0963 HIP FRACTURES. EPIDEMIOLOGY AND VALIDATION OF HOSPITAL DATA ON 582 FRACTURES DURING 1994-2008

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Background The exact number of hip fractures occurring in Norway is unknown. Estimates vary from 7000 to 9000 per year, constituting great human costs and expenditure of health resources. An injury registry (IR) was July 1. 1985 established in Harstad, Norway and contains by now 25 years of prospectively collected data on injuries with upstream variables useful for preventive purposes. Data from the IR have extensively been used for analysis of the injury panorama, finding target groups for preventive action and evaluation of the effect of these. Several intervention studies have been published, mainly on traffic injuries, burns in children and fall-fractures in the aged (65+ years). From 2008 the IR is owned and administered by the University Hospital of Northern Norway (UNN) in Tromsø.

Materials and Methods During the period 1994–2008, the IR registered 582 hip fractures in persons living in Harstad (23 000). By searching through medical records (paper or electronic) for every person in the IR, a validation of the IR was made possible. Inclusion criterias were IDC codes S720 (neck), S721 (perthrochanteric) og S722 (subtrochanteric). Correct ICD coding was validated by checking x-ray descriptions from primary admittance. Exclusion criterias were (1) double registry because of readmission, for example, from osteosynthesis failure, necrosis of the caput (2) other fractures, for example, pelvic/femoral shaft (3) pathological fractures (metastasis), (4) admission for other complications, for example, infection, trombosis and bleeding.

Results 541 hip fractures were verified. Of 42 non-verified (7.2 %) 10 were osteosynthesis failure or caput necosis, falls without

verified fracture 10, shaft fractures 9, pelvic fractures 4, pathological fractures 5, double entry 3 and other address 1. For the years 2002–2007 the patient journal was electronic. Validated IR data on hip fractures for these 6 years could thus be compared with data from the National Patient Registry (NPR). This central registry is a main source for national estimates of hip fractures. The NPR data contained 3.3% fewer hip fractures compared with the validated Harstad injury registry. Mean ages were as follows: for both genders 81.8 years, for women (74%) 82.4 years and for men (26%) 80.0 years. Mean survival after fracture was investigated for 354 patients: For both genders 3.2 years, for women (73%) 3.4 yrs and for men (27%) 2.6 years.

Conclusions Hip fractures occur predominantly at the age of 80–82 years and in women in three out of four cases. Mean survival after the fracture is 3.2 years. The Harstad Injury Registry shows during 15 years (1994–2008) a 7.2 % over-reporting of hip fractures while data from the National Patient Registry show a 3.3% under-reporting.