Calcaneus Fractures, Epidemiology and Treatment– Ten Years of experience from the Swedish Fracture Register

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Background: This study aims to provide updated epidemiological data regarding calcaneus fractures from a large population.

Methods: This observational study is based on data from the Swedish Fracture Register (SFR) including calcaneus fractures in patients ≥18 with a sustained fracture between april 2012 and June 2021. Epidemiological data, injury mechanism, fracture classification and primary treatment were analysed.

Results: The study was based on 3 629 unilateral calcaneus fractures (3 618 patients, 60 % men). Mean age was 48.4 years (SD ± 18.1).

Fall from height was the most common mechanism of injury, 46%. High-energy trauma was documented only for 26% of the unilateral fractures, but for 67% of bilateral fracures. AO/OTA type A fractures (avulsion), and type C fractures (intra-articular) was most common, In male patients type C fracture was much more common. 310 fractures (8.5%) were not classified/unclassifiable. For type A and B fractures, most patients were treated non-operatively; 86.8% and 89.0% respectively. For type C fractures, only 47.1% were treated non-operatively. Fracture fixation with plate and screws was the dominating surgical treatment. Arthrodesis as a primary treatment was very rare in this material.

Conclusion: Calcaneus fractures occur most frequently in the middle-aged population, with a trend towards a biphasic age distribution with a separate peak in the younger population. The difference in prevalence between men and women is smaller than previous studies have shown. In male patients the fractures were more severe, due to high-energy trauma, and more frequently treated surgically.