

Cosmetic dream and limb lengthening procedure by ilizarov technique

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Stature lengthening

A larger set of population with short stature are very unhappy about their height. Patient with psychological state of “short stature dysphoria” seem to feel an intense need to increase their height. With proper psychological screening we can do stature lengthening. Regarding this, our experience is always positive. Safe and successful height increase of 2-3.5 inches can be accomplished. The result is an outcome of increased happiness and improved self image.¹

Some patients after adolescence do not feel that they have fully grown. In young people with stature shorter than average always feels themselves in anxiety and tension.

Challenges are always sought for psychological aims, but it involves a strong physical suffering. In modern era, people are more self-centered. Discomfort felt by some people has a new thinking “Why I cannot be taller”. Any adult dream of a lengthening is the same as the one of a child who wants to grow physically and mentally. For cosmetic lengthening of any patient he/she wants pain free surgery.

Our treatment option

Academician Professor Gavriil Abramovich Ilizarov² was the first one in the world to show that in one surgical lengthening procedure it was possible to obtain very big achievement with primary healing by distraction histoneogenesis, without the need for bone grafting.

We strictly follow the Kurgan teaching, the Ilizarov ring fixator for gradual distraction as well as consolidation. This is well established and has been used for the longest time. The main disadvantage is excessive time in frames, soft tissue tethering by wires. The main advantage is that the corticotomy can be done in the metaphyses of tibia. The usual goal for lengthening for stature for most patients with Ilizarov fixator is 2-3.5 inches. Our preference for tibia lengthening over femoral lengthening is because of several good reasons. First of all, tibial lengthening makes one’s leg look longer than femoral lengthening. The reason for this is that the level of knees and feet are obvious but the level of the hips is not obvious. When we see long lower legs, we extrapolate that the rest of the person has a normal proportion, which gives the impression that the individual is taller than they really are. Furthermore, wearing short skirts and dresses shows the length of the lower legs but not the thighs; therefore one gets more mileage in apparent increased height from tibial than from femoral lengthening.

Secondly, we prefer tibia lengthening is that technically it can be performed in one operation in a reasonable period of time. There is much less blood loss in tibial lengthening. Thirdly, we prefer bilateral tibial rather femoral lengthening is that it is much easier and better tolerated to have two Ilizarov ring fixator on both the legs than on both thighs.¹

Bliskunov et al.³ from Ukrain Simferopol in 1983 did with one embed in the body. The first one to spread in 16 countries was the Albi’zzia, designed in 1986.⁴ All these implants are mechanical. New technologies are introduced, as for example PRECICE nail.⁵ But proper use of Ilizarov fixator can reduce risk for patients. We would prefer to resume walking and full weight bearing by Ilizarov fixator.

Case illustration

Our primary aim is to full weight bear with the Ilizarov fixator. Our first priority is the function. With Ilizarov frame patient can return to full activities if it is properly placed with proper hand. True success of lengthening can be achieved by Ilizarov technique if we know the all tit bats of this wonderful technique. We are Ilizarov surgeon and we must do the meticulous intelligent follow up of the patients. In general, healing time for lengthening by Ilizarov technique is 45 days/cm. Physical activities can increase muscle flow by 10 times, thus the bone blood flow and healing capacity. In fact, we need to adjust speed and rehabilitation by observing the regular follow up of the Ilizarov frame. Nobody wants pain, if we properly apply the Ilizarov frame, with proper tensioning of the wires patient will not complain any pain. Proper instruction to the patient is absolutely mandatory regarding the Ilizarov apparatus. When someone is in better conditioned and explained about post-operative care and is psychologically stable, the pain is much lesser (Figure 1).





Figure 1 Case Illustration.

1. Former avg. height 5/-0//, age 23 years.
2. After 7 months of treatment.
3. Author is checking the Ilizarov frame.
4. After 9 months of treatment.
5. After 10 months of treatment.
6. Height gained by 4// after 11 months of treatment.
7. Previous Height 5/-0//.
8. New height 5/-4//.

Conclusion

Pain is the chrysalis process inside the mind. In lengthening process patient surgeon interaction is very essential. A cosmetic lengthening is an access to a human understanding and is the dream of patient, physically and mentally. Success comes from hard work and meticulous follow up. The Ilizarov frame is strong enough and patient can walk with full weight bear.

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None.

Conflicts of interest

None.

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