Tenosynovial Cysts and Pseudogout

To the Editor:

Notable for mimicry of other arthritides (1), pseudogout (PsG) may resemble rheumatoid arthritis (RA) in the hands and wrists, sharing features such as narrowed radiocarpal and metacarpophalangeal joints (2), synovial swelling at the wrists (3–5), interosseous atrophy (6), and ulnar deviation (6). Tenosynovial swelling at the wrist, however, was not observed in one reported series of 18 patients with PsG and synovitis of the wrist (4). A patient has been reported with PsG and a “small ganglion” on the dorsum of the wrist (1). Except for popliteal (Baker’s) synovial cysts (7), cystic lesions have not been mentioned in clinical descriptions of PsG. This is a report of protuberant, dorsal tenosynovial cystic swelling at the wrists in two men with PsG (Table 1).

In both patients, calcium pyrophosphate dihydrate (CPPD) crystals were present in repeated aspirates, whether from the knees or dorsal wrist tenosynovium (Table 2).

Marked by chronic pain in the wrists and knees as well as dorsal tenosynovial swelling at both wrists, the disease in patient A had been diagnosed as RA and treated with corticosteroids for 20 years. When encountered currently, both patients had type I noninflammatory synovial fluids, good mucin clots, negative

Table 1. Clinical Data of Two Patients with Pseudogout and Tenosynovial Cysts

<table>
<thead>
<tr>
<th>Patient</th>
<th>Year of Birth</th>
<th>Onset of Arthritis</th>
<th>Dorsal Wrist Cysts</th>
<th>Chondrocalcinosis by X-ray</th>
<th>Rheumatoid Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>1894</td>
<td>1946</td>
<td>1952</td>
<td>Bilateral Knees, wrists</td>
<td>Neg</td>
</tr>
<tr>
<td>B</td>
<td>1892</td>
<td>1950</td>
<td>1971</td>
<td>Left Wrist, symphysis pubis</td>
<td>Neg</td>
</tr>
</tbody>
</table>

Fig. 1. Patient A. Dorsal tenosynovial swelling at right wrist and similar, less marked swelling at the left wrist.
Table 2. Synovial Fluid Data

<table>
<thead>
<tr>
<th>Patient</th>
<th>Site</th>
<th>Viscosity</th>
<th>Mucin</th>
<th>Clot</th>
<th>WBC</th>
<th>Positively Birefringent</th>
<th>Rhomboid Crystals</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Knee</td>
<td>Normal</td>
<td>Good</td>
<td>900</td>
<td>Yes*</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tenosynovial cyst, wrist</td>
<td>Normal</td>
<td></td>
<td>1,300</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>Knee</td>
<td>Normal</td>
<td>Good</td>
<td>626</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tenosynovial cyst, wrist</td>
<td>Normal</td>
<td></td>
<td></td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* X-ray diffraction, kindly performed by Frank B. Johnson, M.D., Armed Forces Institute of Pathology, identified crystals as calcium pyrophosphate dihydrate.
+ WBC = leukocyte count/mm³.

tests for the rheumatoid factor, and absence of “rheumatoid” juxtaarticular erosions by x-ray, features that reduce the likelihood of concurrent RA.

Although CPPD deposits are found chiefly within joints, crystals have also been identified in tendons and ligaments well away from articular synovium and cartilage (8,9). The crystals aspirated from the dorsal tenosynovium near the wrists in the present patients, however, could merely have come from intraarticular cartilage. Arthrograms often demonstrate communications between the intraarticular compartment of the wrist and adjacent dorsal tenosynovium (10).

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REFERENCES
Radiograph can proceed rapidly and efficiently once the patient is in the x-ray room; the time taken to complete the examination is considerably less than if the patient returned on six different occasions. We therefore charge a fee that is 60% of the sum of the expected individual charges.

We suggest that the Radiographic Arthritis Survey is a practical, efficient, and economical tool which, in our experience of over 3,000 cases, has provided sufficient information to allow formulation of a differential diagnosis and assessment of disease severity.

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REFERENCE
1. Mink JH, Gold RH, Bluestone R: Radiographic Arthritis Survey. Submitted for publication

Reversal of Azotemia in Lupus Nephritis by Megadose Corticosteroid Therapy

To the Editor:

Extreme deterioration of renal function in systemic lupus erythematosus is almost always irreversible and leads to death or maintenance hemodialysis. The following case is reported because megadoses of dexamethasone (260 mg daily) were associated with dramatic restoration of renal function and resolution of parenchymal lung disease when death seemed imminent. This therapeutic approach was suggested by Cathcart and coworkers (1); in one of their patients renal deterioration was almost as severe as that in the patient reported here.

Since 1968 a 39-year-old Chinese woman had had five psychotic episodes, keratoconjunctivitis sicca, excessive hair loss, recurrent oral ulcers, polyarthalgia and positive reactions to tests for antinuclear antibodies and rheumatoid factor. In November 1975 acute hemolytic anemia appeared, together with proteinuria and microhematuria. By January 1976 serum creatinine had risen to 1.8 mg/100 ml and creatinine clearance was 40 ml/minute; L/F cell preparations were now positive. Renal biopsy in April 1976 showed diffuse pro-