

Complex Fractures and other complicated orthopaedic diseases treated by Ilizarov (Russian) technique at Parul Sevashram Hospital

Recently two patients were treated by Ilizarov (Russian) technique at Parul Sevashram Hospital. One patients met with an accident & was bedridden due to open fracture of his thighbone (femur) since 6 months & had pus discharge from fracture site. The other patient had very bad fracture of leg bone (TIBIA & FIBULA 10 to 12 pieces).

These patients were already operated elsewhere in big hospitals of state. Both patients were operated using Ilizarov technique at Parul Sevashram Hospital and they could walk weight bearing from very next day with help of walker.

Basically Ilizarov (Russian) Technique is a type of external fixator (circular) used in orthopaedics to lengthen or reconstruct complex & open bone fractures and cases of infected non-union & mal-unions of bones those are not managed with other methods, can be dealt with ultimate good results by this method.

This techniques is named after the orthopedic surgeon Gabriel A Ilizarov from Russia, who pioneered the technique by doing research more than 40 years 1940 to 1992.

How does this technique work ?

In this technique, very thin wires (diameter of 1.5 to 2 mm) are passed through bones of leg & attached to steel or carbon rings and then rings are connected to each other via threaded rods & adjustable nuts. Hence this is a type of circular external fixator which stabilises artificially made fracture.

In due course bone & soft tissue gets regenerated / lengthened in reliable and reproducible manner by this technique with "theory of tensions" & callotaxis.

Which diseases can be treated through this technique ?

Complex and open fractures, closed, multiple (comminuted) fractures of Bones, Non-Union, Mal-Union, Infections - Osteomyelitis, different congenital / acquired deformities, Poliomyelitis, tumors & various other problem diseases of bones & joints which conduct be treated by other conventional methods. Osteoarthritis of knee & Burger's Disease (T.A.O.) can also be treated with Ilizarov Technique.

What are the advantages of this technique ?

There is no need of open surgery in most of cases. which minimizes the blood loss. Patient can be made to bear weight and walk from the very next day with the help of stick / walker (even though with 2 or more fractures in the limb). Physiotherapy can also be started immediately, hence stiffness of nearby joints is preventable which is common end result of bad fractures.

