

عنوان مقاله:

Treatment of Segmental Loss of the Tibia by Tibialisation of the Fibula: A Review of the Literature

محل انتشار:

مجله تروما, دوره 16, شماره 4 (سال: 1390)

تعداد صفحات اصل مقاله: 6

نویسندگان:

Alireza Rahimnia

Frank Fitoussi

George Penneçot

Keywan Mazda

خلاصه مقاله:

Segmental defects of the tibia are challenging therapeutic problems for both the physician and the patient. These defects may be caused by severe trauma, infection, tumors and congenital processes. Several different techniques have been described for treatment of these defects including the Papineau technique, allograft reconstruction, bone transport using the Ilizarov frame, free vascularized fibular graft, tibiofibular synostosis and medial transport of the fibula with Tuli's technique, use of the Ilizarov frame and Huntington's procedure. All of these techniques have their specific advantages as well as disadvantages. Some of these techniques are used rarely i.e. the Papineau technique. The procedure of choice for most large tibial defects is bone transport with Ilizarov's technique; but in some cases the tibial remnant is inadequate for lengthening and we must use alternative treatments. In the three aforementioned techniques, the fibula is transferred with peroneal and anterior tibial muscles on a pedicle of peroneal vessels. This transfer retains a biological component of vital bone that allows for a shorter time for consolidation, increased remodeling potential and resistance to infection. It also has better long-term mechanical properties. Hypertrophy of the centralized fibula is described as attaining twice its original diameter or twice the size of the contralateral tibia. Hypertrophy has been seen in nearly all cases of the fibular centralization. Maximum hypertrophy is seen in children and besides patient age, is related to bony union and weight bearing. The reported time for hypertrophy of fibula varies from one to four years. No significant change in the diameter of the fibula was observed after five years. Fracture of tibialized fibula was not reported in many studies of fibular centralization with different techniques. In the reviewed articles, there were no cases of valgus deformity of the ankle. Either the patients were satisfied with the final results despite appearance of the lower extremity and the presence of some angular deformities, although in most cases, the deformities were mild. In this review we conclude that tibialisation of the fibula in selected cases is a reasonable alternative for the treatment of massive tibial defects.

کلمات کلیدی:

segmental, Fibula, Ilizarov Technique, Tibia

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1809595>



