Poland

Overview
The hip fracture incidence in Poland in women over 50 is estimated at 280/100,000. The prevalence of clinical fracture in this group is estimated at 27-29%, including 20% forearm and 4.6% clinical spinal fracture. Osteoporosis is not a national health priority in Poland and there is no national registry to collect data and monitor fragility fractures. The government is not supporting any patient or scientific societies nor training programmes for health professionals. The most important problem for patients is that there is only one medication (generic bisphosphonate) reimbursed for osteoporosis. Currently, the most pressing issue is to prepare a FRAX® model based on the Polish data. The main scientific organizations working in the field of osteoporosis are the Polish Foundation of Osteoporosis, the Polish Osteoarthrology Society and the Multidisciplinary Osteoporotic Forum. National guidelines on osteoporosis treatment have been developed. In 2011 we will be celebrating the 25th anniversary of the Polish Osteoarthrology Society which has been active since 1986.

Key findings
The present population in Poland is estimated to be 38.4 million, of this 35% (13.4 million) is 50 years of age and over and 10% (3.8 million) is 70 and over. By 2050, it is estimated that 52% (16.7 million) of the population will be 50 and over and 23% (7.4 million) will be 70 and over while the total population will decrease to 32 million (fig. 1).

In Poland, it has been estimated that the prevalence of osteoporosis in women older than 55 years is 18.5%, and osteopenia in 40.7%, both irrespective of place of residence (urban or rural area)².

Hip fractures
In a 2007 study, data provided by the Mazowsze Division of the National Health Fund were used to evaluate the number of hip fractures in Poland³. The number of hip fractures in the Mazowsze Province was calculated per 100,000 inhabitants and then extrapolated for the whole of Poland according to age and sex. Based on this, 28,000 cases of hip fractures per year were estimated to occur in Poland.

In 2005, there were 17,625 hip fractures diagnosed in Poland⁴. In the over-50-year-old population, hip fracture incidence was found to be 1.85 times greater in women than in men (89/100,000 for men and 165/100,000 for women). In the 50–65-year band, hip fracture incidence was higher in men than in women. The remaining lifetime probability of hip fracture at the age of 50 years was 2.0% for men and 4.5% for women which are among the lowest in Europe.

The estimated direct hospital cost of hip fracture is €870-1,300, and the average number of hospital days varies from 14 to 21 days.

Among women under 40 years of age, the annual risk of hip fracture is 0.01%³. As regards men, this risk is slightly higher and comes to 0.04%. Among women this risk slowly rises until 70 years of age and then
suddenly increases, reaching 1.55% at ages over 80. A slowly rising risk is also found among men until 70 years of age, while the further increase is not as sudden as among women. The risk of hip fracture among men over 80 years of age comes to 0.89%.

**Vertebral fractures**

No available information

**Diagnosis**

In Poland, it is estimated that there are 3.9 DXA scanners per million population. Most DXA scanners are only available in large cities and in the private sector. The waiting time for a DXA exam is 1-3 months in the public health system (2-3 days in the private system) and the cost for a DXA scan of hip or spine is €9 (€30 to €40 in the private). In the public system, DXA scans are reimbursed if the patient is sent to the specialist by a general practitioner.

**Reimbursement**

Only bisphosphonates are reimbursed up to 30% and patients at high risk are eligible for treatment reimbursement before the first fracture.

**Calcium and vitamin D**

National guidelines have been developed on optimum daily intake of calcium and vitamin D but currently there is no national public health programme regarding calcium and vitamin D supplementation. In a cross-sectional observational study conducted in a standardized way during February–March 2004 in Denmark, Finland, Ireland, and Poland, it has been observed that Polish women (average age 71.6) had a significantly lower concentration of serum 25OH-vitamin D compared to the other women (p=0.0001); 25% of Polish women had a serum 25OH-vitamin D <25 nmol/L and 92% were <50 nmol/l.

**Prevention, education, government policy**

Osteoporosis is not a national health priority in Poland, there is no national registry to collect data and monitor fragility fractures. The government is neither supporting patient or scientific societies, nor training programmes for health professionals.

**References**

1. Source: U.S. Census Bureau, International Data Base.