

OSTEOSCOOP

News on current events in osteoporosis and rheumatology

Geographical variations in hip fracture risk for women: example from France

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Few studies have analyzed the geographical variations in the relationship between age and hip fracture incidence. The goal of this study [1] was to assess these variations among women under 85 within the same country. The study population included women aged 50 to 85 who were living in France in 2004.

Hip fracture cases were identified in the French Diagnosis Related Groups (DRG)-like database using the diagnosis code for closed hip fractures and procedural codes for treatment. The Moran index and a spatial model using latitude and longitude were used to assess the geographical heterogeneities of cumulative incidence risk (CIR) and age effect.

A total of 29 218 hip fracture cases were identified. A South-to-North CIR gradient ranging from 7% to 16% was observed. The variation in the number of years until double hip fracture incidence was 75% (ie, 1.49 to 2.57 years). In the South, and more markedly in Southwest France, the women are at higher risk of hip fracture at a younger age.

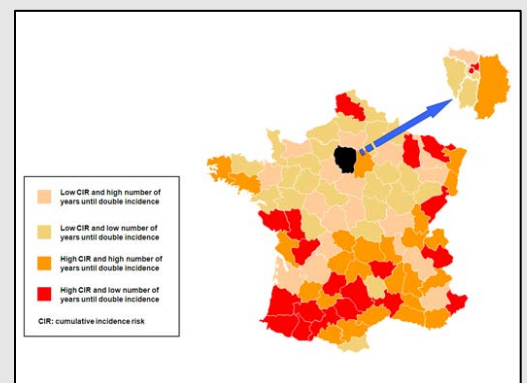
In conclusion, the risk of fracture may be different between women of the same age. This may be hidden in a comparison of standardized ratios. This finding should be considered when examining risk factors and implementing public health interventions.

1. Barbier S et al. *Osteoporos Int.* 2009;20:371-377.

Geographical variations in hip fracture risk for women: example from France

The map of the relationship between the cumulative incidence risk (CIR) of hip fracture and age effect for women aged 50–85 reveals heterogeneity among regions. Women in the North of France have a lower risk than those living in the South, especially in the south west.

The reasons for this heterogeneity will deserve attention.



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