

- 5) Educate the patient/family on pin-site care and have frequent, regular checks of each pin site in the office or by photos sent electronically.
- 6) Plan to have redundant fixation elements in the initial frame construct so that if an infected pin or wire needs to be removed, the integrity of the frame stability won't be compromised.

Scheduling weekly evaluations of the regenerate/osteotomy healing during the distraction phase will help to keep the surgeon out of trouble. Frequent and regular assessment of the pin sites and the bone healing is important to adjust the correction speed and pin-site care. If the regenerate is healing quickly, the correction rate can be increased to prevent a premature consolidation. If the regenerate bone formation is poor, the correction speed can be decreased or stopped, if necessary. The regenerate bone should be visible by two to three weeks after surgery.

Once the distraction or adjustment phase is completed, the goal is to get the patient weight-bearing without assistance. Regular physical therapy can help advance the

weight-bearing as tolerated and provide feedback about the patient's progress. Radiographs to evaluate the bone healing should be obtained every few weeks until the surgeon feels the bone has adequately consolidated. Clinically, if the patient has a comfortable range of motion and is easily able to ambulate fully weight-bearing in the fixator without assistance, this is a good indication that the frame may be ready for removal.

References

1. Standard SC, Herzenberg JE, Conway JD, et al. The Art of Limb Alignment, Ninth Edition. 2020 Rubin Institute for Advanced Orthopedics, Sinai Hospital of Baltimore.
2. Malik SS and Malik SS. External Fixation. In, Orthopaedic Biomechanics Made Easy. Cambridge University Press, Cambridge, UK 2015. P 180.
3. Eidelman M, Bialik V, Katzman A. The use of the Taylor spatial frame in adolescent Blount's disease: is fibular osteotomy necessary? *J Child Orthop* 2008;2:199-204.