A case presentation of lengthening of short amputated foot stump

Introduction: The trauma after vascular disease is the most common indication for amputation in patients under the age of 50. Amputations due to traumatic lacerations have a number of unique characteristics not found in vascular disease. The remaining stump often has an excellent blood supply and the patient is usually young and in good general condition and is expected to regain a high level of function. The use of prosthesis has many complications, irritation and skin issues, general fatigue, reduced mobility, poor balance, instability, or a fear of falling, current prosthetic not meeting the needs, back pain and intact limb pain. The Ilizarov method is a reliable method for the lengthening foot stump. The technique of distraction osteogenesis can also be used to improve the quality of life of patients with short foot amputation stumps by giving them a better mechanical stump that is more effective than prosthetic use, and for the function of the adjacent joint.

Material & Methods: Female patient 17 years old was presented by short amputated foot stump. She was complaining from difficult fitting prosthetic uses that led to ulcer and infection. In this case, the observed foot-length discrepancy was 10 cm and was treated with classic ring Ilizarov fixator.

Discussion: The use of prosthesis with short foot amputation stumps has many complications. The technique of distraction osteogenesis can also be used to improve the quality of life of patients with short amputated feet stumps by giving them a better mechanical stump that is more effective than prosthetic use, and for the function of the adjacent joint. The main area of concern in amputation stump lengthening is the soft tissue. To prevent these skin problems resulting in new debridement’s and re-amputation, skin and soft tissue should be in optimal condition prior to any lengthening. To this purpose tissue expanders can be used to produce a pocket for bone growth, or vascularized myocutaneous flaps. Lengthening of short amputated feet stumps is a lengthy treatment.

Results: The mean length gain was 8 cm but the consolidation time was very long (healing index 1.8 month/centimeter). The final outcome was excellent in this case.

Conclusion: The technique of distraction osteogenesis can also be used to improve the quality of life of patients with short amputation stumps by giving them a better mechanical stump that is more effective than prosthetic use, and for the function of the adjacent joint.

Biography
Ibrahim Abuomira is a Lecturer of Orthopedic, Al-Azhar University, Egypt. He is a Consultant in Deformity Correction and Limb Lengthening, Pediatric Orthopedic Surgery and obtained his MD from Institute Clinico Humanitus, Milano University, Italy during 2007-2010. He has received his PhD at Al-Azhar University in 2011 and is a Member of Egypt ASAMI, Member of International ASAMI and Member of American Academy for CP.

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