THE HAND PATIENT

Having had the pleasure to teach and train students for many years, and the privilege of having patients referred to me by ex-student General Practitioners, one realizes that medical school training can only impart but a general overview of knowledge. It is impossible and unfair to expect of any medical student to "know it all".

For this reason, Continuing Professional Development (CPD) is imperative. This post-graduate training should however, be presented in such a way that the busy practitioner readily has access to the relevant information in a succinct form and in an understandable jargon. This continuing education is part of the responsibilities of a consultant specialist.

Communication between the specialist and the referring doctor should not only include information regarding that particular patient, but should also contain some informative detail on the pathology and management.

It is sincerely hoped that this edited collection of selected case reports will promote a well informed communication between the practitioner and his/her "hand patient".

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PISIFORM-TRIQUETRUM OSTEO-ARTHRITIS

Dear Colleague,

Re: Your patient with pain over the "heel" of the hand

Thank you for the referral of Mr. GBF, a 37 year old right-handed administrator. He suffers when playing golf and has difficulty in doing odd jobs at home because of pain he experiences over the base of the hypothenar eminence.

His history goes back many years when he was actively involved in all kinds of sport at school but he cannot remember a specific incidence of injury. However, over the years his pain slowly increased every time he ulnarly deviates his hand such as when greeting people, opening doors, using a screwdriver and playing golf.

On examination the pisiform bone at the base of the hypothenar eminence was very tender when palpated from the ulnar side. He also experienced excruciating pain when the flexor carpi ulnaris, which is attached to the pisiform, was resisted. Moving the pisiform sideways elicits the same kind of pain.

Special investigations included standard x-rays of both hands on one x-ray plate, as well as the so-called carpal tunnel views to demonstrate the joint space between the pisiform bone and the triquetrum. The x-rays clearly revealed a reduced pisiform-triquetrum joint, as well as osteoarthritic changes, i.e. subchondral sclerosis, small intra-osseous cysts, small osteophytes and some swelling.

The treatment of choice is a longitudinal incision over the pisiform, which should be removed sub-periosteally, taking great care of the neuro-vascular bundle which lies directly against the pisiform bone. Post-operatively he would only need a splint for a week, after which he can slowly use his hand again. He may play golf after six weeks.

Discussion:
A pisiform-triquetrum osteoarthritis can start spontaneously but usually a history of chronic severe exercises may be the etiological factor, such as push-ups, squash and contact sport. The pisiform is a sesamoid bone

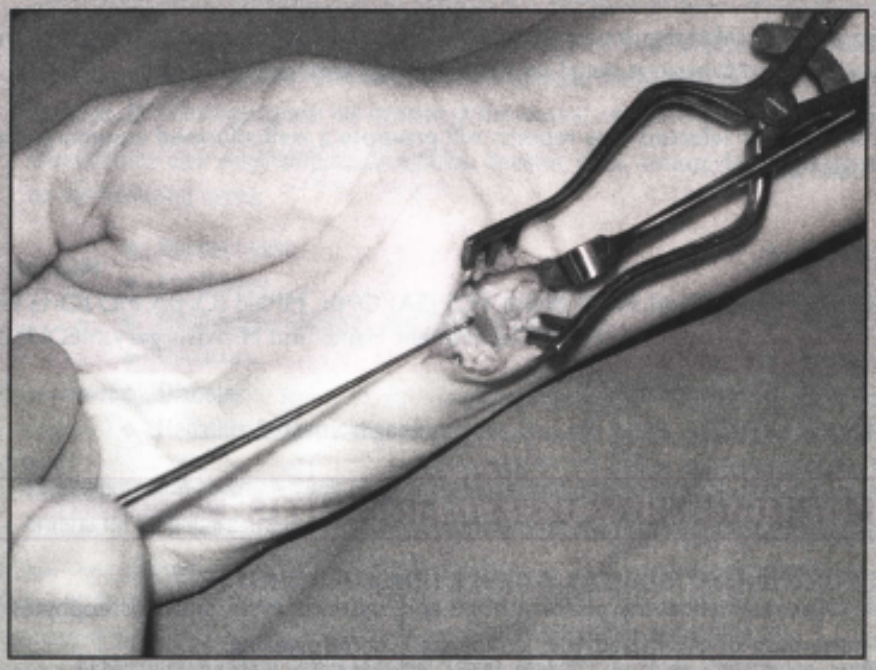
which lies inside the tendon of flexor carpi ulnaris. Flexor carpi ulnaris is the strongest muscle in the forearm, which is responsible for ulnar deviation of the hand as well as slight flexion such as when tying shoelaces. This also allows the transverse arch of the hand to lie longitudinally in relation to the long axis of the forearm, allowing the hand to hold objects such as a racquet or a screwdriver. This is one of the most important functions of the human hand. However by removing the pisiform subperiosteally very little if any functional loss is seen.

The swelling, which may be seen on the x-rays, is due to synovitis around the joint. The ulnar nerve lies directly against this joint and may be affected by the synovitis. The patient may experience pins and needles in the little finger and half of his ring finger. Seldom may the intrinsic muscles be affected.

The treatment of choice is conservative in the first instance, i.e. reducing the stress on the pisiform, local injections with cortisone and long-acting local anaesthetic and non-steroidal anti-inflammatory drugs. These are usually only of temporary value, and one usually ends up with a surgical removal of the pisiform.

With sincere regards,

Ulrich Mennen



Legend:

Pisiform-triquetrum osteo-arthrosis is clearly visible: the articular cartilage has disappeared and some synovitis is evident around the edge of the pisiform.