











addressing the contracture, such as with a gastrocnemius recession.<sup>3</sup> Worsening of the gait can occur, specifically the development of crouched gait. This is due to the lack of understanding between true versus apparent equinus and failure to identify adjacent soft tissue contractures and/or skeletal malalignment.<sup>11,12</sup> Reoccurrence of the contracture or soft tissue pressure wounds may occur due to the lack of adequate postoperative casting and orthotic wear. To prevent the risk of soft tissue pressure wounds, it may be needed to perform cast changes in the postoperative period.

## Summary

When properly indicated, operative Achilles lengthening corrects fixed ankle equinus and improves ankle dorsiflexion, ideally to 10 degrees of ankle dorsiflexion past neutral with the knee flexed and 5 degrees with the knee fully extended. Before operating, it is imperative to distinguish between true equinus versus apparent equinus. Properly perform the Silfverskiöld test both preoperatively and intraoperatively when the patient is asleep to ensure an Achilles lengthening is needed so overlengthening of the tendon is prevented. When an Achilles lengthening is indicated for severe deformity, use an open approach as percutaneous techniques often don't give enough correction. In the open approach, either an open sliding lengthening or z-lengthening technique can be performed once the tendon is exposed. In Achilles contractures with greater than a 20 degrees plantarflexion deformity, it is preferred to utilize a z-lengthening technique to adequately address the deformity. Postoperatively, reoccurrence of the contracture is common. This can be minimized by casting for the initial postoperative period then transitioning to an AFO.

## Additional Links

- AAOS *Percutaneous Achilles Tendon Repair*: [https://www.aaos.org/videos/video-detail-page/20275\\_Videos](https://www.aaos.org/videos/video-detail-page/20275_Videos)
- AAOS *Minimally-Invasive Surgical Repair for Achilles Tendon Rupture*: [https://www.aaos.org/videos/video-detail-page/18309\\_Videos](https://www.aaos.org/videos/video-detail-page/18309_Videos)

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