

What is osteopenia?

In 1994 a committee of the World Health Organization suggested the term "osteopenia" should be used for persons whose bone density was somewhat low. Bone density can be measured in units called "T-scores" and osteopenia was a T-score between -1 and -2.5. This category was intended for epidemiology studies and was not meant to suggest anything about treatment. A "T-score" of -1 is a statistical value which is the level at which 16% of people are below the level and 84% of people are above it. For example, height could be stated in T-scores. For height, the T-score of -1 is at 5'2", because about 16% of Caucasian women are shorter than 5'2". The committee decided to base the bone density T-scores on a group of young Caucasian women. Therefore, by definition, 16% of young women have osteopenia.

Osteopenia is not a disease!

In the United States, about 50% of women older than 65 and about 90% of elderly women have osteopenia. This is because bone density naturally decreases with aging.

Many patients who had osteopenia were treated with osteoporosis medications, even when these medications had not been shown to prevent fractures in women who did not yet have osteoporosis.

In 2008, the World Health Organization recommended that the bone density should be interpreted according to the risk of getting a fracture within the next ten years. This fracture risk can be calculated from the bone density combined with other clinical risk factors such as age, weight, diseases, and habits. It is better to decide about treatment using the fracture risk than using the bone density alone.

If there were a perfect bone-building drug that was 100% safe and that worked for 50 years or more, then it would make sense to treat all persons with osteopenia, and fractures would only be seen after serious accidents. Unfortunately, there is no such perfect drug.

Therefore, a few patients with osteopenia will benefit from our current osteoporosis drugs, but most will need only healthy diets and exercise, and everybody should avoid smoking cigarettes and drinking excessive alcohol.