BILATERAL PERILUNAR DISLOCATION OF THE CARPUS

Report of a Case

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Perilunar dislocation of the carpus is an unusual injury of the wrist joint, and a bilateral case is so rare that it is worthy of report. In this injury the lunate bone remains in normal relationship with the radius but the other carpal bones and the rest of the hand are displaced backwards, usually to the radial side. The tip of the radial styloid process is sometimes fractured and displaced with the carpus, and the tip of the ulnar styloid also may be avulsed. Reduction is achieved by simple traction and manipulation, and the wrist is immobilised in plaster for three or four weeks.

The patient was a ship's carpenter. In September 1946 he fell down the hold of a ship and struck both wrists on the edge of the well of a lower deck before reaching the bottom. In addition to multiple minor injuries, he sustained fractures of the mandible and skull, and injuries of both wrist joints. On the right side there was an uncomplicated perilunar dislocation of the carpus (Fig. 1); on the left there was a similar dislocation with fracture and displacement of the tip of the radial styloid process (Fig. 2).

The dislocations were reduced by traction and manipulation. Normal relationship of the carpal bones was restored on both sides and the detached fragment of the right radial styloid process was accurately reduced. The joints were immobilised in plaster for four weeks, and physiotherapeutic treatment was then begun.

On review three years after the injury it was found that there was for all practical purposes full return of function in the left wrist, and radiographic examination showed no residual damage. In the right wrist there was slight limitation of the extremes of movement; radiographic examination again showed normal appearances (Fig. 3).
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Fig. 1
Antero-posterior, oblique and lateral radiographs of the right wrist, showing perilunar dislocation of the carpus.

Fig. 2
Antero-posterior, oblique and lateral radiographs of the left wrist, showing perilunar dislocation with fracture of the radial styloid process and a chip detached from one of the carpal bones.

Fig. 3
Antero-posterior radiographs of the left and right wrists three years later.