

Directing the Power of Nature

Sergey S Leonchuk

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Doctors who deal with the treatment of congenital anomalies know how difficult this problem is. A little bit about congenital clubfoot. The prevalence of the disease varies within different limits depending on the race and ranges from 1 to 5 and in Polynesia and Hawaii up to 7 per thousand newborns. The expressed stiffness of the soft tissues, various changes in the nervous system, significant disturbances in the joints and later the disproportional progression of the foot skeleton bones with persistently progressing course put clubfoot among the most severe and recurrent abnormal development of the musculoskeletal system. The first descriptions of the treatment of clubfoot were found in India in 1000 BC. In 400 BC Hippocrates first described clubfoot, methods of conservative treatment and defined the key principles of treatment: Step-wise treatment at the earliest possible age and the redressing of the foot in hypercorrection to prevent relapse. In 1658 Arcaeus in his paper about clubfoot described his technique of "stretching" and mechanical devices to maintain of foot correction. The beginning of surgical treatment was marked by the introduction of achillotomy: 1823 year-Delpech, Stromeyer, Little; 1834-Rogers, 1835-Dickson, 1866-Adams, etc.

Nowadays treatment of children with congenital clubfoot around the world begins already from the first days of life with the use of conservative techniques, later using various forms and techniques of surgical treatment, reconstruction of the foot bones followed by fixation of the segment by wires, immobilization by plaster cast or by external fixator. Although deformation of the feet after conservative treatment or surgery can be corrected, but clinical practice shows that the percentage of recurrence of deformation is sufficiently high from 15 to 70% according to different authors [1-3].

At the end of the 20th-beginning of the 21st centuries, I.V. [4] Ponseti and his successors achieved success. However, the problem was not solved. After the treatment of children by the method of Ponseti in 41% notice pain in the feet, and in 18% functional limitation. The rate of recurrence after treatment by Ponseti method is 41% according to a number of authors. Some authors conclude that the effectiveness of using the Ponseti method in the treatment of children with congenital clubfoot is noted only in patients less than 9 years of age.

Russian Ilizarov Scientific Center for Restorative Traumatology and Orthopedics, Kurgan, Russia

Corresponding author: Sergey S Leonchuk

E-mail: leon4yk@mail.ru

MD, PhD, Russian Ilizarov Scientific Center for Restorative Traumatology and Orthopedics, Kurgan, Russia.

Tel: +7 905 8516338

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What to do when there are expressed secondary changes in the foot bones and scar changes of the soft tissue of the segment after the initial treatment?

Analyzing the literature on this issue, we can conclude that most authors sought to achieve the maximum result intraoperative. The experience of the Ilizarov clinic shows that the more effective in such cases is the gradual correction of the deformation components by the external fixator. Acknowledgment to this is the work of Ilizarov and his followers. The Ilizarov method of treatment provides stable controlled fixation of the foot bones, dosed their movement in the necessary direction, stretching of the shortened soft tissues, which allows directional transformation of each bone fragments and the foot as a whole [5-7]. However, the problem was not solved too...

The modern principle of treatment of patients with congenital clubfoot is the individual and complex approach. The various treatment algorithms and technical solutions used in this case should direct the force of nature against this congenital defect.

What is your opinion? What is your solution of congenital anomalies problem?

Recommended literature.

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