



Editorial

Three common orthopaedic surgical procedures of the lower limb



We are delighted to present a dedicated issue of the Journal of Clinical Orthopaedics and Trauma, focusing on the lower limb. We have seen that in the last few decades some of the reconstructive surgical procedures (like arthroplasty, arthroscopy and open reduction and internal fixation of the fractures) have become very popular amongst Orthopaedic Surgeons, due to their outstanding success and track record. Hence, we have chosen some fascinating research articles related to lower limb Arthroplasty, Arthroscopy, and Fractures in this issue.

Arthroplasty in younger and older population is challenging and remains a topic of debate amongst Orthopaedic surgeons. Halawi et al.¹ reported a large series of 426 cases of less than 55 years with a minimum of five years follow up. The overall 5-year implant survival rate was 90.8%, and the aseptic survival rate was 92.6%. They also noted that the bearing type was the only risk factor for revision surgery, particularly with metal-on-polyethylene bearings. Considering the old age of patients, uncertainty about their life expectancy, associated co morbidities and fear of potential postoperative complications, elderly patients often hesitate to undergo simultaneous bilateral total knee arthroplasty (SBTKA). There have been very few reported series of SBTKA in octogenarian and nonagenarian population. Vaishya et al.² in a retrospective study of 46 patients of age > 70 years found that there was a significant improvement in their knee function. Only seven out of 46 patients (15.21%) were deceased (average time of death 5.6 years after surgery), due to non-surgery related medical causes. With expected benefits of surgery, SBTKA seems a safe, effective, and viable procedure for carefully selected elderly patients. It was suggested that these patients should not be deprived of potential benefits of this surgery and that the biological age is more important than the chronological age of these patients, in decision making. The restoration of the mechanical axis is one of the main aims of total knee arthroplasty (TKA), and it depends on perpendicular distal femoral and proximal tibial cuts along with soft tissue balancing. It is debatable if the use of customized or fixed femoral valgus angles in making the distal femoral cut in TKA is better. In a prospective study, Vaishya et al.³ found no statistically significant difference ($p > 0.05$) between the Femoral Valgus Angles on the left and right side or between the males and females on either side. They concluded that it is justifiable to use a fixed femoral valgus angle in the patients undergoing TKA. Acute arterial occlusions after TKA are a rare but a severe complication. Karanam⁴ presented a series of 9 patients who underwent successful endovascular recanalization for acute thrombotic

occlusion following TKA. A high degree suspicion with careful monitoring in the postoperative period is needed to identify the problem at the earliest, and early diagnosis with recanalization within 6 h is the key to limb salvage in these patients was suggested.

After an outstanding success and acceptability of arthroscopic procedures of the knee, amongst the patients and doctors, arthroscopy is now being done in increasing numbers in other joints of the body, like shoulder, hip, ankle and elbow joints. Anterior Cruciate Ligament (ACL) reconstruction is perhaps one of the most commonly performed and rewarding arthroscopic surgery⁵. Various surgical techniques of its reconstruction have evolved over the past three decades debating the timing of reconstruction, as there was no consensus in the literature regarding the optimal time of surgical intervention. Manandhar et al.⁶ reported no clinical differences regarding the range of motion and functional results between early and delayed ACL reconstruction. Mohindra et al.⁷ found a higher incidence of infection following double-bundle ACL reconstruction, compared to a single-bundle technique.

Pelvic fractures may be associated with life-threatening complications, like fat embolism. Stein et al.⁸ however found no evidence to suggest the routine use of a prophylactic inferior vena filter in patients with a single long bone fracture or non-complex pelvic fracture. Debnath et al.⁹ reiterated that Ilizarov fixator technique is well suited for the management of complex and high-energy fractures of the proximal tibia (Schatzker VI) when extensive comminution at the fracture site and compromise of the soft tissue is present.

References

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