In the reports of Dall et al. (1970), Guyer and Levinson (1983), Nakasone et al. (1989) and Matsuda et al. (1996), good results were reported with surgical procedures. They described the leakage of air and contrast medium from the capsule, and performed capsulorrhaphy and femoral derotational osteotomy.

We performed capsulorrhaphy and rotational acetabular osteotomy, because of the dysplasia, on our patient. 2 years later, she had no pain and no "locking" with daily activities.

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Pigmented villonodular synovitis of the wrist invading bone—a report of 2 cases

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Case 1

A 47-year-old male farm worker complained of pain and limited movement of the right wrist in the preceding 2 years. The pain which radiated to the 2nd and 3rd finger had gradually worsened and the patient was at times unable to sleep. The wrist was swollen and Phalen's maneuver and Tinel's sign were positive. Laboratory findings, ESR, leukocyte counts and C-reactive protein were normal. However, radiographs showed cystic lesions in the scaphoid, capitate and hamate bones (Figure 1). Electromyography showed signs of median nerve entrapment. A Tc-99 bone scan revealed increased uptake in the right wrist; on MRI (Figure 2), joint effusion and volar hypertrophy of the synovial membrane were noted. The patient underwent carpal tunnel release and synovectomy; the synovial membrane was hypertrophied and dark brown. Histopathological examination identified the lesion as pigmented villonodular synovitis. Although symptoms improved over the next few months, 1 1/2 years later the patient was readmitted, complaining of pain and severely limited wrist movement. Arthrodesis of the wrist was performed.

Case 2

A 32-year-old man was admitted complaining of pain in the left wrist for the past 8 years. 7 years ago, when the pain had become more intense, he noted reduced wrist movement and attended another hospital, where radiographs revealed a cyst in the lunate (Figure 3). Fine-needle aspiration led to a diagnosis of an intraosseous ganglion, and the patient was treated with NSAIDs. Several months

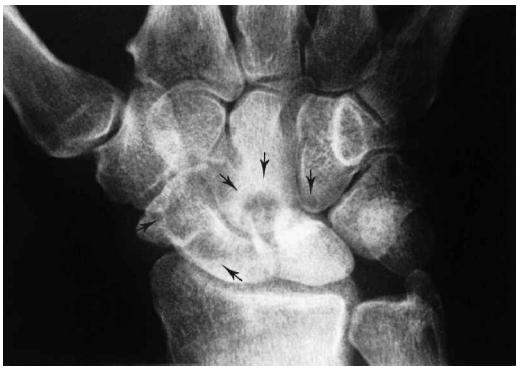

Figure 1. Case 1. Osteolytic changes in the capitate, scaphoid and hamate bones.

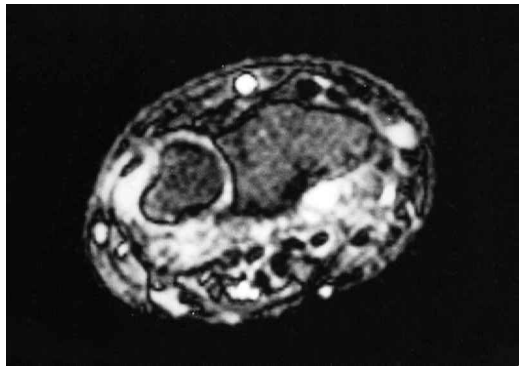

Figure 2. Case 1. Axial T2 MRI reveals high-signal intensity in the palmar aspect (synovial hypertrophy) and synovial fluid.

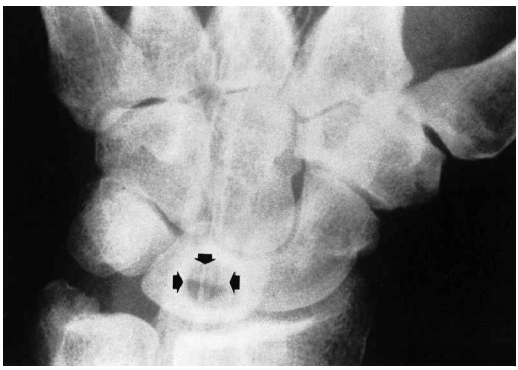

Figure 3. Case 2. Cystic erosion in lunate.

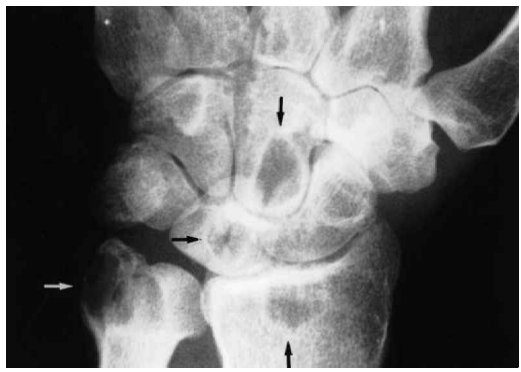

Figure 4. Case 2. The same patient 2 years later, with cysts in the radius, ulna, lunate and capitate bones.

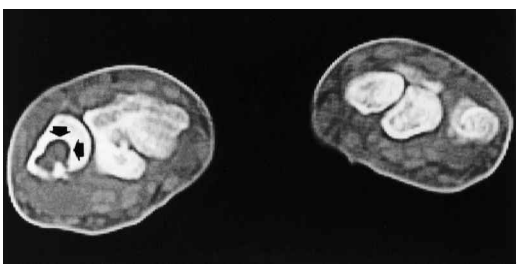

Figure 5. Case 2. CT scan showed a cyst-like erosion in the ulna, and synovial hypertrophy in the palmar aspect of the left wrist.

later, the pain had not abated, and he was reexamined by another orthopedic surgeon. Radiographs showed an increased number of bone lesions, interpreted as bone necrosis. A swelling of the dorsal region of the wrist was diagnosed as a ganglion cyst, and fluid was extracted by needle aspiration. New radiographs (Figure 4) showed that the number of bone lesions had increased, and the patient was referred to our department with a suspected tumor. Examination revealed a 4 × 2 cm dorsal mass. The range of left wrist movement was reduced (right: flexion 85º, extension 70º vs. left: 70º/40º).

Blood count, ESR and blood biochemistries were normal. Bone scintigraphy showed increased uptake in the wrist, while a CT scan (Figure 5) revealed bone lesions and volar soft-tissue enlargement. Progression of bone lesions and the characteristics of the fluid extracted pointed to PVNS, and synovectomy was performed. Volar and dorsal incisions revealed a dark-red synovial membrane with abundant bloody dark-brown synovial fluid. Bone cysts were removed and filled with heterologous lyophilized bone. Pigmented villonodular synovitis was confirmed histologically. Now, 2.5 years later, the patient is almost free of pain, but wrist movement is still limited. Radiographs showed that the bone lesions had not worsened, and some had improved; however, some of the bone grafts had been reabsorbed.

Discussion

Pigmented villonodular synovitis (PVNS), a benign, predominantly monolateral, proliferative process of the synovial membrane (Rydholm 1998), was first described by Jaffe in 1941 (Jaffe 1958). Although it has been reported in most joints (Pantazopoulos et al. 1975, Dorwart et al. 1984), few cases have been found in the wrist. The tenosynovial form, with tendon-sheath involvement, is seen oftener in the wrist, but primary intra-articular involvement is rare, as shown by the few cases reported in the literature (Moynagh 1968, Schajowicz and Blumenfeld 1968, Patel and Zinberg 1984, Duriez et al 1986, Valer et al 1997).

In our cases, the diagnosis was considerably delayed. This is often the case with PVNS (Rollo and Wapner 1993), since pain at first is usually mild and radiographs and laboratory tests are usually normal.

Early diagnosis and treatment of PVNS to minimize joint destruction may be of value. Attention should also paid to the lack of relationship between the clinical symptoms and bone lesions, since the patient with the worst bone lesions recovered better than the one with less severe bone lesions.

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Unusual course of the extensor pollicis longus tendon associated with tenosynovitis, presenting as de Quervain disease—a case report

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A 50-year-old, right-handed woman had had severe right radial wrist pain for 4 months, without trauma. She had never been diagnosed as having inflammatory arthropathy or connective tissue disorders. An orthopedic surgeon diagnosed de Quervain tenosynovitis. Non-steroidal anti-inflammatory drugs and corticosteroid injections were ineffective. After 1 month she underwent surgery, without improvement.

1 month later, she visited our hospital complaining of pain over the dorsum of her right radial wrist. She was unable to extend actively either the interphalangeal (IP) joint or the metacarpophalangeal (MP) joint of her right thumb.

Physical examination revealed localized tenderness and soft tissue swelling radial to Lister's tubercle. She had severe pain on passive extension and flexion of the thumb, and moderate pain at