Overview

Hungary is one of only several European countries, where despite the increasing number of elderly, the hip fracture incidence has fallen in the over 60s during the last two years. It has been suggested this is the outcome of the twenty years of educational and lobbying activity initiated by the professional society and patient association. Free DXA scanning and reimbursement for high risk and affected patients appears to have resulted in a statistically significant improvement.

Osteoporosis was a health care priority during the initial years; now it is treated as any other disabling health problem.

Yearly multidisciplinary congresses and regular postgraduate courses with attendance of over 500 physicians form a solid professional background supported by motivated allied health professionals (X-ray technicians, physiotherapists etc.). World Osteoporosis Day always gets special media attention, and maintains public awareness. Vitamin D and Calcium supplementation as well as dietary and life style advice is distributed with varied success.

Key findings

The present population in Hungary is estimated to be 10 million, of this 37% (3.7 million) is aged 50 and over and 11% (1.1 million) is 70 and over. By 2050, it is estimated that 49% (4.2 million) of the population will be 50 and over and 23% (1.9 million) will be 70 and over, while the total population will decrease to 8.9 million (fig 1).

Hip fractures

The estimated number of hip fractures was 9,680 cases in 2009. The number of hip fractures in Hungary since 2007 is presented in figure 2. The incidence of hip fracture was 43 for women and 22.3 for men per 10’000 population over 60 in 2007.

The average number of hospital days is 10 days (12 in 2007) in acute care and 26 days in rehabilitation or long-term care. The total direct hospital costs of hip fractures were between €5,000 and €10,000 in 2010.
Vertebral fractures
The prevalence rate of vertebral fractures in women aged over 50 years is 18.5 per 10,000 population and 15.8 in men aged over 50 years.

Wrist fractures
The prevalence rate of wrist fractures in women aged over 50 years is 142 per 10,000 population and 60 in men aged over 50 years.

Diagnosis
In Hungary, there are 13 DXA machines per million population. Their distribution is nearly homogenous with only a few regions underserved. The waiting time for a DXA scan is 4 to 6 weeks in the public health system. The cost of a DXA scan is €30 in the public system (20-40 in the private) but free for patients diagnosed with osteoporosis. Axial DXA is reimbursed for up to 1 scan (hip or spine) every 2 years while peripheral DXA and quantitative ultrasound (QUS) are not reimbursed, affected patients are 100% reimbursed. Technicians and physicians benefit from standardized training and a quality assurance protocol for DXA machines has been developed by the Hungarian Society of Osteoporosis and Osteoarthritis (HSOO).

Reimbursement
In patients with a T-score ≤-2.5 who have risk factors or previous fracture, 70% of the treatment is reimbursed. Patients at high risk can receive preventive treatment before the first fracture. Bisphosphonates, raloxifene, strontium ranelate, and teriparide are reimbursed drugs.

Calcium and vitamin D
There is a national public health programme for calcium and vitamin D; national guidelines are prepared by the HSOO and reviewed yearly. Recommendations are a daily intake of 800IU for vitamin D and 1,000-1,500 mg for calcium.

The Euronut SENECA study investigated the diet and health of elderly people from 19 towns in 12 European countries. Between December 1988 and March 1989, the 25(OH)D concentration from 16 towns in 11 European countries was studied. In Monor, a Hungarian city, it was observed that 33% of men and 52% of women had a 25(OH)D concentration below 30 nmol/L. Levels of 25(OH)D below 30 nmol/L are associated with secondary hyperparathyroidism, increased bone turnover, and decreased bone-mass density at the hip.

Prevention, education, government policy
Since 2007, due to general medical restrictions, osteoporosis has no longer been considered a national health priority in Hungary. Training programmes are developed by the HSOO and partly by the medical universities but without government support. The Hungarian Patient Society, pharmaceutical companies, some foundations and media are supportive partners in the fight against osteoporosis. University-based general scientific and medical research funds exist. There is no funding programme directly nominated for bone research.

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