

What's New in Hip Replacement- Recent Update and Guidelines

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Abstract

Hip replacement surgery has undergone tremendous changes from preoperative work up to post operative management. Now many studies are done on individual stages to assess which is the best method. Also, these are helping to fasten the recovery phase. Early and pain free mobilisation is the present motto in joint replacements so that patients can get back to their routine activities as soon as possible.

Introduction

Hip instability post hip replacement is seen so the concept of dual mobility cup was introduced. But as their usage started and its design improved then the number of indications to use increased. So, comparison of the implant along with its result was done. Klemm et al. observed no increase in range of motion in the dual-mobility total hip arthroplasty (THA) construct when compared with a neutral THA construct, but did observe increased provocative anterior and posterior subluxation range of motion before dislocation [1]. The authors suggested that this may be the mechanism for previously observed lower dislocation rates.

Another implant related issue was the polyethylene liners. As different designs evolved there were some modifications even in poly liners. A study done by Kjærsgaard et al. reported on 94 patients at a 5-year follow-up and found very low wear rates for all implants and no difference in wear rates between vitamin E polyethylene liners and conventional cross-linked polyethylene liners for both 32-mm and 36-mm heads [2].

Next regarding the use of tranexamic acid (TXA) in surgery and its effect on blood loss has been studied many times. Recent study in a meta-analysis of the use of intravenous TXA and its impact on wound complications, Sukeik et al. identified 25 clinical trials including 1,608 patients. Although the authors found that TXA use did reduce blood loss and transfusion rates without an increase in thrombotic complications, there was no significant difference in the use of antibiotics or surgical intervention for wound problems [3].

During post operative period thromboembolism aspirin use and its benefits were analysed. One study was systematic review done by Azboy et al. suggested that low-dose aspirin for patients after total joint arthroplasty is not inferior to high dose aspirin in preventing venous thromboembolism [4]. Another study was a systematic review and meta-analysis by Matharu et al. suggested that aspirin taken as venous thromboembolism prophylaxis after THA and TKA did not differ in clinical effectiveness in a significant way from other anticoagulants [5].

Discussion

There have been significant changes in the management of hip replacement. Many systematic reviews and meta-analysis studies have done on pre operative tests, implant selection, intra operative approaches and procedures, post operative prophylaxis and management. Recent studies help in guiding both young and experienced surgeons to fasten the process and recovery of surgery.

Conclusion

All the reviews and meta-analysis are helping to improve the whole procedure from beginning to end of recovery phase in the process of hip replacement. This will improve quality of life and in turn effect the economic development. So, the surgeons should keep updating themselves with latest studies and implement them in patient care to bring out best and excellent results.

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