

Management of Stress Fractures

Patient Information Sheet

You have been diagnosed as having a 'stress fracture' which was seen on imaging, what happens now?

Background

A *fracture* is the medical term for a 'broken bone'.

A *stress fracture* is a 'crack in the bone'. This can arise from overuse and repeated high impact. It is commoner in the lower limb which has to bear more weight. It is sometimes referred to as a *bone stress injury*.

There are 2 common types of stress fractures-

- 1) *Fatigue fractures*: where abnormally high stress is repeatedly placed on normal bone.
- 2) *Insufficiency fractures*: where normal stress is repeatedly placed on abnormal (weakened) bone.

Management options

Following on from the likely diagnosis of 'stress fracture', your doctor may need to go through some of the options below with you. Not all options may apply to you.

1. MORE IMAGING

This will be undertaken if there is doubt if this is truly a stress fracture or further information is needed for confirmation.

There is a continuum of bone stress injury from mild to severe- some patients may experience bone pain but not have a true stress fracture. This is termed a *stress reaction* or *bone strain*.

It can be difficult to differentiate between a high-grade (severe) stress reaction and a stress fracture.

2. BLOOD TESTS

These may be carried out if there is some suspicion your stress fracture is of the insufficiency variety.

These blood tests look at bone health and may include a bone profile (which includes calcium levels), thyroid and parathyroid levels, kidney function, vitamin D, haemoglobin levels, iron and inflammatory markers.

There are other blood tests which may also need to be carried out.

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3. CAM WALKERS OR BRACE

Protective boots and slings are often used to protect the injured area while it is actively healing.

4. CRUTCHES

If indicated to aid mobility.

5. PHYSIOTHERAPY

To strengthen and rehabilitate muscles around the injured area which may have atrophied and weakened; to identify and remedy any training errors; to supervise a safe return to sport and physical activity.

6. PAINKILLERS AND OTHER MEDICATIONS

To manage pain levels and allow normal function while the injured area is healing.

7. PODIATRY AND INSOLES

To carry out a gait analysis (determining how you walk and run) when you are better and prescribe customised orthotics, if needed, to prevent injury recurrence.

8. DIETITIAN INPUT

To maximise bone recovery; to also identify and address any nutritional deficiencies which may have prompted an insufficiency fracture.

9. REPEAT IMAGING

To ensure the stress fracture has healed. This typically takes place around 2-3 months after treatment has begun.

10. DEXA SCAN

This type of investigation looks at bone mineral density (BMD). It is typically carried out if a patient has had recurrent stress fractures or if there are strong risk factors to suggest poor bone health and possible osteoporosis. Not every patient will require this.

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11.SURGICAL OPTIONS

Only a small number of patients with stress fractures will go on to need surgery. Typically, this is for longstanding stress fractures which have significantly displaced or had complications and are not healing.

12.MEDICAL REVIEW/S

Your doctor will schedule a medical review/s to ensure your stress fracture has healed before advising you if you can return to physical activity and sport.

IN SUMMARY

- *This information sheet on stress fracture management covers the common management options.*
- *There are other available options which have not been included as each individual patient will have different needs and not all options may apply.*