重的併發症，是導致翻修手術的主要原因，會顯著降低生活質量，並需要複雜且昂貴的治療。瑪麗醫院於 1993 至 2013 年間周圍關節感染的發生率為 1.34%，主要由對甲氧西林敏感的金黃葡萄球菌（MSSA）引起。是項研究分析了同樣來自瑪麗醫院的 2171 名患者，發現 2014 至 2021 年間周圍關節感染的發生率為 0.64%，而早發感染發生率則沒有顯著差異。MSSA 仍為最常見的致病菌，分別影響 2014 至 2021 年隊列的 57.1% (n=8) 及 1993 至 2013 年隊列的 26.5% (n=9) 患者。

這項研究提供了有關選擇性初次全膝關節置換術後周圍關節感染發生率的最新本地數據，並識別出其微生物學變化，為未來治療和預防策略提供參考。此外，周圍關節感染發生率顯著下降，反映相關干預措施成效顯著，有助推動其更廣泛應用。長遠而言，預防周圍關節感染可提升患者預後，減輕醫療系統負擔。

詳細內容可參閱原文《全膝關節置換術後周圍關節感染的細菌學是否隨時間有所變化？一項對 2171 名患者的回顧性隊列研究》。

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