

Treatment trends for acquired hallux valgus among orthopedic surgeons and podiatrists

Ryan Callahan, DO, MS, Umur Aydogan, MD, Guodong Liu, Djibril Ba

Category: Bunion

Keywords: hallux valgus, bunion, trends, orthopedic, podiatry, osteotomy, admission, prescription

Introduction/Purpose: Foot and ankle surgery is unique in that both orthopedic surgeons and podiatrists perform many of the same procedures. Very little data exists comparing the two groups for treatment trends and potential complications for acquired hallux valgus deformity. The Truven Health MarketScan® Commercial Claims and Encounters database offers a breadth of information for comparing commercially available health insurance claims. The MarketScan® database was utilized to gain understanding in treatment trends between podiatrists and orthopedic surgeons.

Methods: MarketScan® database was used to retrospectively search from 2005-2014 for cases involving a diagnosis of hallux valgus (ICD-9 735.0) that included procedural codes for distal metatarsal osteotomy (CPT 28296), double osteotomy (CPT 28299), and first tarsometatarsal arthrodesis (CPT 28297). The procedures were then divided into the provider groups of podiatry (PO) or orthopedic surgery (OS) to compare the trends in treatment options. Additionally, hospital admission within 3 months, reoperation, and pain medication prescriptions were tracked for the separate groups and for the individual procedures within those groups.

Results: From 2005-2014, 206409 patients were identified for comparison. Podiatrists performed 87.5% of hallux valgus corrective procedures with significantly different ($p < 0.0001$) treatment approaches with 78.9% distal metatarsal osteotomy (OS 63.2%), 16.2% double osteotomy (OS 25.3%), and 4.9% first tarsometatarsal arthrodesis (OS 11.5%). Orthopedic surgeons and podiatrists demonstrated similar hospital admission rates 3 months from surgery or reoperation at 1.8% and 1.5% respectively. Amongst all providers, there was significantly more ($p < 0.001$) reoperations and admissions after first tarsometatarsal arthrodesis (2.1%) when compared with distal metatarsal (1.5%) and double (1.6%) osteotomies. 9254 patients were available for prescription drug comparison that demonstrated significantly different prescribing trends with orthopedic surgeons prescribing hydrocodone 2.8% (PO 12.9%), oxycodone 39.4% (PO 10.8%), and tramadol 43.4% (PO 60.0%).

Conclusion: A large portion of hallux valgus correction is being performed by podiatrists amongst privately insured patients. Podiatrists were much more likely to perform distal metatarsal osteotomy while orthopedic surgeons were more likely to perform double osteotomies and first tarsometatarsal arthrodesis. Hospital admission within 3 months was similar for the providers. Podiatrists were more likely to prescribe hydrocodone and tramadol while orthopedic surgeons demonstrated greater numbers with oxycodone prescriptions.