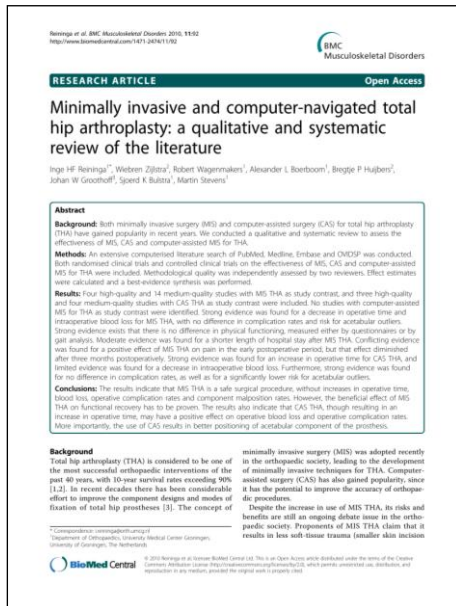


Hip



BMC Musculoskelet Disord 2010, 11:92
Minimally invasive and computer-navigated total hip arthroplasty: a qualitative and systematic review of the literature.

Reininga I. et al.

Summary

The authors present a qualitative and systematic review on the effectiveness of MIS (Minimal Invasive Surgery), CAS (Computer-aided Surgery) and computer-assisted MIS for total hip arthroplasty.

They highlighted the operative complications and acetabular outliers, the perioperative outcome measures like operative time or blood loss and other physical outcome measures of 25 controlled and randomized controlled trials.



Conclusion

CAS has a positive effect on acetabular positioning by reducing outliers which benefits the longevity of the prosthesis.

“The results of this review also indicate that computer-assisted THA, despite an increased operative time, may have a positive effect on operative blood loss and complications. More importantly, the use of CAS during THA results in better positioning of the acetabular component of the prosthesis.”

“Since accurate component positioning benefits the longevity of the implanted prosthesis, CAS can help achieve this goal”

Minimal invasive THA is a safe surgical procedure and is comparable to conventional procedure regarding many aspects.

“The results of this systematic review indicate that MIS THA is a safe surgical procedure, without increases in operative time, blood loss, operative complications and component positioning when compared to the conventional procedure.”

Next sensible step to take is combining ‘the best of both worlds’ of MIS and CAS in total hip arthroplasty.

“Since minimally invasive THA and the use of computer navigation are becoming increasingly popular in orthopaedics, combining ‘the best of both worlds’ would be a sensible next step to take.”