SUMMARY

The term fibular hemimelia implies a congenital absence of all or a part of the fibula.

The appearance of a limb with fibular deficiency can vary from barely detectable to severely deformed. The typical limb is characterized by a valgus foot, shortening of the leg, variable anterior bowing of the tibia with a dimple over the apex, and variable valgus of the knee. The foot is often deformed, missing one to several lateral (post axial) rays. Frequently the femur is short as well as the tibia, the femoral shortening may be slight to severe **(Lovel and Winter, 2003).**

Various classification schemes have been described for fibular hemimelia as by **Coventry et al. (1952); Achterman and Kalamchi, (1979); Letts, (1993); Birth, (1998) & Stanitski and Stanitski, (2003)** the most commonly used throughout the literature is that of Coventry and Johnson.

The definite line of treatment has been a debatable issue for a long time; the problem is not merely a diseased bone (pathological condition to which a treatment is proposed); but

also a problem of limb length discrepancy which caries various psychological, cosmetic, social, economic and community aspects **(McCarthy et al., 2000)**.

The main problems in the treatment of fibular deficiency are the limb length discrepancy, the deformity and instability of other foot and ankle. It is very important to realize that the discrepancy will become worse with growth and its ultimate discrepancy at maturity that is it important **(Choi et al., 1990)**.

For many years, Syme or Boyd amputation in early childhood has been recommended to replace the deformed foot with a more functional prosthetic one, to simplify the treatment of limb-length inequality, and to avoid subjecting the child to multiple reconstructive operations. However, recent advances in reconstructive techniques, afforded by the introduction of Ilizarov's method and apparatus, have resulted in renewed interest in the reconstruction of limbs that have deformities associated with fibular deficiency **(Birch et al., 1999)**.

As scientific advances are widely spread nowadays parents tend to reluctant to allow their child's foot to be amputated at an early age especially when the foot is near normal and the limb length is not grossly abnormal. The Ilizarov technique provides

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a means of achieving simultaneous lengthening and angular and rotational correction in children with congenital fibular deficiency. Because a greater percentage of lengthening can be achieved with this method as compared with previous rapid distraction methods, children with large projected limb length discrepancies who were previously managed with amputation may now be candidates for lengthening. This method may be combined with simultaneous ankle or foot reconstruction when symptomatic ankle instability or foot deformity exists. One must be aware of potential complications, but we expect that the incidence of complications will diminish as greater experience with the Ilizarov technique is obtained **(Miller et al., 1992)**.