

PATIENT INFORMATION

CANCER & BONE HEALTH

WorldOsteoporosisDay
October 20

LOVE YOUR
BONES

www.worldosteoporosisday.org



WHAT IS OSTEOPOROSIS ?

Osteoporosis is a condition in which bones become thinner and more fragile, making them more likely to break (fracture).

Bone is often affected in the course of cancer and cancer therapy. It is important that if you have cancer and have undergone certain cancer therapies you are aware of your heightened risk for osteoporosis and related fractures. As fragility fractures often result in prolonged disability, pain, and loss of quality of life, early action must be taken to maintain bone health and reduce fracture risk.

WHY ARE CANCER PATIENTS AT RISK OF OSTEOPOROSIS?



People undergoing cancer therapy are more at risk of osteoporosis for several reasons:

Cancer treatments, including chemotherapy, radiation therapy, and medications such as corticosteroids - negatively affect bone health.

Certain cancers (such as prostate or breast cancer) are treated by hormone removal, which in itself contributes to bone loss.

The cancer itself, or bone metastasis, may stimulate the production of osteoclasts, the cells that break down bone.

In addition, other cancer-related factors such as low body weight, frailty, undernutrition, or prolonged bed rest, may have an impact on bone health or the risk of falling.

BREAST CANCER

Women who have undergone breast cancer treatment are at increased risk for osteoporosis and fracture for a number of reasons. As oestrogen has a protective effect on bone, reduced levels of oestrogen lead to more rapid bone loss. If a woman has received adjuvant aromatase inhibitor therapy for breast cancer, she may experience a two to four-fold increase in bone loss compared to the normal rate of bone loss with menopause, and have an approximately 10%, or more, increased risk of fracture. As well as oestrogen deprivation therapy, surgery which causes loss of ovarian function results in a drop in oestrogen levels. In younger pre-menopausal women, breast cancer treatment may result in early menopause, which is a risk factor for osteoporosis.

EARLY ASSESSMENT OF BONE HEALTH

If you are being treated for cancer it is important to take early action to protect your bone health.

The doctor will assess your osteoporosis risk based not only on the factors related to the cancer and cancer treatment, but also based on lifestyle factors, family history, and other conditions (such as rheumatoid arthritis). A clinical assessment will likely include a DXA scan to measure bone mineral density (BMD), FRAX risk assessment, and assessment of calcium, vitamin D and parathyroid hormone levels.

PROSTATE CANCER

One form of treatment for prostate cancer is androgen deprivation therapy (ADT), where the amount of testosterone and related hormones circulating in the body are cut back in order to shrink a prostate tumor or slow its growth. Bone loss is rapid in men treated with ADT, in the order of 2 to 4% during the first year of treatment. As a result, men who have had hormone therapy or testes removal are at significantly increased risk of fracture.



PREVENTIVE STRATEGY

Preventive measures will always encompass nutritional, exercise and lifestyle factors. IOF recommendations include:

- Regular weight-bearing and muscle-strengthening physical activity
- Vitamin D intake of 800-1000 IU/day
- Calcium intake of at least 1000 mg/day
- Smoking cessation

Depending on your bone health status, pharmacological therapies may be prescribed to preserve bone and reduce the risk of fracture.

**The IOF vision is a world without fragility fracture
in which healthy mobility is a reality for all.**

Show your support, sign the IOF Global Patient Charter at

www.iofglobalpatientcharter.org

About IOF

The International Osteoporosis Foundation (IOF) is the world's largest nongovernmental organization dedicated to the prevention, diagnosis and treatment of osteoporosis and related musculoskeletal diseases. IOF members, including committees of scientific researchers as well as 240 patient, medical and research societies in 99 locations, work together to make fracture prevention and healthy mobility a worldwide health care priority.

<http://www.iofbonehealth.org> <http://www.facebook.com/iofbonehealth> @iofbonehealth

About the European Cancer Patient Coalition

The European Cancer Patient Coalition is an umbrella organisation of over 400 cancer patient organisations in 46 countries. The Coalition works for a Europe of equality, where all European cancer patients have timely and affordable access to the best treatment and care available, throughout their life. The European Cancer Patient Coalition believes that cancer patients are the most important partners in the fight against cancer and against all the cancer-related issues affecting our society. Policy makers, researchers, doctors and industry should recognise cancer patients as co-creators of their own health.

<http://www.ecpc.org>

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