

Iraqi boy with rare birth deformities treated without open surgeries; walks first time in six years

Mustafa, a kid from Iraq with rare deformities, was able to walk on his own first time in his life following successful non-surgical Ilizarov technique used by Dr. Sachin Bhonsle, Orthopaedic Surgeon at Fortis Hospital Mulund.

Six-year old Mustafa was born with multiple severe leg deformities that rendered him immobile since birth. Mustafa was born with a rare congenital disorder known as Arthrogryposis Multiplex Congenita (AMC), characterized by multiple deformities in his limbs and spine. AMC is a rare disorder affecting one in 15,000 new born children around the world.

Arthrogryposis Multiplex Congenita (AMC) or simply Arthrogryposis, describes congenital joint contractures in two or more areas of the body. Children born with one or more joint contractures have abnormal fibrosis of the muscle tissue causing muscle shortening, and therefore, are unable to do passive extension and flexion in the affected joint or joints.

Due to the AMC disorder, Mustafa's legs were deformed in a hexagonal shape and he had been bed-ridden since birth. To make things difficult for Mustafa, the deformities caused due to the AMC were progressive in nature and extremely resistant to correction, especially through any surgical procedure. In fact, correcting the AMC through surgical procedures is extremely difficult, with very low chances of success. Despite several failed surgeries in Mustafa's native country Iraq, his parents had been hopeful of seeing their child stand on his own feet.

Mustafa's parents' hope brought them to India. On recommendations from a number of experts they interacted with, Mustafa's parents found themselves at Fortis Hospital Mulund. Even for Dr. Sachin Bhonsle, the Orthopaedic surgeon at Fortis Mulund, who went on to treat the child, Mustafa's case was a major challenge as he had not come across such a case in his medical career. Not to be bogged down by rare medical cases, Dr. Bhonsle took Mustafa's case as a personal challenge and went ahead with the treatment with extreme care and confidence.

On his experience, Dr. Sachin Bhonsle of Fortis Hospital Mulund said: "There were multiple challenges to begin with. Mustafa had extreme deformities in the knees area and the open surgical release was not possible. So severe were Mustafa's condition that it required correction at six sites including both knees, both ankles and both feet. Because an open surgical correction would create huge defect in skin, arteries would need grafting post-surgery, nerves would stretch out leading to possible paralysis and there was a risk of loss of limb, we concluded that an open surgery was not a viable option. Instead we opted for gradual correction through the Ilizarov Ring External Fixator procedure."

In this unconventional procedure, Mustafa's his legs were placed in the Ilizarov Apparatus (Ring Fixator), wherein the screws on the apparatus are turned 3 to 4 times a day, promoting a small 3-mm correction in the bones every day. The gradual procedure lasted around 6 weeks and after 50 days there were visible signs of improvement in Mustafa's condition. The non-surgical procedure resulted in substantial correction in the shape of Mustafa's knees, ankles and feet.

Following the substantial improvement in Mustafa's condition, the Ring Fixators were removed and the troubled areas were plastered to prevent the recurrence of the deformities.

Dr. Bhonsle said: "While this was challenging, we were confident that we would be able to turn around this case successfully – without any open surgery. With the gradual application of the Ilizarov technique, there has been a substantial improvement in Mustafa's condition and we are happy to see Mustafa walking on his own."