

COCHRANE CORNER



Correspondence should be sent to Mr A. Das; MRCS(Eng), Trauma & Orthopaedics, Queens Medical Centre, Nottingham University Hospitals, Nottingham, UK
E-mail: avidas17@doctors.org.uk

There has not been a huge volume of output from the Cochrane Collaboration over the past four months; however, reviews that have been published are high-impact and important for clinical practice with clear, practice-changing messages.

INTERVENTIONS FOR PREVENTING VENOUS THROMBOEMBOLISM IN ADULTS UNDERGOING KNEE ARTHROSCOPY

At the best of times, venous thromboembolism (VTE) is a thorny and difficult topic to discuss, make policy around, or study. There are some areas that are particularly difficult and one of these is knee arthroscopy. Patients who have minor surgery to the lower limb, followed by a period of immobilization or relative immobility, form one of those areas in which there is significant disagreement as to the importance of chemical prophylaxis. One particularly large group in which this is a potential problem is those patients undergoing arthroscopic knee surgery. This intervention review is an update on the work previously published in May 2020, looking specifically at the evidence for prevention of VTE in adults undergoing knee arthroscopy.¹ Although the authors found no new trials to include in this update, it is worth a mention again. The eight included trials studied 3,818 healthy subjects undergoing knee arthroscopy with no previous history of thromboembolism, and comparisons included low molecular weight heparin (LMWH) versus no prophylaxis or compression stockings, rivaroxaban versus placebo, and aspirin versus placebo. In terms of the overall evidence for LMWH, the authors commented that, "When compared with no prophylaxis, LMWH probably results in little to no difference in the incidence of pulmonary embolism (PE)," and indeed no significant differences were identified. However, there was moderate evidence of certainty of findings for clinically relevant symptomatic deep vein thrombosis (DVT). Rivaroxaban was more poorly studied, with just 234 patients included. However, there were no differences noted, and the authors commented that this was probably a moderate-certainty estimate. The authors concluded that there was a small risk of DVT or PE following knee arthroscopy, and found moderate to low certainty evidence of little or no benefit from LMWH or rivaroxaban in reducing pulmonary embolism (PE) or symptomatic DVT, and some evidence that LMWH may reduce the risk of asymptomatic DVT (very low-certainty evidence).

INTERVENTIONS FOR TREATING PROXIMAL HUMERUS FRACTURES IN ADULTS

This intervention review from the **UK** is venerable and long-running and, now on its sixth update, found four key comparisons in their trial search for

interventions treating proximal humerus fractures.² This is a wide-ranging review that historically has included a range of interesting potential comparisons, including rehabilitation, implant-related conditions, and conservative versus operative management. In an ever-expanding review, there was a large amount of evidence available. The authors found five trials looking at early versus delayed mobilization for fractures that were managed conservatively, and reported no clear evidence of better function or quality of life with one over another. In terms of the need for intervention at all, there was a large amount of randomized evidence. The authors reported that ten trials met the inclusion criteria and evaluated surgical intervention (of any kind) compared with non-surgical treatment. The authors' review and evidence synthesis suggested that, with high- or moderate-certainty evidence, surgical treatment does not result in a better outcome at one or two years for patients with a displaced proximal humeral fracture, noting the lack of applicability to some sub-groups due to the lack of evidence (age under 60 years, high-energy trauma, and, of course, some specific fracture patterns). In terms of selection of implant types, there were four trials that looked at open reduction and internal fixation with a locking plate compared with intramedullary nail. In common with many, they found no clinically important differences in shoulder function at important timepoints and little difference in adverse events. Two trials reviewed looked at reverse total versus hemiarthroplasty. The authors suggested no or minimal differences in shoulder function at one or two to three years, but a lower complication risk following reverse total arthroplasty (very low-certainty evidence). There is still some way to go to establish the best intervention for the perfect patient. At the moment, it does seem that for the majority of studied fractures there are essentially no differences between interventions, and indeed between intervention or conservative treatment. It is important to remember when interpreting these results that there are some significant caveats, as many complex patients and fracture types have yet to be studied.

INTERVENTIONS FOR TREATING SUPRACONDYLAR ELBOW FRACTURES IN CHILDREN

This review from **Nottingham (UK)** found a number of clinically important comparisons for interventions when treating paediatric supracondylar fractures of the elbow.³ The majority of studies reviewed looked at the very relevant comparison of retrograde lateral wires compared with retrograde cross-wire configuration. Perhaps not unsurprisingly, lateral wires showed less nerve injury, albeit with low-certainty evidence. The authors do, however, also report in their sub-group analyses that there may be little