

## **Incidence and prevalence of referred adult acquired flatfoot deformity in the Swedish population**

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**Background:** Adult acquired flatfoot deformity (AAFD) is a disabling condition that commonly requires complex surgical treatment to correct the deformity. Little is known about the incidence of AAFD in the general population.

**Methods:** We conducted a nation-wide epidemiological study to estimate the incidence of referred AAFD in the general population. We retrieved data from the National Patient Register that covers all secondary and tertiary healthcare facilities in Sweden, both outpatient and inpatient care. All individuals aged 16 years or older, who had received a first-time diagnosis of AAFD (ICD-10 codes M214 or M768) made by a medical doctor between 2007 and 2018 were identified. The retrieved data also included the surgical procedures used in the treatment of AAFD.

**Results:** The incidence of referred AAFD in the general population was 33.4 (95% CI 33.0–33.8) per 100,000 person-years. The incidence in women was 43.3 (95% CI 42.8–43.9) and in men 23.1 (95% CI 22.7–23.6). The age groups 61–75 years and 46–60 years had the highest incidence rates of 50.0 (95% CI 49.0–51.0) and 41.2 (95% CI 40.3–42.0) respectively. Among the 19 regions in Sweden, large variations in the incidence were found, with age- and sex-standardized incidence rates ranging from 14.7 (95% CI 13.2–16.1) to 78.3 (71.1–85.4).

**Conclusions:** AAFD is common in the general population. The incidence in women is almost double that in men. Large unexplained regional variations in the incidence of referred AAFD exist.

Level of evidence: III