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Short Communication

Recent Advances in Foot and Ankle Surgery

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Abstract

Foot and Ankle has in itself developed as a subspeciality of importance. With growing advance in technology and imaging modalities the treatment and sugery has grown enormously in the field of foot and ankle joints. From simple bony fractures to ankle replacement to arthroscopy it's a fast pace through which we are able to treat the patients with the use of cutting-edge technology.

Patient-Reported Outcome Measure

The Foot and Ankle Outcome Score (FAOS) is the most used PROMs in foot and ankle evaluation. At present this is used widely and has been translated into several languages. It is applicable in many conditions and has proven validation across multiple foot and ankle diseases hence FAOS is the preferred PROM by many specialists.

In a study by Hansen, et al. [1] took into consideration about various scores later on summarized them. Totally there were 17 patient reported outcome measures in the setting of ankle instability, including commonly used measures such as the Foot and Ankle Ability Measure (FAAM), Foot Function Index (FFI), and the Foot and Ankle Outcome Score (FAOS). Their analysis among these for ankle instability showed only 3 scales to be valid enough. Of these scales, only the Foot and Ankle Ability Measure (FAAM) had been rigorously validated for construct validity using modern psychometric methods.

Hallux Valgu

Hallux valgus surgery in patients already having metatarsus adductus is a challenging problem in foot. In a study by Choi, et al. [2] they took 173 feet sample with hallux valgus and compared those with metatarsus adductus (42 feet) and those without metatarsus adductus (131 feet) after proximal chevron and Akin osteotomies. At a median follow-up of 32 months, no difference in the improvement of the hallux valgus angle and the intermetatarsal angle between groups. Recurrence rate was significantly higher in the metatarsus adductus group (28.6% compared with 6.1%).

Trauma

In RCT done by White, et al. [3] in which fibula fracture fixation by different methods in young patients (mean age, 42 years) either by fibular nail (63 patients) or by plate osteosynthesis (62 patients). They found no difference in the Olerud and Molander Score ($p = 0.621$) between the groups at 1 year and no significant difference in the quality of radiographic reduction, rate of complications, and rate of reoperations between the groups.

Another prospective study by Del Balso, et al. was done in which radiographic and functional outcomes were compared. These were patients who underwent either closed reduction-syndesmosis with screw fixation (29 patients) or open reduction syndesmosis with

repair of the anterior inferior tibiofibular ligament (AiTFL) and screw fixation (21 patients). They reported better syndesmotic reduction in the AiTFL group on postoperative CT scans. But no difference was there between groups in overall functional scores. Nonetheless, 12 months, the AiTFL group had better Maryland Foot Shoe subscore and FAOS Quality of Life subscore. They opined that it might be a product of improved reduction.

Arthroscopy

Ankle arthroscopy (AA) is now a well-established treatment method and important armamentarium of the foot and ankle surgeon. It can be used both as a diagnostic tool and also has therapeutic applications in the same sitting using a minimally invasive technique. Many conditions such as high incidence of chondral lesions and other intra- articular abnormalities following ankle fractures can be treated well with scopy. Almost 80% were treated in this manner by study done on 288 patients [4].

Arthroscopy allows for clear visualization and assessment of associated syndesmotic and ligamentous injuries. Chronic ankle instability is such a condition where pathology likely due to contribution of medial ankle ligament damage, which lead to better understanding & refinement of our treatment strategies. Further progress in ligament injury treatment has led to the development of arthroscopic reconstructive procedures of the anterior tibiotalar ligament portion of the deltoid ligament [5-7].

Acknowledgement

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Conflict of Interest

No conflict of interest.

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