

Effectiveness of hallux valgus surgery on improving health-related quality of life: A follow up study

- Hernández-Castillejo L.E.^{a, c},
- Martínez-Vizcaíno V.^{a, b},
- Álvarez-Bueno C.^a,
- Quijada-Rodríguez J.L.^c,
- Alonso-Galán M.^c,
- Garrido-Miguel M.^{a, d}

Abstract

Background: Hallux valgus (HV) negatively impacts health-related quality of life (HRQoL). Patient-reported outcome measures (PROMs) are increasingly used in clinical studies of the foot and ankle. We aimed to evaluate the effect of HV surgery on PROMs (i.e., pain scales, general HRQoL, and region-specific scales) and radiological angles. Additionally, we aimed to determine whether the effect on these outcomes depends on the type of surgery (including open and percutaneous techniques) and if it is influenced by potential confounding factors (i.e., age, HVA, 1–2 IMA, body mass index (BMI), and distal metatarsal articular angle (DMAA)). **Methods:** This was a longitudinal prospective study. We collected the clinical data of all patients who underwent surgery for symptomatic HV deformity in the orthopedic department of the Virgen de la Luz Hospital of Cuenca (Spain). The clinical outcomes were assessed using the American Orthopedic Foot and Ankle Society (AOFAS) Hallux metatarsophalangeal-interphalangeal (HMI) scale, visual analogue scale (VAS), Manchester Oxford foot questionnaire (MOXFQ), short form health survey (SF-12) and European Quality of Life-5 Dimensions (EQ-5D). **Results:** A total of 72 patients (70 women, 97.2%) were included in the study 72 (72 feet). The AOFAS pre–post-surgery score changed from 42.16 (SD: 10.11) to 83.31 (SD: 6.23). Considering AOFAS domains, the pre–post change was from 14.17 (SD: 9.15) to 33.19 (SD: 4.69) for pain, from 27.22 (SD: 3.90) to 37.94 (SD: 2.78) for function, and from 0.78 (SD: 2.38) to 12.18 (SD: 3.45) for alignment. For other clinical outcomes was VAS score from 5.01 (SD: 1.26) to 1.26 (SD: 0.96) and MOXFQ score from 61.44 (SD: 7.09) to 12.35 (SD: 4.85). SF-12 (physical) changed from 36.26 (SD: 5.32) to 47.06 (SD: 4.82), SF-12 (mental) from 38.23 (SD: 8.04) to 46.49 (SD: 4.16), and EQ5-D from 0.64 (SD: 0.008) to 0.90 (SD: 0.10). **Conclusions:** Our data confirmed the improvements in the clinical and radiological outcomes after HV surgery, and provided some evidence of these improvements not depending on the type of surgery or on some potential confounding factors such as BMI, HVA, 1–2 IMA, and DMAA. © 2021 European Foot and Ankle Society

Author keywords

Hallux valgus; PROMs; Quality of life; Surgery

