

## FRACTURE OF THE DOME OF THE TALUS ASSOCIATED WITH A FRACTURE OF THE OS CALCIS OF THE OPPOSITE SIDE\*

G. SCHWEITZER, F.R.A.C.S., *Lecturer in Orthopaedic Surgery, King Edward VIII Hospital and the University of Natal, Durban*

### SUMMARY

*A patient with an unusual combination of fractures in the region of the ankle joint is reported.*

Falls from a height are commonly associated with fractures of the os calcis, the distal tibia and fibula, the acetabulum, the thoracic and lumbar spine and the base of the skull. An association between a fracture of the dome of the talus on one side and a fracture of the os calcis on the other is very unusual.

### CASE REPORT

A 35-year-old Zulu male had jumped to the ground from a railway truck he was loading. He estimated the height from which he had jumped to be about 2 metres and stated that he had landed on his feet. Immediately after landing he felt pain in both heels and was unable to get up off the ground. He was carried from the site of the accident by his workmates and eventually was transported to hospital.

On examination he was found to be 158 cm tall and to weigh 71 kg. He was unable to stand because of pain in both heels. Both ankles were swollen. On the right side he was very tender over both malleoli but more so over the lateral malleolus. On the left side the os calcis was very tender to palpation.

X-ray of the right ankle (Fig. 1) showed a depressed

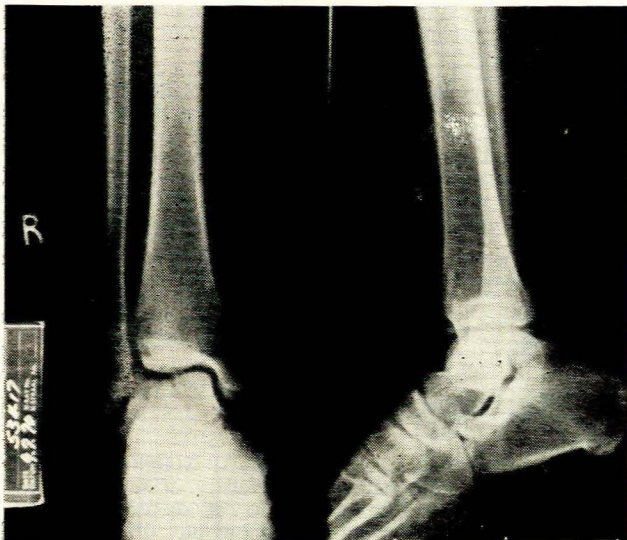


Fig. 1. Right ankle showing a depressed fracture of the lateral portion of the talar dome.

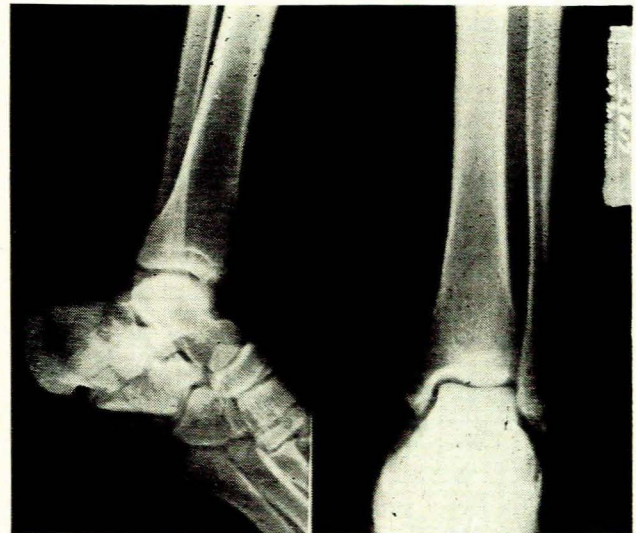


Fig. 2. Left foot showing a fracture of the body of the os calcis involving the subtalar joints.

fracture of the lateral portion of the talar dome. X-ray of the left ankle (Fig. 2) showed a fracture of the body of the os calcis involving the subtalar joints.

### DISCUSSION

Fracture of the os calcis, resulting from a fall from a height, is a relatively common injury. Rosenberg<sup>1</sup> described 38 talar dome fractures. This injury is however, by comparison, rare. The fracture of the lateral portion of the talar dome is usually elevated and is very painful. By contrast a fracture of the medial portion of the dome is usually depressed and is asymptomatic unless a large portion of the dome is involved. Rosenberg attributes the elevated lateral fracture to the levering effect of the lateral malleolus. The case reported here is unusual in that the lateral portion of the talar dome is depressed and not elevated.

Apley<sup>2</sup> attributes talar dome fractures to a forced dorsiflexion of the ankle. This was probably the mechanism of injury in the case reported. The association with a contralateral fracture of the os calcis is very unusual.

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### REFERENCES

1. Rosenberg, N. J. (1965): *J. Bone Jt Surg.*, 47-A, 1279.
2. Apley, A. G. (1968): *A System of Orthopaedics and Fractures*, 3rd ed., p. 519. London: Butterworth.

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