

Cystic Fibrosis and Osteoporosis.

What is osteoporosis?

This is a condition where the bones become more fragile and weak and as a result of this they are more likely to break (fracture).

What causes osteoporosis?

Normally our bones grow during childhood and continue to strengthen until the age of 25-30 years. After this time our bones gradually become thinner. Some people's bones do not become strong enough in the first place or the thinning process is speeded up by certain factors. The bones then become too weak too quickly leading to osteoporosis.

Who is at risk?

Everyone is at risk of developing osteoporosis as they get older. However in people with cystic fibrosis (CF) there is an increased risk because of the following factors.

- **Poor diet**

A poor diet and food intake, which does not contain enough calcium, can contribute towards osteoporosis. It is important to have regular meals and snacks and to include foods rich in calcium (milk, cheese, yoghurt, white bread, and green leafy vegetables).

- **Lack of exercise**

By not being active the strength of your bones suffers. The less active you are the more likely you are to develop osteoporosis. Regular exercise, especially weight bearing exercise like walking, jogging and aerobics all help to strengthen your bones.

- **Steroids**

Steroids taken over a long period of time can cause osteoporosis. However, in patients with CF they are very important to help reduce inflammation in the lungs and often their benefit outweighs the risk of osteoporosis.

- **Fat malabsorption**

Inadequate amounts of pancreatic enzymes or missing your enzymes regularly will not only reduce the amount of fat you absorb but also the amount of calcium and vitamins you absorb from your food.

- **Vitamin D**

Vitamin D is needed to help your body absorb calcium from your diet. Low vitamin D levels are common in people with CF, which is why supplements are prescribed. Take any vitamin supplements you are prescribed regularly.

Information for Patients

- **Alcohol.**

Drinking large amounts of alcohol on a regular basis can reduce the bodies ability to make bone cells. Try to keep your drinking to a sensible level and space this out during the week rather than bingeing over one or two days.

How is osteoporosis detected?

If your doctor thinks you are at risk from osteoporosis you may be asked to have a special X-ray called a DEXA scan. This scan measures the density of your bones to see whether you have developed osteoporosis.

How can osteoporosis be treated?

You can try and reduce your risk by following the advice in this leaflet. However if you do develop osteoporosis there are some drug treatments available which slow down the thinning of the bones, leading to the strengthening of the bones and reducing the risk of fracture.

Contact Us:

If you are concerned about any of the points raised in this leaflet or have any further queries please speak to your consultant or the CF team.

Additional Information Sources:

For more information on all aspects of living with Cystic Fibrosis you can visit the Cystic Fibrosis Trust web site at: www.cftrust.org.uk. For local news and events the West Midlands Regional Cystic Fibrosis Unit based at Heartland Hospital has its own website at: www.heartlandscf.org.uk

Our commitment to confidentiality

We keep personal and clinical information about you to ensure you receive appropriate care and treatment. Everyone working in the NHS has a legal duty to keep information about you confidential. We will always ask you for your consent if we need to use information that identifies you. We will share information with other parts of the NHS to support your healthcare needs, and we will inform your GP of your progress unless you ask us not to. You can help us by pointing out any information in your records which is wrong or needs updating.

Please use the space below to write down any questions you may want to ask: