

TUNISIA

OVERVIEW

The Tunisian Osteoporosis Prevention Society was founded in 2000. It provides support for patients and education materials for the public and physicians. As well as organizing meetings and conferences, the Society also develops education programmes for practitioners, hospital doctors and nurses. Tunisia is one of only four countries in the Middle East and North Africa region which has a FRAX® model, developed on the basis of recent research.

KEY FINDINGS

The present population in Tunisia is estimated to be 10.5 million, of this 20% (2.1 million) is 50 years of age or over and 5% (500 000) is 70 or over. By 2050, it is estimated that 40% (5.3 million) of the population will be 50 or over and 16% (2.1 million) will be 70 or over while the total population will increase to 13 million (fig 1).

FIGURE 1 Population projection for Tunisia until 2050



REF US Census Bureau

EPIDEMIOLOGY

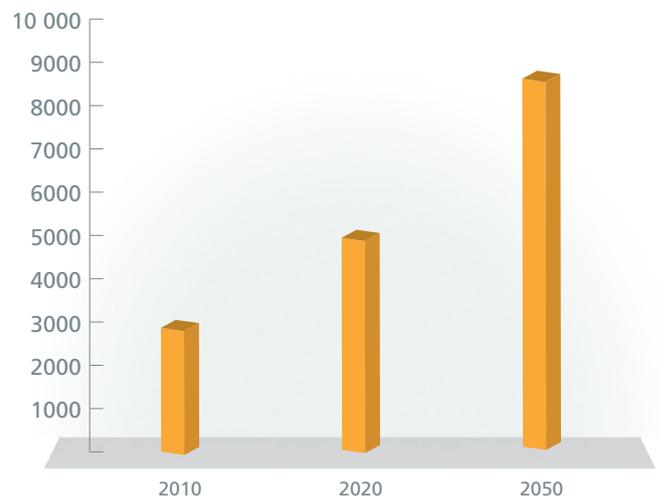
Osteopenia is estimated to affect 504 254 women aged over 40 years and 244 293 women in the same age category are thought to suffer from osteoporosis. In a 2006 study of the prevalence of osteoporosis, one out of four

postmenopausal Tunisian women studied had a T-score below 2.5 (the WHO threshold for osteoporosis)¹. In a further study, national references in Tunisian women were also calculated².

Hip fracture

The number of osteoporotic hip fractures in 2001 was 3,164 cases in individuals aged 50 years or over, and 2,979 in individuals over 60 years of age. This number is projected to reach 5101 by 2020 and 8850 by 2039 (fig.2). The data on the incidence of hip fracture was established in the national HIFIT study of 2002 (Hip Incidence Fracture in Tunisia) which estimated 213.5 fractures per 100 000 per year³.

FIGURE 2 Hip fracture projections by 2050



The average number of hospital bed days for hip fracture is nine.

The direct hospital costs for hip fractures are €4 million (data derived from public hospital stays only)⁴.

Vertebral fracture, other fragility fractures

Sellami et al studied osteoporosis fractures among 1,311 postmenopausal women; among these women, 16%

presented with a fracture at one of the sites studied for investigation⁵. Vertebral fractures accounted for 60% of all fractures and wrist fractures for 32% and proximal femoral fractures represented only 4.1% of all fractures.

DIAGNOSIS

In Tunisia, there are 50 DXA machines and 10 quantitative ultrasound instruments. This equipment is only available in urban centers. The cost of a DXA scan is USD 40 and USD 15 for an ultrasound scan. The length of waiting time for a DXA scan is less than 3 days and less than 1 day for an ultrasound scan.

REIMBURSEMENT POLICY

These diagnostics are not reimbursed by the government health plan but could be reimbursed by private health care insurance depending on the individual plan. Osteoporosis therapies are reimbursed by the government health plan and private health care insurance.

CALCIUM AND VITAMIN D

Calcium and vitamin D supplements are available and calcium intake was evaluated in the DOPIT study⁴.

In a Tunisian study conducted during wintertime among 269 women aged 20 to 60 years, vitamin D deficiency ($\leq 15\text{ng/ml}$) was observed in 55.2% of cases⁶.

In addition, research published in 2006 and 2007 by A. Laatar et al. studied the main risk factors for osteoporosis in Tunisian women^{7,8}.

There are no programmes addressing lifestyle prevention of osteoporosis.

PREVENTION, EDUCATION, LEVEL OF AWARENESS

Osteoporosis is not yet recognized as a major health problem in Tunisia and as of yet, there are no physician guidelines for osteoporosis or health professional training programmes. However, there is a government public awareness programme.

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