

Foreword

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In this issue of the *Journal of Knee Surgery*, our Special Focus section addresses the topic of high tibial osteotomy. This is a timely topic that has been given increased attention in active patients with unicompartmental degenerative joint disease. The 4 articles in this issue discuss:

- The role of arthroscopy at the time of high tibial osteotomy.
- A report describing early complications comparing two different techniques (Puddu plate for opening wedge high tibial osteotomy versus closing wedge with AO/ASIF L plate).
- The effect of plate position and size on tibial slope associated with high tibial osteotomy.
- The description of a novel technique for harvesting autograft bone for opening wedge high tibial osteotomy.

Currently, I perform far fewer high tibial osteotomies than I have in the past, in part because I have one partner who attracts the younger, complex malalignment patients, and several arthroplasty partners who perform, when appropriate, unicompartmental arthroplasties. Nevertheless, I believe this technique is underused and merits careful consideration in properly chosen patients.

What are a few of the pearls from these articles? Arthroscopy has played a role in my armamentarium, not to determine which patients needs a high tibial osteotomy, but which may have concomitant pathology. Ilahi et al demonstrate the importance of arthroscopy in their article. The opening wedge high tibial osteotomy is currently more popular than the closing wedge technique because of the easy surgical exposure, perceived ease of technique, ability to alter tibial sagittal slope in associated ligamentous deficient patients, and avoidance of fibular osteotomy

or tib-fib joint disruption. It does have a higher complication rate (55% higher), as reported by van den Bekerom et al, and can be associated with increased sagittal slope correction (whether intended or unintended), as reported by Rubino et al. Finally, Moyad and Minas report a nice technical pearl, accessing distal femoral autograft with an osteochondral core harvester for grafting an opening wedge high tibial osteotomy.

Historically, I have more experience with the valgus-producing closing wedge osteotomy, and overall, my results have paralleled what is generally reported—when they are good, they are great; and when results are not good initially, patients generally have a poor response to high tibial osteotomy. Our biomechanical gait studies delineated between high and low loaders. Those who have high adduction moments are more likely to have a more rapid deterioration of their results, and the technical component should be directed to overcorrection and possibly building in some external rotation.

Don't forget some of these preoperative pearls—instruct your patients to walk more slowly, try a lateral heel wedge, avoid casual loafers and wear shoes that lace up, and try to walk with the feet in slight external rotation. Those who walk with internal tibial rotation generally have high adduction moments; you can unload the medial compartment with foot external rotation. I also teach my patients that those extra pounds are knee forces magnified several fold, depending on varying activities. Finally, have your patient walk backward and observe the gait. This can enhance the varus thrust, which may not have been detected during a normal gait assessment.

I appreciate the excellent contributions of these authors.