

Surgically treated adult acquired flatfoot deformity: Register-based study of patient characteristics, health-related quality of life and type of surgery according to severity

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Background: Population-level data describing patient characteristics and interventions used in surgical treatment of adult acquired flatfoot deformity (AAFD) is lacking.

The Swedish National Quality Register for Foot and Ankle Surgery (Swefoot) is a unique nationwide register of patients who are surgically treated for foot and ankle related disorders in Sweden. Data is provided by both patient and treating surgeon. The patient provides information through 2 different PROMs; EQ5D-3L and SEFAS, a region-specific PROM validated for foot- and ankle related conditions. Comorbidities, indications and interventions according to diagnose are registered and described on a regional and national level. The register covers 16 different diagnoses.

Methods: We analyzed baseline patient-reported data including PROMs and surgical interventions for patients with AAFD reported to the Swefoot 2014 to 2021.

Results: First-time surgery for AAFD was registered on 625 feet (median patient age 60 years, 64% women, and mean BMI 28.4). Diabetes prevalence was 7.3%, similar to the Swedish general population.

Mean preoperative EQ-5D index and Self-Reported Foot and Ankle Score (SEFAS) were low. In stage IIa (n=319) 78% had medial displacement calcaneal osteotomy and 59% had flexor digitorum longus transfer, with some regional variations. Spring ligament reconstruction was less common. In stage IIb (n=225), 52% had lateral column lengthening, and in stage III (n=66), 83% had hind-foot arthrodesis.

Conclusions: Patients with AAFD have low health-related quality of life before surgery. Treatment in Sweden follows best-available evidence, but regional variations exist.