SYSTEMATIC REVIEW

Wrist arthroplasty – a systematic review

Michel E. H. Boeckstyns

INTRODUCTION

Severely painful or dysfunctional, destroyed wrists can be reconstructed by fusion, interposition of soft tissue or by arthroplasty using artificial materials. Total and partial wrist arthroplasty (T/PWA) have been used on a regular basis since the 1960s. The objective of this study was to review the literature on second, third and fourth generation implants.

METHODS

The review was conducted according to the PRISMA – guidelines. A search was made using a protocoled strategy and well-defined criteria in PubMed, in the Cochrane Library and by screening reference lists.

RESULTS

Thirty-seven publications describing a total of 18 implants were selected for analysis. Sixteen of the publications were used for the evaluation of implant longevity. Despite methodological shortcomings in many of the source documents, it was possible to make a summary estimate.

CONCLUSION

It seems that T/PWA has a good potential to improve function through pain reduction and preservation of mobility. The risk of severe complications in the form of deep infection and instability problems is small with the available implants. Implant survival rates of 90-100% at five years are reported in most, if not all, of the series using newer 2nd generation and 3rd generation implants, but survival rates decline from five to eight years. Periprosthetic osteolysis/radiolucency is frequently reported. Its causes and consequences are not clarified.

CORRESPONDENCE: *Michel E. H. Boeckstyns*. E-mail: mibo@dadlnet.dk

CONFLICTS OF INTEREST: none. Disclosure forms provided by the authors are available with the full text of this article at www.danmedj.dk.

REFERENCE: Dan Med J 2014;61(5):A4834

FROM: Clinic for Hand Surgery, Gentofte Hospital

ORIGINAL ARTICLE

Insufficient pain management after spine surgery

Rikke Vibeke Nielsen[1], Jonna Storm Fomsgaard[1], Jørgen Berg Dahl[2] & Ole Mathiesen[2]

INTRODUCTION

A prospective observational quality assurance study was performed at Glostrup Hospital, Denmark, to describe patients undergoing spine surgery with regard to perioperative analgesic management, post-operative pain, opioid consumption and side effects.

MATERIAL AND METHODS

Patients eligible for the study were identified consecutively from the operation chart. The following data were registered: post-operative visual analogue (VAS) pain score at rest and during mobilisation, opioid consumption for the first 24 h, other analgesics administered and side effects.

RESULTS

A total of 87 patients were included. For instrumented lumbar fusion patients (n = 24), the VAS pain scores at 1, 4 and 24 h after surgery were (median (interquartile range)) 5 (0-7), 2.5 (0-8) and 5.5 (0-9) at rest and 5 (0-8), 3 (0-9) and 7 (3-9) during mobilisation, respectively. The other surgical subgroups generally experienced VAS ≤ 3. For instrumented lumbar fusion, the total 0-24 h consumption of IV morphine equivalents was 39.1 (27.5-62.7) mg. Only eight of 87 patients received the entire scheduled standard post-operative pain treatment. Adverse events were rare.

CONCLUSION

Most patients experienced acceptable pain levels, but instrumented lumbar fusion leads to moderate to severe pain levels and a relatively high opioid consumption. The scheduled standard pain management protocols were sparsely followed. Challenges exist in post-operative pain management as observed in previous surveys, especially for instrumented lumbar fusion surgery. Future work should focus on optimising treatment plans.

FUNDING: not relevant.

TRIAL REGISTRATION: not relevant.

CORRESPONDENCE: *Rikke Vibeke Nielsen*. E-mail: rikkesoennichsen@gmail.com

CONFLICTS OF INTEREST: none. Disclosure forms provided by the authors are available with the full text of this article at www.danmedj.dk

REFERENCE: Dan Med J 2014;61(5):A4835

FROM: 1) Department of Anaesthesiology, Glostrup Hospital, 2) HovedOrtoCentret, Rigshospitalet