

and ankle community. One of the advantages of circular frame systems is that the fixation segments can be distant to the pathology. This is particularly an advantage in bone infection. It has previously been thought that due to the potential for higher complication rates and lack of protective sensibility, circular frames are not ideal in neuropathic feet. However, that perception is gradually changing. The authors of this study from **Kuwait City (Kuwait)** and **Kurgan (Russia)** have shared their experience of frame-assisted arthrodesis in infected neuropathic ankles.<sup>6</sup> The authors report their comparative cohort study of patients all treated with an Ilizarov ring fixator, 21 with a closed technique, and 39 with an open fusion technique. It is important to remember when interpreting these results that the surgeons in Kurgan are able to achieve the best results in the world with ring fixation systems. Their series reports similar fusion rates of 81% for the closed fusions and 85% for the open fusions. However, hospital lengths of stay were significant at 21 days for closed fusion and 28 days for open fusions. Clinical outcome scores were similar in each group and infection recurrence rates were 19% and 16% in the closed and open groups respectively. While we would not be quite as effusive about the results of the Ilizarov method in ankle

fusion for infected neuropathic feet as they are at the Ilizarov Institute, we would agree that both open and closed procedures represent a viable treatment option for these patients.

### Arthroscopic just as good as open for the Brostrom?

Researchers in **Singapore City (Singapore)** have published this nice paper, which examines the role for arthroscopic Brostrom repairs in unstable lateral ankle ligament complexes.<sup>7</sup> Noting that the open technique is tried and tested, the arthroscopic technique is nowhere near as well evaluated but is gaining rapidly in popularity. The authors report a retrospective matched series of 52 patients all with unstable lateral ligament complexes. The authors matched the 26 patients in each arm by age, sex, and body mass index. The outcomes were reported using the American Orthopaedic Foot and Ankle Society (AOFAS) score, 36-item short form health survey (SF-36), and visual analogue scales. At the reported six- and 12-month outcome points, the authors reported superior pain outcomes in the arthroscopic group (1.0 vs 2.4) and better AOFAS scores (87.2 vs 73.5). There were no complications reported in either group, and

despite the limitations inherent in small number retrospective case matched studies, this paper does give us reassurance at 360 that, on the surface at least, those patients receiving the arthroscopic approach are likely to be doing better than the traditional Brostrom-Gould procedure.

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## Wrist & Hand

**X-ref** For other Roundups in this issue that cross-reference with **Wrist & Hand** see: **Oncology Roundup 9**.

### Non-surgical management of isolated proximal phalangeal fractures with immediate mobilization X-ref

Among hand surgeons, there are a wide variety of opinions regarding the appropriate management of proximal phalangeal fractures. Akin to many injuries in the hand, the range of opinion varies from the ultra-conservative to the operatively aggressive. The proximal phalanx fracture is particularly controversial partially due to the unique anatomy. The anatomy of the surrounding soft tissues is such that when the metacarpophalangeal joint (MCPJ) is in maximal flexion, the proximal two thirds of the phalanx is

enveloped by the extensor apparatus. Combined with active flexion at the proximal and distal interphalangeal joints, a compressive force is produced at the volar cortex contributing to stability. Some advocate that this is sufficient to treat most fractures nonoperatively; this paper from **Perth (Australia)** reports on a large series of such fractures.<sup>1</sup> The study was prospective and observational, including 121 consecutive isolated stable or initially unstable proximal phalangeal fractures managed at this single centre over a three-year period. Intra-articular displaced fractures and those with fracture angulation greater than 25° in the sagittal plane, greater than 10° in the coronal plane, or a rotational deformity that could not be corrected by closed manipulation under local anaesthesia were excluded from this series. Overall, just three patients needed operative intervention due to loss of position and 18 were lost to

follow-up. Patients were manipulated where required under local anaesthetic and placed in a hand-based thermoplastic splint in maximum MCPJ flexion with buddy strapping to an adjacent digit. Full active proximal interphalangeal joint (PIPJ) and distal interphalangeal joint (DIPJ) motion was commenced from the outset and the splint was worn continuously for one week. In terms of skin care and cleaning, removal was allowed with the MCPJ flexed between weeks one to four. The splint was removed at six weeks and mobilization with therapy continued until the pain had resolved indicating clinical union and the range of motion had fully returned or improvement plateaued. Patients were evaluated at the time of discharge from therapy services in terms of individual joint range of motion and total active digit range of motion. This occurred at a mean of seven weeks post-injury and achieved a median PIPJ extension of -4°, and