

SYNOVIAL CHONDROMATOSIS OF THE INFERIOR RADIO-ULNAR JOINT

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Synovial chondromatosis is an extremely rare affection of the inferior radio-ulnar joint. The case in this study presented with mild episodes of swelling and pain in the wrist and discomfort during forearm rotation.

Key words: synovial chondromatosis; inferior radio-ulnar joint

Accepted 11.iv.76

CASE REPORT

A 29-year-old male loader presented with a history of recurrent episodes of swelling and pain in the right wrist over the previous 6 months. He had sustained a trivial injury to his wrist at the onset, but was not absent from work. He described his symptoms as a continuous discomfort, with occasional stabs of pain in the wrist, especially when it was turned, and stiffness and weakness of the grip. Clinical examination revealed a slightly hard swelling over the front of the wrist; this was generally pain-free, but rotation produced an acute pain, especially on supination. No evidence of median nerve compression was found. Radiographs showed the existence of multiple small free bodies lying in the recess between the radius and ulna, more noticeable on the palmar than the dorsal side (Figure 1).

At surgery, through a transverse incision at the palmar of the wrist, the capsule of the inferior radio-ulnar joint was opened and eight yellow-grey small cartilagenous nodules removed. Histological sections taken from the excised specimens showed extensive cartilagenous areas, with evidence of secondary ossification, and with cartilagenous foci in the synovial membrane. The pathological diagnosis was synovial chondromatosis.

Postoperatively the patient developed a temporary limitation of the full extension of the last three fingers, due to adhesions of the flexor

tendons. This recovered fully and the patient resumed his usual duties.

DISCUSSION

Articular synovial chondromatosis most often affects the knee, hip or elbow (Eisenberg & Johnston 1972, Freund 1937, Jeffreys 1967, McIvor & King 1962, Murphy et al. 1962, Mussey & Henderson 1949), and rarely the ankle (Murphy et al. 1962, Mussey & Henderson 1949), shoulder (Freund 1937, Paul & Leach 1970), jaw joint (Silver et al. 1971), wrist (Bibergeil 1913, Murphy et al. 1962, Riedel 1917), and interphalangeal joints of the hand (Kettlekamp & Dolan 1966, Lewis et al. 1974). The inferior radio-ulnar joint appears to be a very uncommon site for this condition.

The inferior radio-ulnar joint is an extremely unusual localization of synovial chondromatosis. A review of the existing literature showed only three cases of involvement of the wrist (Bibergeil 1913, Murphy et al. 1962, Riedel 1917), two of them reported in the years 1903 and 1913.



Figure 1. Radiographs of the inferior radio-ulnar joint to show the existence of multiple small free bodies lying in the recess between the radius and ulna (a). In the lateral view (b) these nodules are more noticeable on the palmar side.

As the inferior radio-ulnar joint does not communicate with the carpal joint the present case must be considered as a different localization.

Episodes of mild swelling of the joint, pain and stiffness are common symp-

toms of articular synovial chondromatosis (Murphy et al. 1962, Paul & Leach 1970). These symptoms are often very mild, so diagnosis tends to be delayed until suggested by X-rays (Murphy et al. 1962).

Median nerve compression is theoretically possible, and it has been described as a postoperative complication (Murphy et al. 1962); it did not, however, occur in this case.

ACKNOWLEDGEMENTS

The author wishes to thank Mr. W. Kellock, F.R.C.S. for permission to present this case, and Dr. Pead for the histologic examination.

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