Case report 350

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Radiological studies

Fig. 1 A. An anteroposterior supine roentgenogram of the abdomen shows a diffuse disseminated sclerotic pattern involving the spine, the innominate bones and the lower ribs

Clinical information

This 65-year-old man, who was in good health until the onset of his recent illness, presented with difficulty in voiding and the presence of microscopic hematuria. Radiological studies, including the abdomen, most of the bony pelvis and the chest, demonstrated the presence of a widespread sclerotic process affecting the areas of the skeleton illustrated in Figs. 1 A and B, and Fig. 2. A technetium 99m-methylene diphosphonate bone scan (Fig. 3) showed no significant focal abnormality. Of interest, however, was the failure to identify any renal activity, although bladder activity was present.

Laboratory studies demonstrated normal renal function, normal serum calcium and normal acid phosphatase; the serum alkaline phosphatase was mildly elevated. A moderate normochromic anemia was present.

A bone marrow aspiration was performed.
Fig. 1B. A "cone-down" film of the pubis and ischial tuberosities, which includes most of the sacrum, again demonstrates the diffuse sclerotic process which is disseminated throughout the skeletal structures included in these studies. C A posteroanterior roentgenogram of the chest shows the lungs and cardiovascular structures to be within normal limits, but the disseminated bony sclerosis described in Fig. 1A involves the thoracic cage to a similar extent.

Fig. 2. A posterior view obtained during the performance of the TC99m-MDP skeletal scan demonstrates no apparent renal activity; otherwise, no focal abnormality is noted.