

Case 33 A blow to the skull

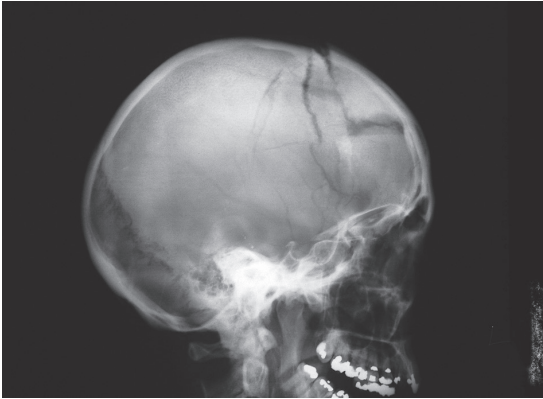


Figure 33.1

This is the lateral skull X-ray of a young man who came off his motorcycle at considerable speed and struck his forehead against the kerb. The force was so great that he split his helmet.

What abnormality can be seen on the X-ray?

Severe multiple linear fractures involving the frontal, parietal and temporal bones.

This was a closed fracture – the overlying scalp was intact. What sort of skull fracture is nearly always compound in the adult patient?

Depressed fractures of the skull vault, sufficient to depress

the bone below the level of the rest of the skull outline, are nearly always compound injuries.

What type of skull fracture only occurs in children?

A 'pond' fracture. The soft, pliable bones of the child's skull can be indented, in the way you can indent a table-tennis ball.

What nasal discharge can occur if the fracture involves the frontal and/or ethmoid sinuses, and what is the danger of this?

Leakage of cerebrospinal fluid (CSF) from the nose (CSF rhinorrhoea). The danger of this is that the tear of the dura allows a pathway for infection from outside air via the nasal cavity to the meninges, i.e. meningitis.

How is this discharge distinguished from the discharge of blood-stained mucus that is so often seen in patients with facial injuries?

The fluid is collected and tested for sugar. CSF contains sugar, unlike mucus, where sugar is not found. Jugular compression may increase the flow of CSF from the nose.