## Vitamin D profile in frail elderly patients (126 cases)

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## ABSTRACT

Vitamin D plays a major role in bone growth and mineralization. It's a pro-hormone whose extra bone role is increasingly known. In the elderly, vitamin D deficiency is common and vitamin D treatment improves muscle performance and reduces the relative risk of falls.

It was proposed to study vitamin D deficiency in a population of 126 elderly Belgian people.

The population concerned included 91 women and 35 men (Sex ratio 2.6).

The mean age was 87 (79-96 years).

Among these 126 elderly subjects, 88 lived at home (including 40 accompanied) and 38 in institutions.

The SEGA score was determined in 124 patients; they were mostly very fragile (80 cases); fragile in 25 cases and 19 slightly fragile cases.

The vitamin D level was specified in 109 patients, it was sufficient in 53 patients (48%) and insufficient in 56 cases (52%) including 27 cases (24.7%) with serious deficiency.

A fracture occurred in 11 cases (8.7%) including 4 men and 7 women. Eight of these 11 patients had vitamin D deficiency. In all cases there was a complicated fall.

Only two patients had no osteoarthritis whose vitamin D status was indeterminate for one and very insufficient for the other.

In the absence of a clear recommendation on Vit D dosing, vitamin D supplementation would be required in many clinical situations and could be part of preventative measures in frail elderly people to reduce the risk of traumatic falls and dependency.