

Knock Knees

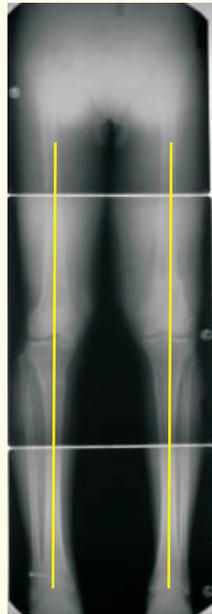


VS from Sweden had a 14° valgus or Knock Knee deformity seen in both legs. Careful examination revealed a 7° deformity in her thigh and leg bones on both sides. She already had pain in the knee on the lateral side due to early arthritis.

Surgeons in Sweden refused to treat since making an error of even 1° would mean a 15% error.

We performed software simulation for accuracy & we treated her with LRS & TSF external fixation to achieve a very accurate correction.





Jean Ebert was a United Nations worker from New York who had a mild knock knee deformity. He had seen his father suffer in old age due to knock knee induced arthritis and wanted to correct his deformity. Upon careful analysis of his full length xrays we found that he had a mild deformity in the Left Femur & Right Tibia. He also had a very mild deformity in his Right Femur.

He was given a choice of correction with either internal or external fixation. He chose external & we corrected the 3 bones to give him a satisfactory result.

MK was a young teenager from New York who had significant knock knee deformities in both her legs. Upon careful examination, the deformity was found mostly in the tibiae. A fixator assisted nailing (FAN) was performed on one side with accurate correction. The other side had an Ilizarov external fixator which permitted her to bear weight immediately and walk as the FAN side could not bear weight early. This also enabled her to fly back to New York in less than a month.





60 year old mother of a Medical Representative was suffering from severe one sided Genu Valgum (knock Knee) and had developed a severe arthritis in the lateral compartment of her knee. Full length xrays revealed the deformity to be present in the Femur bone. Fixator Assisted nailing surgery was done for her. Initially, a LRS fixator with Titanium Pins was attached to her femur. Then using accurate aiming devices and specially designed instruments, a custom made IM device was inserted after a minimally invasive procedure. A mild amount of over correction was done for relief of arthritic pain. She was walking in a few days and healed in 3 months. Full Knee movement was gained in 4 months and she has accurate correction of her deformity and complete relief from her knee pain.



PS was a 17 year old who suffered from Metabolic Bone Disease and had a severe Knock knee deformity. She was also very short at only about 4'8". While it was explained to her parents that correcting her deformity would give some increase in height, they requested a lengthening procedure to be combined with deformity correction.

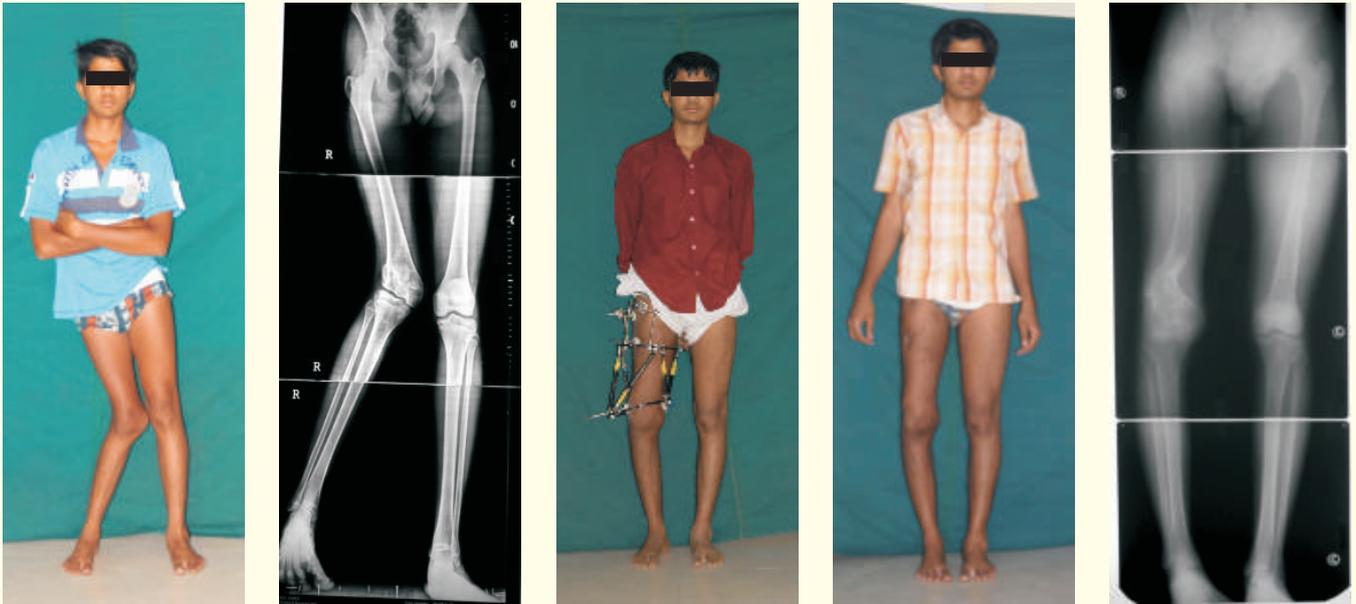
In the first stage, The Left limb was corrected using external fixation devices-- LRS fixator for the femur and TSF fixator for the Tibia for accuracy along with gradual lengthening. The procedure was very successful with a 7 cm length gain and accurate correction of the valgus deformity.

The only issue was that the duration of external fixation was a little long at about 7 months and her father had difficulty bringing her for follow-up examination every 3 weeks from a distance of 500 km.

Hence we chose to perform the newer FAN--Fixator Assisted nailing procedure. We could accurately correct the deformity in the femur by performing two osteotomies for the valgus and procurvatum deformities.

The tibial valgus was corrected and lengthening was done gradually to achieve limb equality. Fixator was removed in 3 weeks. She was very happy with the rapid and accurate correction.





16 year old AP had a severe knock knee deformity due to a childhood injury which lead to a growth arrest. His thigh was badly deformed and also very short. His growth remaining prompted us to perform not only deformity correction and lengthening but also over-lengthening to compensate for future growth.

This was done with the TSF external fixator very nicely and he achieved full deformity correction along with 7 cm of lengthening.