SUMMARY

In treatment of long bone fractures, which are seen very frequently, the restricting factors such as fragments is not large enough to implement and regional open infected wounds with plate and pins can be seen. Also, complications such as lack of reduction with bandage and then forming an open infected fracture by broken part of the bone can be encountered. In this study, Ilizarov external fixator system which can apply although these restrictive factors; as a method that can be evaluated for all extremities, provides the early onset of joint movements, allows treatment of soft tissue and bone together in infected fractures, was applied total 26 calves of different breed, aged and gender with the metacarpus (n = 12), metatarsus (n = 5) and antebrachium (n = 9) fractures in order to investigate the advantages and disadvantages of the fixator in the treatment of long bone fractures in calves.

All calves began to weight-bearing postoperatively 1st day, with one exception with 2nd day. Consolidation started within 2 weeks and completed within maximum 55 days in 24 of calves, but for two other calves it is started within 2 to 3 weeks and completed at day 71 and 91.

All wounds of calves were completely healed without any complication. Pin tract infection occurred in five calves and it was immediately brought under control, and also there was no variance at clinical presentation of these 5 patients. After removal of fixator following completely fracture healing, all patients were able to use their extremities without lameness.

As a result, in our study; calves fractures that fragments was too small for pin or plate application, open infected wounds were present, those became open-infected after incorrect bandage applications or empirical treatment trials, in other words all of which were within the system's indications, healed completely. These results indicate that many calves' fractures, which considered amputation option because of it may not recover, can be treated with the use of the Ilizarov system.