

typically performed after the pubertal growth spurt when adolescents need to be independent and resent being made once again dependent on outside help for mobility. In our experience, patients found it impossible to comply with long periods of non-weight-bearing after bilateral bunion surgery. This may have contributed to unpredictable postoperative outcomes.

The advantages of using of a dorsal locking plate as opposed to previous generation plates (such as the Vitallium mandibular plate), is that the hallux valgus angle and dorsiflexion angle are pre-set and improve the precision of the arthrodesis so long as the plate is placed directly dorsally. In addition, the plates are stronger, and weight-bearing for transfers are allowed from day 1 and weight-bearing as tolerated from day 7–10, with early return to activity such as attending high school or college. Furthermore, dorsal locking plates are concave and have a low profile. They are asymptomatic in the majority of patients and rarely require removal.

Summary

Symptomatic bunions affect a significant proportion of adolescents with cerebral palsy, and arthrodesis of the 1st MTPJ has been reported in the literature as having the highest success rate in terms of relief of symptoms and correction of deformity. We recommend cup and cone reamers for joint preparation. These should be used carefully in osteopenic bone as it is easy to remove too much bone resulting in excessive shortening of the fusion construct. We use pre-contoured dorsal locking plates for fixation. This technique is reproducible and produces stable fixation allowing early weight-bearing, optimal alignment, high fusion rates, and reliable results for fusing the 1st MTPJ in the treatment of hallux valgus and hallux flexus in cerebral palsy.

Additional Links

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