RECURRENT DISLOCATION OF EXTENSOR TENDONS IN THE HAND

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Dislocation of a tendon of extensor digitorum from its median position on the metacarpal head during flexion of the metacarpo-phalangeal joint is a rare occurrence, though from its exposed position it will not often pass unnoticed. Sir James Paget mentioned three cases in 1875 and Marsh a further four in 1896, since when its pathology and treatment have received occasional mention and discussion. Usually the report has been on the basis of a single personal case.

The following cases are of interest in that the nature of the primary lesion is demonstrated, together with a satisfactory method of operative repair. Other methods of treatment and the probable etiology are briefly discussed.

CASE REPORTS

Case 1—A sixteen-years-old boy gave a history of having sustained a sharp blow on the dorsum of the proximal phalanges of his right hand six years before, when holding a toy gun. Since then, the extensor tendon on the third metacarpal head had been dislocating to its ulnar side each time the metacarpo-phalangeal joint was flexed, and returning to the normal position when it was extended. This had caused few symptoms until recently, when an increased amount of writing had been followed by aching and throbbing in the affected knuckle. On examination, the dislocation of the tendon with flexion of the joint was obvious. The function and anatomy of the hand were in other respects normal.

Operation—Exploration through a longitudinal incision revealed an oblique tear in the radial side of the proximal border of the extensor aponeurosis (Fig. 1) which allowed the tendon and aponeurosis to slip off the metacarpal head as the joint flexed, leaving it covered only by synovial membrane and extra-synovial connective tissue (Fig. 2). The aponeurosis was sutured, but with flexion of the finger the sutures cut out and the dislocation recurred. A conveniently situated junctura tendinum was therefore separated from its attachment to the ring finger tendon and brought over to be sutured down in the line of the torn aponeurosis (Fig. 3). This effectively prevented any further dislocation (Fig. 4). After suture of the skin the digit was immobilised on a plaster splint in a position just short of full extension for three weeks. The finger soon regained a full range of movement and normal strength. There was no sign of recurrence one year later.

Case 2—A twenty-eight-years-old woman injured her left hand thirteen years ago when jumping over a vaulting horse. The hand was wrenched as she continued to hold on to the horse after her body had passed over it. She sustained a greenstick fracture of the fourth metacarpal, and the whole hand was bandaged up with the fingers fully flexed for two weeks. She remembers that it took a long time and much effort before she recovered a full range of movement in her fingers. Since then, she had noticed the extensor tendon of the ring finger occasionally slipping to the ulnar side of the knuckle, and to this she attributed aching discomfort between the fourth and fifth metacarpal heads after much work with the fingers, as in dentistry or piano playing.

On examination, a partial dislocation of the ring finger extensor was produced fairly easily by resisting the patient's attempt to extend the partly flexed finger while forcing it a few degrees towards the ulnar side (Fig. 5). The photograph shows that the middle finger tendon was also unstable and moved well to the ulnar side of its knuckle.