

# COCHRANE CORNER



New and updated reviews published by the Cochrane collaboration

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There were a number of new and updated reviews published by the Cochrane collaboration this month. Although blighted by the perennial difficulties of lack of evidence, causing almost every review to conclude that further high-quality randomised controlled trials are required, even in the face of lacking evidence, many reviews include important information not available elsewhere. In a new feature this month, 360 will be casting its beady and critical eye at what's new in the world's most evidence-based collaboration.

■ Few injuries are as contentious as the management of proximal humeral fractures.<sup>1</sup> Though there is universal agreement that stable undisplaced fractures are best managed conservatively, there remains animated debate over the smaller cohort of displaced and complex injury patterns. In an update of a previously published review, authors from the UK were able to find good quality but limited evidence supporting early physiotherapy without routine immobilisation for undisplaced two-part fractures. With regards to complex fractures, there was insufficient published evidence to support that surgery gives better functional or quality of life outcomes over non-operative treatment. Furthermore, conclusions could not be drawn as to what the best fixation method was.<sup>1</sup>

■ Hamstring injuries are relatively common among athletes, in whom return to full strength and function are paramount. There are well-established rehabilitation protocols for this injury, however, little current consensus exists as to the efficacy of these therapeutic interventions.<sup>2</sup> The Cochrane collaborators were sadly only able to find two trials (reporting 104 patients) in their attempt to shed light on this tricky question. The larger trial of 80 elite athletes suggested increased intensity of hamstring stretching exercises could reduce time to return to full activity, while the second smaller (and underpowered) trial gives an inkling as to a possible benefit of exercise programmes correcting movement dysfunction subsequently in reducing time to return to full activity and reducing re-injury rates.<sup>2</sup>

■ A brand new review from authors in Thailand attempts to answer the 'how many bundles make the best ACL reconstruction?' conundrum. They penned a thorough review including 17 trials reporting 1433 patients assessing the effectiveness of anatomical double bundle *versus* standard single bundle ACL reconstruction.<sup>3</sup> Despite the large number of trials and patients, the authors report insufficient evidence to show any significant differences for functional knee scores, long-term knee pain, complications and range of movement. However, limited data

found double bundle reconstruction had better results when measuring knee stability and further injury (re-rupture or new meniscal injury). Unfortunately, the authors state that yet again all included studies had methodological weaknesses and were at risk of bias.<sup>3</sup>

■ The beady eyes of the Cochrane collaboration in Australia examined the evidence for management of ankle fractures during their rehabilitation, assessing the effectiveness of different rehabilitation regimes.<sup>4</sup> Though 38 trials were included, conclusive results were limited due to heterogeneity in trial design and population. For ankle fractures managed conservatively, there was insufficient evidence to show a clear benefit of an air stirrup over a cast. A number of studies looked at immobilisation after surgical fixation, comparing cast immobilisation with the use of a removable cast allowing exercise. There was some evidence to suggest that the latter intervention reduced activity limitation, pain and improved ankle range of movement. However, this was achieved at the cost of an association with increased adverse events such as wound infection. Physiotherapy is commonly prescribed after the immobilisation period for operatively or non-operatively managed fractures. However, the authors found studies suggesting that adding manual therapy to exercise compared with usual care did not improve outcomes.<sup>4</sup>

■ A new review for the Cochrane library aimed to assess the efficacy of intermittent pneumatic compression (IPC) devices for prevention of venous thromboembolism following total hip replacement.<sup>5</sup> Sadly, only a single quasi-randomised trial with 121 patients met the inclusion criteria. This study compared calf–thigh compression *versus* foot compression. Neither reported symptomatic clots at three weeks following surgery. This study was a small underpowered trial and other types of IPCs have not been tested in randomised trials.<sup>5</sup>

## REFERENCES

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