Bahrain Medical Bulletin, Volume 17, Number 2, June 1995

Original

ILIZAROV TECHNIQUE IN CORRECTING LIMBS DEFORMITIES: PRELIMINARY RESULTS

Saleh W. Al-Harby, FRCS(Glasg)*

This is a prospective study of eleven patients treated by Ilizarov technique for various limb lesions. These included lengthening, deformities, malunion, non union and congenital pseudarthrosis. Abundant, well formed new bone was obtained in all patients who had lengthening procedure. Union for pseudarthrosis was sound.

Twenty one manageable complications were encountered in the 15 segments treated, most of the complications could be reduced by improving the surgeons' familiarity of the technique, beside a careful psychological preparation of the patients before and during the treatment.

This method of treatment is very useful for certain cases of musculoskeletal disorders provided familiarity of the technique and preoperative planning are maintained.

The Ilizarov technique was introduced in Siberia in the 1950 principally to fix trans-osseous tensioned wires over rings which are connected together by rods. If it is used for lengthening or correction of bony deformities, then corticotomy of the segment between the rings is performed. The medulla and periosteum should be preserved^{1,2,4}.

Ilizarov has demonstrated that bone and soft tissue could reproducibly be formed by gradual distraction. This has led to the management of many congenital and acquired bony problems.

For septic and aseptic non union, Ilizarov has demonstrated that compression, distraction forces through the site of non union can stimulate union without the need for bone grafting^{1,2,4}.

The objective of this prospective study was to evaluate and compare these results with other published studies elsewhere.