

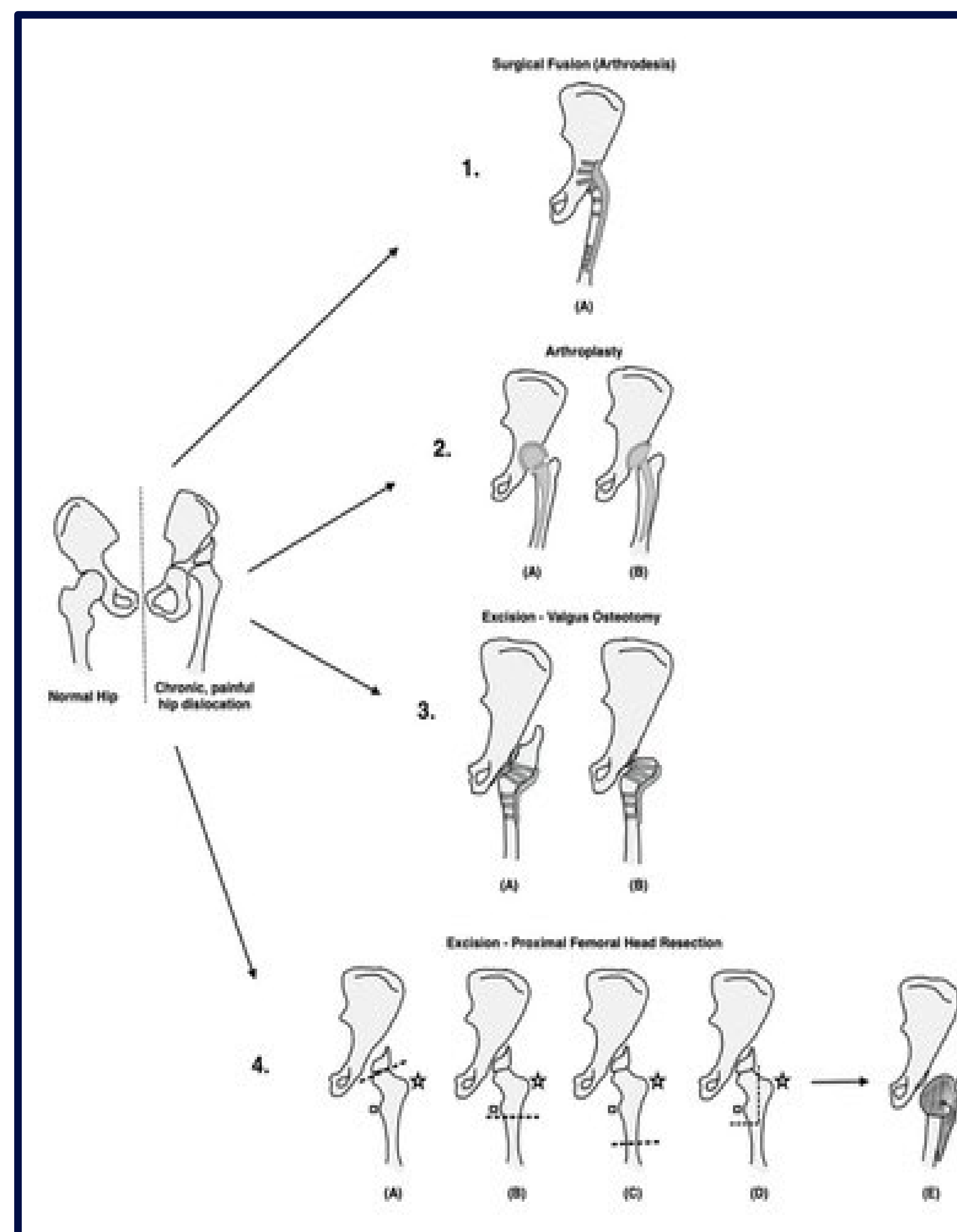
Hip Salvage Surgery in Non-Ambulatory Cerebral Palsy: A Systematic Review

Tara Korbal¹, Naomi Khan², Daniel Gould², Erich Rutz²

LSUHSC School of Medicine¹ University of Melbourne, Department of Paediatrics²

INTRODUCTION

- Individuals with severe CP (GMFCS levels IV and V) are at high risk of hip displacement causing pain, reduced sitting tolerance, and hygiene challenges.
- Salvage procedures such as proximal femoral resection, hip arthrodesis, or total hip arthroplasty are often required.
- This review evaluated preoperative characteristics, intraoperative variables, and postoperative outcomes of salvage hip surgery in non-ambulatory children and young adults with CP.

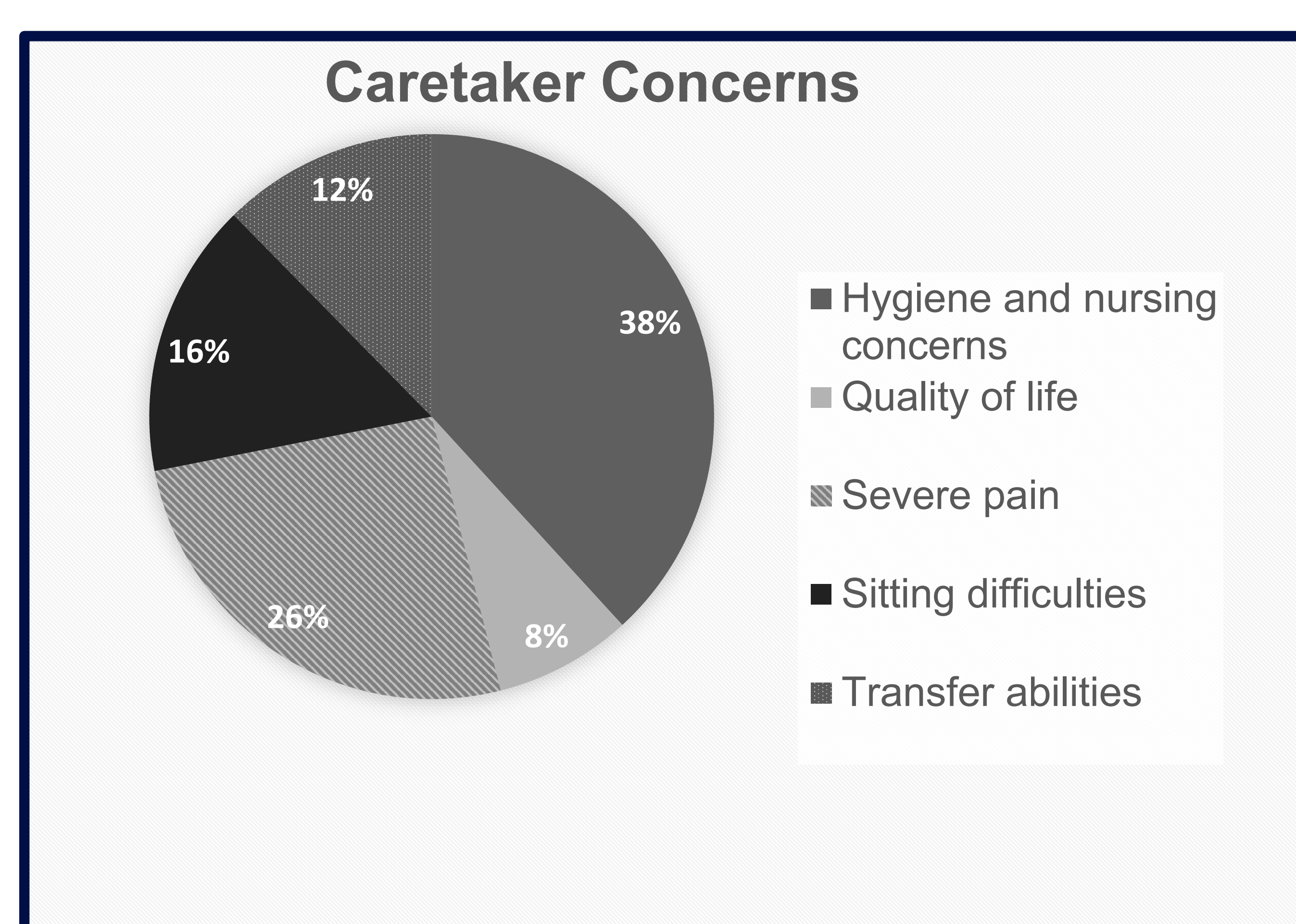


RESULTS

- Of 3004 records screened, 42 studies (793 patients, 1014 hips) were included.
- Excision was most common (n=34 studies), followed by arthroplasty (n=8) and arthrodesis (n=4).
- Excision procedures had the lowest operative times (mean 2.5 h) and blood loss (mean 232 mL).
- Pre-operative indications included pain (93% of studies) and caretaker concerns including transfer ability, hygiene and quality of life (83% of studies).
- Overall peri-operative complication rates were 13.9%.
- Post operative complications included: Heterotopic ossification occurred in 69% of studies, proximal femoral migration in 52%, and 80% reported need for secondary procedures.

METHODS

- PubMed and Embase were searched to October 1, 2024, following PRISMA guidelines
- Registered PROSPERO protocol. Eligible English-language cohort studies and case series were included.
- Quality assessed using MINORS.



CONCLUSION

- Salvage surgery provides consistent pain relief and functional benefits in non-ambulatory CP but remains associated with frequent complications and repeat surgery.