Limb salvage reconstruction of the ankle with fusion and simultaneous tibial lengthening using the Ilizarov/Taylor spatial frame

Tellisi N, Fragomen A, Ilizarov S, Rozbruch SR
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Discussion

This article is a well-written and very useful article in the field of limb reconstruction as well as foot and ankle surgery. It is from the New York Division of the Hospital for Special Surgery. The unit, headed up by SR Rozbruch is very prolific in generating articles and cases and is an important centre in the world of modern Ilizarov surgery. One of the co-authors is Svetlana Ilizarov, daughter of Gavriil Ilizarov of fame.

The article describes a technique where an ankle arthrodesis is performed for salvage indications, using a circular fixator to fix the ankle arthrodesis, followed by a proximal lengthening to restore limb length and function.

The authors present a sizeable series of just over 50 cases with average pre-operative bone loss around the ankle of around 4 cm. They performed their fusions with the aid of a frame and then performed a proximal lengthening either simultaneously, or later on. They report an initial fusion rate of 84% which is remarkable, taking into account the nature of the cases. The average post-operative limb length discrepancy was just over 1 cm. Treatment time in the frame was long at 8.4 months, but patients were allowed to weight-bear during this period.

The authors describe every stage of the technique in detail. This description would be very useful for a surgeon contemplating executing this type of technique or referring a patient for this technique. It is very similar to my own protocol for these cases and makes for good reading.

I found this a very useful article, describing an important technique in the armamentarium of a limb reconstruction or foot and ankle surgeon.

A prospective study of pyogenic sepsis of the hip in childhood

TR Nunn, WY Cheung, PD Rollinson
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The authors prospectively assessed the outcome of 38 children (40 hips) with septic arthritis of the hip, treated at a regional hospital (Ngwelezane, Empangeni). Eighty-nine per cent were referrals from nine rural hospitals and 75% of patients had initially sought medical help within five days of onset of symptoms.

All hips were treated with open arthrotomy. Cloxacillin was used routinely (30% of hips had no culture and 55% Staph. aureus). Cefotaxime was added in patients <2 years, and cefuroxime in patients with multifocal (septicaemic) disease.

Of the 38 hips available for arthrotomy only 13 (34%) had a good outcome; 25 (66%) had a poor outcome (avascular necrosis, stiffness/chondrolysis). All the poor results (except three: see below) had a delay of five days or longer from onset of symptoms to arthrotomy. Significantly 32 hips (84%) were initially misdiagnosed or treated with antibiotics only (five). Three of these five patients had a good outcome in spite of a delay to arthrotomy.

There was no statistical difference in the time delay to arthrotomy between patients who were deprived or not, or those who consulted a traditional healer or not. The maternal educational attainment and the distance to a primary health-care facility also were not significantly associated with a delay to arthrotomy. The delay was due to medical misdiagnosis.

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This is an important article from a non-academic institution which contributes regularly to our annual orthopaedic congresses. Sequelae of septic arthritis of the hip are catastrophic and are due to delay of diagnosis and treatment beyond five days of onset of symptoms. It is a poor reflection of our undergraduate orthopaedic training that 84% of septic arthritis of the hip is misdiagnosed at a primary level.