Ottawa rules for x-ray of knee, ankle and foot

Ottawa ankle and foot rules

An ankle x-ray is required only if there is any pain in malleolar zone and any of these findings:

- bone tenderness at A
- bone tenderness at B
- inability to weight bear both immediately and in the casualty department.

A foot x-ray is required if there is any pain in the midfoot zone and any of these findings:

- bone tenderness at C
- bone tenderness at D
- inability to weight bear both immediately and in the casualty department.

Ankle injuries are extremely common but many features on history and physical examination are unreliable. The combined Ottawa ankle and foot rules have a sensitivity of 97.8% and a specificity of 31.5%, giving a negative likelihood ratio of 0.07; this will yield a post-test probability of about 1% for fracture of the ankle if test results are negative (not requiring x-ray).

Treatment for ligament injuries should include dynamic splinting and RICE (rest, ice, compression, and elevation).

Rule out a complete tear of the ligaments by doing drawer testing of the ankle before discharging the patient or at the first follow-up visit.

Ottawa knee rules

A knee x-ray is only required for knee injury patients with any of these findings:

- age 55 or over
- isolated tenderness of the patella (no bone tenderness of the knee other than the patella)
- tenderness at the head of the fibula
- inability to flex to 90 degrees
- inability to weight bear both immediately and in the casualty department (4 steps - unable to transfer weight twice onto each lower limb regardless of limping).