

Osteoporosis Diagnosis and Treatment



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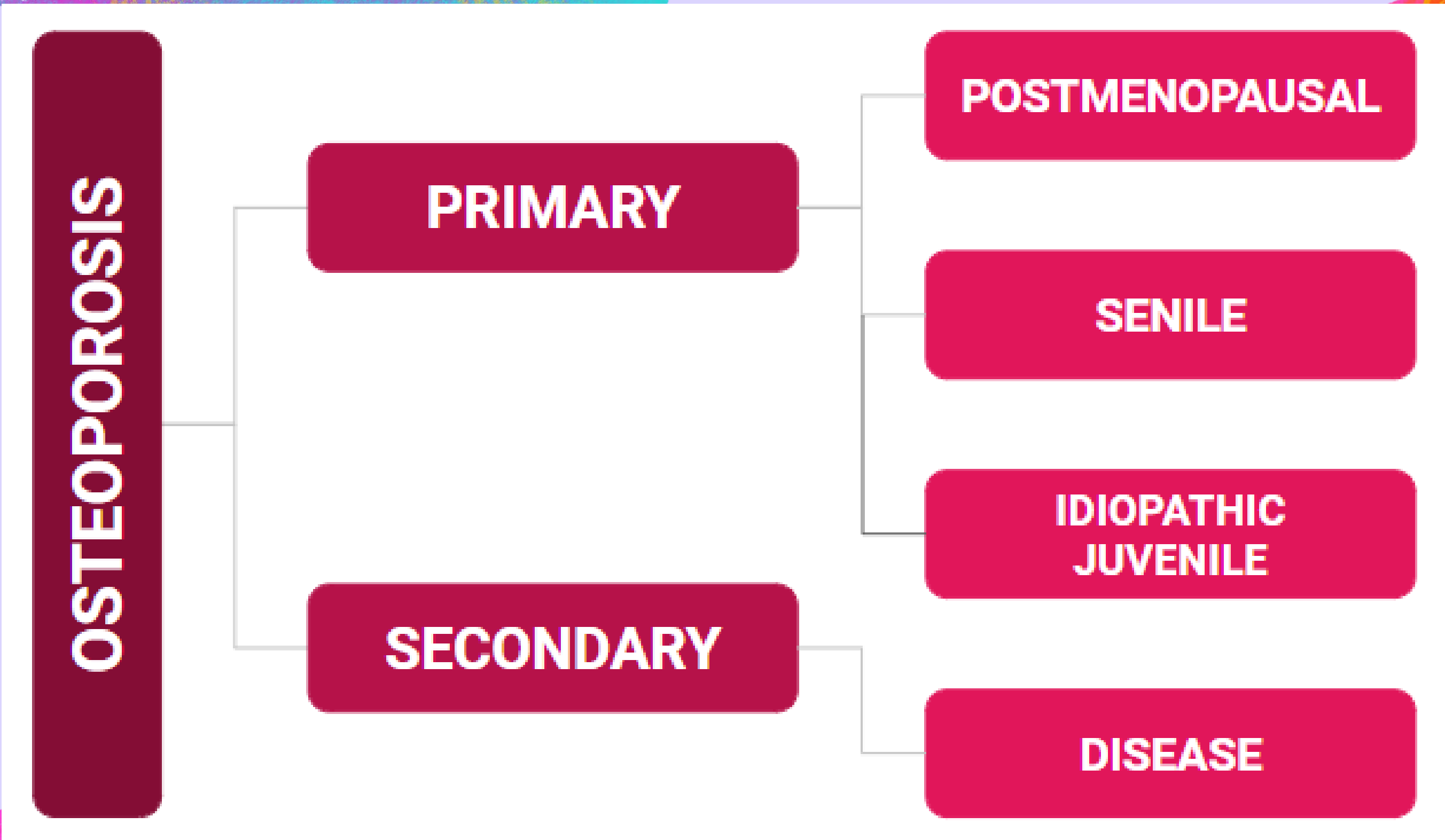


Metabolic bone disease

Characterized by decreased bone mass, fragility of the skeleton, and consequently increased bone fragility and susceptibility to fracture.



OSTEOPOROSIS



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graph LR; A[OSTEOPOROSIS] --> B[PRIMARY]; A --> C[SECONDARY]; B --> D[POSTMENOPAUSAL]; B --> E[SENILE]; B --> F[IDIOPATHIC JUVENILE]; C --> G[DISEASE]
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The diagram is a hierarchical flowchart. At the top level, 'OSTEOPOROSIS' is written vertically in a dark red box. A line from this box branches into two boxes: 'PRIMARY' and 'SECONDARY'. From the 'PRIMARY' box, a line branches into three boxes: 'POSTMENOPAUSAL', 'SENILE', and 'IDIOPATHIC JUVENILE'. From the 'SECONDARY' box, a line branches into one box: 'DISEASE'. All boxes are dark red with white text. The background is light purple with colorful, abstract, paint-like splashes in the corners.

PRIMARY

POSTMENOPAUSAL

SENILE

**IDIOPATHIC
JUVENILE**

SECONDARY

DISEASE

RISK FACTORS



Low body weight



Genes



Smoking



Gender



Alcohol



Age



Diet



Exercise

Symptoms of Osteoporosis

Bone pains and fractures



<https://diag.pl/pacjent/artykuly/rodzaje-osteoporozy-profilaktyka-i-diagnostyka-choroby/>

DIAGNOSTIC



<https://www.hopkinsmedicine.org/health/conditions-and-diseases/osteoporosis/osteoporosis-what-you-need-to-know-as-you-age>

The test for diagnosing osteoporosis is bone densitometry, which determines bone mineral density (BMD, from bone mineral density).

Usually BMD of the sections of the skeletal system that are most often broken in the course of osteoporosis such as the femoral neck, the lumbar-sacral section of the spine is assessed.

Data from the densitometry test are presented as indices: T-Score and Z-Score. X-ray shows only very advanced osteoporosis and cannot be the basis for diagnosis.

OTHER DIAGNOSTIC METHODS

Laboratory tests of levels including calcium, phosphorus and bone biopsy are also used in diagnosis.





TREATMENT

Pharmacological

Physical Therapy

Balneotherapy

Kinesitherapy

Proper Diet

Health Education



PHARMACOLOGICAL METHODS

Pharmacological methods are primarily the use of medicaments that reduce the rate of bone resorption and drugs that increase bone cell formation.



<https://www.doctissimo.fr/medicaments/news/Top-10-des-medicaments-qui-contentent-le-plus-cher-a-la-Securite-sociale>

Movement is very important in the lives of patients. The person with the disease is advised to march and walk and should be at least 30 minutes a day.

Patients also perform water exercises, balance and coordination exercises, postural training and activities of daily living.

KINESITHERAPY



https://www.google.com/search?q=walk+patient+old+women&tbm=isch&ved=2ahUKEwimr7il0Kv7AhWJtyoKHX-WBwiQ2-cCegQIABAA&oq=walk+patient+old+women&gs_lcp=CgNpbWcQAzoECCMQJ1CSBli9B2CTCWgAcAB4AIAbgwGIAaEckgEDMi4xmAEAoAEBqgELZ3dzLXdpei1pbWfAAQE&sclient=img&ei=-SFxY-bOMYnvqgH_rj4Q&bih=664&biw=1536&rlz=1C1GCEA_enPL834PL834#imgsrc=yz0t1EBfgcomfM&imgdii=1DCzo3ijkoWMtM

BALNEOTHERAPY AND PHYSICAL THERAPY

**Balneological and physical
therapy treatment results in
accelerated osteogenesis, calcium
and vitamin D3 supplementation,
analgesic effects, and muscle
relaxation.**



PHYSICAL THERAPY TREATMENTS

- heliotherapy;
- ultraviolet radiation;
- electrotherapy;
- laser therapy;
- cryotherapy
- massages;
- sulfide baths;
- mud treatments;



DIET



VOCABULARY

Osteoporosis - Osteoporoza

treatment - leczenie

consequently - w konsekwencji

susceptibility to fracture - podatność na złamania

bone mineral density analysis - analiza gęstości mineralnej kości

femoral neck - szyjka kości udowej

lumbar spine - kręgosłup lędźwiowy

measurement by the presence - pomiar na podstawie obecności

senile - starczej

idiopathic juvenile osteoporosis - idiopatyczna osteoporoza młodzieńcza

secondary - wtórnej

risk factors - czynniki ryzyka

long-term immobilization - długotrwałe unieruchomienie

development of excessive thoracic kyphosis -

rozwój nadmiernej kifozy piersiowej

bone fractures - złamania kości

minor injuries - drobne urazy

levels including calcium, phosphorus - poziomy m.in. wapnia, fosforu

bone biopsy - biopsja kości

appropriate preventive measures - odpowiednie działania profilaktyczne

comprehensive - kompleksowa

anti-inflammatory - przeciwzapalne

anti-edema effects - działanie przeciwobrzękowe

sulfide baths - kąpiele siarczkowe

mud treatments - zabiegi borowinowe

an adequate amount of vitamin D3 - odpowiednia ilość witaminy D3

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