

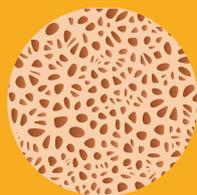
PATIENT INFORMATION

Glucocorticoid-induced osteoporosis

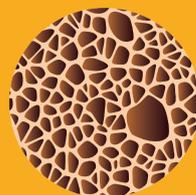


What is osteoporosis?

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



Normal bone



Osteoporotic bone



Broken bone

What are glucocorticoids?

Glucocorticoids (for example prednisone or cortisone) are drugs used for treating a variety of medical conditions including asthma and arthritis. They are very effective as a treatment for many diseases, but can have side-effects, one of which is osteoporosis. This is particularly likely to occur when glucocorticoids are taken by mouth for a period of 3 months or more. The glucocorticoid tablets most often prescribed are prednisolone and dexamethasone.



Can glucocorticoids cause osteoporosis?

Yes, glucocorticoids may lead to bone loss, which is most rapid in the first 3-6 months of treatment. This results in an increased risk of fracture. The greatest increase is seen for fractures of the spine. Increased fracture risk occurs even with low doses (2.5-7.5 mg prednisolone per day) and rises further with increasing daily dose.



Do all glucocorticoids have the same effect on bone?

Inhaled glucocorticoids taken for asthma and glucocorticoids applied to the skin are safer than glucocorticoids taken by mouth. However, high doses of inhaled glucocorticoids and intermittent courses of oral glucocorticoids may also be associated with an increased risk of fracture. Intravenous injections of glucocorticoids, if given frequently and in high doses, may also cause bone loss. Injections of glucocorticoids into joints are not thought to affect the skeleton.



Who is at greatest risk of glucocorticoid-induced osteoporosis and fractures?

Postmenopausal women and men aged 50 years or over with a previous history of fracture, women and men aged ≥ 70 years, and those taking high doses of glucocorticoids are at greatest risk. Premenopausal women and younger men have a lower risk of fracture than older individuals, although if they have had a fracture in the past their risk of having further fractures is increased.



How can I know if I am at risk?

A bone density test is commonly performed in patients being treated with glucocorticoids to check their bone strength. You can also self-assess your bone health by visiting Know Your Bones (www.knowyourbones.org.au) hosted by Osteoporosis Australia and The Garvan Institute of Medical Research. This online tool provides a summary report you can discuss further with your doctor.



I do not have bone pain. Does it mean that I don't have osteoporosis?

Osteoporosis is a painless disease unless a fracture occurs. So if you do not have pain, it does not necessarily mean that you do not have osteoporosis. Individuals could definitely be osteoporotic even if they have not had a fracture at all.