

Oct 02, 2024

Outcomes of Total Hip Replacement in Septic Arthritis of the Native Hip Joint Amongst the Adult Population: A Systematic Review

DOI

<https://dx.doi.org/10.17504/protocols.io.8epv5r415g1b/v1>

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Protocol Citation: Teddy Cheong, Surya Varma Selvakumar, Ryan Kwang Jin Goh, Ing How Moo 2024. Outcomes of Total Hip Replacement in Septic Arthritis of the Native Hip Joint Amongst the Adult Population: A Systematic Review. **protocols.io**

<https://dx.doi.org/10.17504/protocols.io.8epv5r415g1b/v1>

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Protocol status: Working

We use this protocol and it's working

Created: October 02, 2024

Last Modified: October 02, 2024

Protocol Integer ID: 108929

Keywords: Hip Arthroplasty, Native, Septic arthritis, Outcomes, septic arthritis of the native hip joint, native septic arthritis of the hip, septic arthritis of the native hip joint amongst, native hip septic arthritis, outcomes of total hip replacement, septic arthritis of various joint, native septic arthritis, infected native hip, septic arthritis, total hip replacement, native hip joint, native hip joint amongst, clinical outcomes of thr, native hip, hip, native joint, outcomes of thr, preferred reporting items for systematic review, resection arthroplasty, systematic review, clinical outcome, systematic review background, first systematic review, various joint, thr outcome, cumulative index to nursing

Abstract

Background: Septic arthritis is a debilitating condition that results in joint destruction and irreversible loss of joint function. Surgical treatment options include arthroscopy, resection arthroplasty and total hip replacement (THR). There is existing literature on the treatment of septic arthritis of various joints including periprosthetic or native joints. However, to our knowledge, there is a lack of a consolidated review that focuses solely on THR outcomes in a previously infected native hip. This study aims to be the first systematic review that examines clinical outcomes of THR, specifically in septic arthritis of the native hip joint in the adult population.

Methodology: This systematic review will be conducted in accordance with relevant requirements of the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) Statement. PubMed, Embase, Cumulative Index to Nursing and Allied Health Literature (CINAHL), SCOPUS, Cochrane Library, grey literature, and bibliographic references will be searched from inception to October 2023. Only case series or cohort studies published within the last 20 years assessing the outcomes of total hip replacement in native hip septic arthritis will be included. Literature retrieval and data extraction will be conducted by three independent reviewers. The overall methodological quality of the included studies will be assessed using the methodological index for non-randomized studies (MINORS) tool. Re-infection rate and various functional outcomes data such as the Harris Hip Score (HHS), Visual Analogue Scale (VAS), Merle D'Aubigne and Postel (MAP), Western Ontario, McMaster Universities Arthritis Index (WOMAC) Short Form 12-Item (SF-12) scores will be collected and analysed.

Expected Results: Expected to have 5-10 studies included after removal of duplicates and implementation of inclusion and exclusion criteria. Compiled results of re-infection rates and outcomes of THR in native septic arthritis of the hip will be reported and analysed.

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