

TRAUMA

Pilon fractures

Complex fractures of the lower tibia involving the weight-bearing ankle joint surface and surrounding soft tissues.

Patient information, treatment choices, risks, recovery and a space to record your individual plan.

Understanding your injury

A pilon fracture breaks the lower tibia at the ankle joint surface. It may follow a fall from height, a collision or a lower-energy injury in weaker bone. The joint surface, bone above it and skin can all be damaged. Examination checks wounds, swelling, circulation, nerves and other injuries. X-rays and usually a CT scan help plan treatment, often after initial stabilisation.

Treatment and the procedure

Some well-aligned fractures can be treated in a cast. Displaced or unstable injuries commonly need reconstruction. Treatment may be staged: a temporary external frame holds the ankle aligned while damaged skin and swelling settle, followed by plates and screws when appropriate. A frame can also be definitive treatment. Severe tissue loss may require plastic surgery input; a joint surface that cannot be reconstructed may lead to discussion of fusion. These are individual decisions.

Benefits, risks and expectations

If surgery is planned, discuss bleeding, anaesthetic risks and complex regional pain syndrome as well as the risks specific to your injury. Your general health and the extent of surgery affect your personal risk.

- The aim is to restore alignment and stability while protecting the skin and blood supply. Surgery cannot reverse all cartilage damage from the original injury.
- Risks include wound breakdown, infection, nerve or vessel injury, delayed healing, nonunion, malunion and further operations. Serious infection or tissue damage can threaten the limb.
- Persistent stiffness, swelling, pain and post-traumatic arthritis are important possibilities. Recovery may be prolonged and demanding work or sport may remain difficult.

RECOVERY AND YOUR CONSULTATION

Pilon fractures

Use this guidance to prepare your individual plan with the treating team.

Rehabilitation and aftercare

Follow the surgeon's written weight-bearing and movement restrictions. Do not use a routine ankle-fracture schedule for a pilon injury. Keep wound and frame appointments; use the pin-site care method taught by your team. Physiotherapy works on permitted motion, muscle strength, safe transfers and walking as healing allows. Plan support at home and discuss work adjustments. Further imaging guides progression rather than a fixed calendar.

When to get urgent help

- Go to A&E for sudden severe pain or a cold, discoloured or increasingly numb foot. Report spreading redness, discharge, fever or a painful pin site promptly.
- New calf pain or swelling needs urgent assessment. Chest pain or breathlessness requires 999.

Your consultation

Ask whether treatment will be staged, what the CT shows, whether bone grafting or soft-tissue reconstruction may be needed and which outcome is realistic. Your consent discussion is specific to the proposed operation.

Sources and further reading

AAOS: Pilon fractures of the ankle

<https://www.orthoinfo.org/diseases--conditions/pilon-fractures-of-the-ankle>

BOFAS: Pilon fractures

<https://www.bofas.org.uk/hyperbook/trauma/pilon-fractures>

NHS: Compartment syndrome

<https://www.nhs.uk/conditions/compartment-syndrome/>

NHS: Broken leg

<https://www.nhs.uk/conditions/broken-leg/>

NHS: Deep vein thrombosis

<https://www.nhs.uk/conditions/deep-vein-thrombosis-dvt/>

CLINICIAN-COMPLETED WORKSHEET

Your consent discussion

Pilon fractures

This blank worksheet is not an executed consent. Complete it after clinical assessment with the treating clinician. The hospital or clinic must also complete its required consent process before treatment.

Patient name / identifier, date of assessment and communication support needed

Diagnosis, affected side / site and the proposed procedure or treatment

Reasonable alternatives discussed, including the option of no treatment

Expected benefit for this patient, limits of treatment and uncertainties

Material risks and personal risk factors - record the risks that matter to this patient

Patient's priorities, questions, understanding and agreed decision / time to consider

Treating clinician name, role and signature / date

Patient / representative name, signature and date - acknowledgement of discussion only

A signature here records a discussion; it does not replace a completed treatment consent form. You may ask further questions or change your decision before treatment.

CLINICIAN-COMPLETED WORKSHEET

Your rehabilitation and aftercare plan

Pilon fractures

Complete this plan after assessment. The advice must match your injury or operation, imaging, wound and medical history. Do not start limb loading, remove protection or change medicines using an uncompleted worksheet.

Limb loading / weight bearing, walking aids, sling / cast / boot / brace and protection

Wound / dressing care, bathing, elevation and swelling advice

Medicines, pain relief, clot prevention and any treatment-specific restrictions

Exercises, physiotherapy, range of movement and progression criteria

Work, driving, sport and daily activities - individual restrictions / review points

Review date, imaging / tests, named clinician and routine / out-of-hours contact details

Clinician completing this plan, signature / date and patient questions

When to seek urgent help

Go to A&E for sudden severe pain or a cold, discoloured or increasingly numb foot. Report spreading redness, discharge, fever or a painful pin site promptly. New calf pain or swelling needs urgent assessment. Chest pain or breathlessness requires 999.