

Ilizarov's External Fixator. A Bone Regeneration Method Little Used in Africa. Our Experience of 20 Years in Cameroon.

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Abstract : Introduction: It was in 1956 that Ilizarov pioneered the concept of osteogenesis in distraction by the device that bears his name to help produce bone and soft tissue regeneration and bone consolidation. This technique is not widely used in Africa where, however, its applications are numerous (loss of bone substances, congenital or acquired malformations). Our goal is to bring the indications of Ilizarov's device back to our practice conditions. Methods: Our study was conducted in 2 hospitals over a period of 20 years. For the retrospective phase, this study included all complete usable records of patients operated on in the Ilizarov external fixator department, and for the prospective phase, all patients operated on in the departments with complete usable records. Our sample was consecutive and not exhaustive. Data were analyzed by SPSS software version 23.0. Results: A total of 52 patients were reviewed. The average age of our patients was 14.7 years. The sex ratio was 1.6 in favor of men. The lower limb was the most affected (49), with a predominance of the tibia (62.4%). The average elongation was 6.4 cm. Traumatic acquired pathologies (delayed union, malunion) represented 60.6%. The mean time to union was seven months. Correction of the limb length discrepancy or filling of loss of bone substance was obtained in 75% of cases. Functionally, 80.8% of the patients treated had regained autonomy at the end of treatment, but in 17.3% of the patients, pain and limping persisted. Conclusion: This technique should be popularized in Africa because the benefit that would accrue to patients is invaluable and would be an attractive alternative to many amputations sometimes carried out in Africa by despair.

Keywords : ilizarov, external fixator, limb lengthening, bone regeneration, africa

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