

Resumption of Driving after Total Hip Arthroplasty: A Systematic Review and Meta-Analysis

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Background/Objective:

The advice given to patients on resumption of driving after total hip arthroplasty (THA) is inconsistent. Due to a lack of clear guidelines, surgeons make recommendations in the range of waiting 4 to 8 weeks after surgery to resume driving. Driving is a crucial part of daily life thus, withholding driving longer than necessary can have a detrimental social and economic impact on the patient. However, it is equally important to ensure that patients only resume driving once safe. This study presents a systematic review of the literature and a meta-analysis of simulation studies to establish when it is safe for patients to return to driving after hip arthroplasty.

Methods:

The review was performed according to the PRISMA guidelines. Medline, EMBASE, and CENTRAL databases were searched to June 2020 for studies examining 'return to driving' or 'brake reaction time' after 'total hip arthroplasty'. Titles and abstracts were screened for inclusion, data was extracted, and studies were assessed for risk of bias. Review Manager, Version 5.4 was used for statistical analysis.

Results:

A total of 14 articles met the inclusion criteria. Of these, 7 measured brake reaction time and were included in the meta-analysis. The pooled means of both right and left THA show a brake reaction time (BRT) around or just above baseline at 1 week, 2 weeks and 3 weeks, and below baseline at 6 weeks, 12 weeks, 32 weeks and 52 weeks. Of these, the pooled means at 6, 32, and 52 weeks were significant ($p < 0.05$).

Conclusion:

The mean recommended return to driving time was 4.5 weeks. Based upon the meta-analysis of BRT, it appears that it is safe to return to driving at 6 weeks post operatively. Orthopedic surgeons should use these results as a guideline when advising patients on when to resume driving.