Osteoporosis, Osteopenia & Bone Health

Supporting Information

This information accompanies the **Osteoporosis, Osteopenia & Bone Health** community talk presented by Dr Robert Russ at White Horse Medical Practice. It provides a summary of the main topics discussed and practical steps you can take to support your bone health.

Understanding Bone Health

Our bones are living tissue and are constantly being renewed. As we get older, the balance between building new bone and losing old bone gradually changes. Bone loss can become particularly noticeable around the menopause.

Our risk of breaking a bone is affected by more than bone density alone. Age, previous fractures, family history, certain medicines and medical conditions, muscle strength, balance and the risk of falling can all play a part.

Osteopenia and Osteoporosis

A **DXA scan** measures bone mineral density, usually at the hip and spine.

Results may be described as:

- **Normal:** T-score of -1.0 or above
- **Osteopenia:** T-score between -1.0 and -2.5
- **Osteoporosis:** T-score of -2.5 or below

However, the result of a scan is only part of the picture. Someone with osteopenia may still have an increased risk of fracture if other risk factors are present.

The aim is therefore not simply to treat a number on a scan, but to **reduce the risk of fractures**.

Assessing Your Risk

Healthcare professionals may use a tool called **FRAX** to estimate the chance of having a major osteoporotic or hip fracture within the next 10 years.

FRAX considers factors including age, previous fractures, family history, smoking, alcohol consumption and long-term steroid treatment. A DXA result can also be included.

The result can help your healthcare professional decide whether lifestyle advice is appropriate, whether further assessment is needed or whether treatment should be considered.

Four Foundations for Better Bone Health

There are four particularly important areas to think about:

1. Weight-bearing activity
Activities such as walking, climbing stairs and dancing help place healthy stress on our bones.

2. Strength exercises
Muscle-strengthening exercise should normally be included at least twice a week. Examples include sit-to-stand exercises, heel raises, wall press-ups and resistance-band exercises.

3. Balance
Maintaining good balance can reduce the likelihood of falls and therefore fractures, particularly as we get older.

4. Good nutrition
Adequate calcium, vitamin D and protein all contribute to maintaining healthy bones and muscles.

Calcium and Vitamin D

A **food-first approach** is usually recommended for calcium wherever possible. Sources include dairy products, calcium-fortified alternatives and some fish, pulses and green vegetables.

Calcium supplements are not automatically needed if you are getting enough through your diet.

In the UK, adults are commonly advised to consider **10 micrograms of vitamin D each day during autumn and winter**. Some people who are at greater risk of vitamin D deficiency may be advised to take it throughout the year.

Preventing Falls

Preventing falls is an important part of preventing fractures.

Things that can help include:

- Regular strength and balance exercises
- Having dizziness or faintness investigated
- Reviewing medicines that may increase the risk of falling
- Looking after eyesight, hearing and foot health
- Wearing appropriate footwear

- Improving lighting at home
- Removing trip hazards

Repeated falls or a significant unexplained fall should be discussed with a healthcare professional.

When Might Medication Be Needed?

Medication may be recommended when someone's future fracture risk is high enough that the benefits of treatment are likely to outweigh the risks.

Treatments discussed during the talk included **alendronate and risedronate**, **zoledronic acid**, **denosumab** and, for some people, other treatments provided through specialist services.

The most appropriate treatment depends on the individual, including their fracture risk, other medical conditions and ability to take the medication safely.

An Important Note About Denosumab

Denosumab is given as an injection every six months.

It is particularly important that denosumab injections are given on time and that treatment is not stopped or significantly delayed without medical advice.

When denosumab is stopped, protection can wear off relatively quickly and rapid bone loss can occur. If treatment needs to be discontinued, another bone-protecting medicine is usually required as part of a planned approach.

Dental Treatment and Bone Medication

Problems affecting the jaw associated with osteoporosis medicines are rare at the doses used to treat osteoporosis. Maintaining good oral hygiene and regular dental care remains important.

Tell your dentist if you are taking medication for osteoporosis.

Do not stop osteoporosis medication yourself because you are planning dental treatment. If you take denosumab in particular, speak to your healthcare team so that treatment and dental care can be appropriately planned.

Five Things to Remember

1. **Bone health is about preventing fractures, not just treating a scan result.**
2. **Osteopenia can still be important**, particularly when other fracture risks are present.
3. **Strength, balance, nutrition and falls prevention all matter.**

4. **Medication can reduce fracture risk** when prescribed for the right person.
5. **Do not stop osteoporosis medication, particularly denosumab, without medical advice.**

Further Information

Useful sources of reliable information include:

- **National Osteoporosis Guideline Group (NOGG):** www.nogg.org.uk
- **Royal Osteoporosis Society:** Exercise and osteoporosis
- **NHS:** Vitamin D advice
- **FRAX:** Fracture Risk Assessment Tool

Need Further Advice?

If you are concerned about your bone health, have experienced a fracture following a minor fall, have questions about osteoporosis medication, or think you may be at increased risk of osteoporosis, please contact the practice to discuss this with a healthcare professional.

This information is intended as general guidance and does not replace individual medical advice.