Overview

The number of people over the age of 50 is increasing in Armenia. Consequently, the Armenian Osteoporosis Association estimates that the number of people with osteoporosis and osteoporotic fractures will increase accordingly. Although the disease is not recognized by the government as a major health care problem, medical doctors affiliated with the Armenian Osteoporosis Association are actively engaged in health promotion activities in the field of osteoporosis.

Key findings

The total population of Armenia is estimated at 3.2 million people; 25% are aged 50 and over (820,000 people) and 56.8% are women. The average life expectancy for women is 76.9 years of age and for men 70.4. The National Statistical Service of Armenia has no prognostic data about the changes in the structure of the population older than 50 years by 2020 and 2030. However, based on population data from 2006 to 2009 (fig. 1) it is possible to predict an increase in the number of people over the age of 50, and hence it can be expected that there will be a significant increase in the number of people with osteoporosis.

Due to a lack of official statistics, it is practically impossible to judge the incidence of osteoporosis and associated fractures. There are no population-based studies quantifying osteoporosis rates in women and men over 50 years of age in Armenia.

When data from all densitometry centres are integrated, of the 4,162 patients (3,980 women and 182 men over 50 years) examined from 2006 to 2009, osteoporosis was detected in 32.1% patients and osteopenia in 40.3% (fig. 3).

Fragility fractures

Based on data from different departments of traumatology in Yerevan, 309 patients aged 50 and over were registered in 2009 with low energy osteoporotic fractures at different locations. This comprises 7.9% of all adult patients having been hospitalized with fractures at any location. 75% of these 309 patients had hip fractures. Osteoporotic fractures occurred more frequently

Figure 1 Population (%) over 50 years from 2006 to 2009

Figure 2 Population projection for Armenia until 2050
in women than men (2:1). Surgical treatment was performed in 72% of hospitalized patients. The prevalence of endoprosthesis insertion was limited as patients had to pay for it themselves.

Figure 3 The incidence (%) of osteoporosis and osteopenia in women and men over 50 years tested at densitometry centres

Vertebral fractures
No available information

Diagnosis
In Armenia densitometry has been performed since 2006 and today there are 4 dual energy X-ray absorptiometry (DXA) scanners, 1.3 DXA per million population. Additional DXA scanners are due to be installed in regional hospitals of three large Armenian cities (Gyumri, Vanadzor, Martuni). Densitometry is not included in the state health care programme and patients have to pay for it themselves. Nevertheless, thanks to agreements made with the Osteoporosis Association, some densitometry centers offer patients a 50% discount for the examination.

Prevention, education, government policy
Osteoporosis has not yet been recognized as an important medical and social problem in Armenia. However the Armenian Osteoporosis Association has issued a letter to the Ministry of Public Health, appealing for the necessity of accepting osteoporosis as an important state health problem.

The Armenian Osteoporosis Association was established in 2007 and is a member of the International Osteoporosis Foundation. In Yerevan and in different regions of Armenia an educational programme,

‘a School on Osteoporosis’ was set up to improve the awareness and knowledge of osteoporosis and its diagnosis and treatment among primary care doctors and different medical specialists. An osteoporosis school was organized for children where they are given lessons and learn the importance of an adequate diet, physical activity and avoidance of bad habits to maintain healthy bones throughout life. Guidelines on the prevention and treatment of osteoporosis have been published for patients and doctors. All medical institutions in Yerevan received the IOF One-minute Osteoporosis Risk Test, which helps to identify people who have risk factors for osteoporosis and osteopenia and should be recommended for clinical testing. The hope is that those in need will receive early treatment and prophylactics to prevent fracture. Initiatives are being taken that will eventually allow the development of a FRAX®–WHO Fracture Risk Assessment Tool for Armenia.

References

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