SPONTANEOUS RUPTURE OF THE SUPRAPATELLAR BURSA

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We report a case in which spontaneous rupture of the suprapatellar bursa was confused clinically with deep venous thrombosis of the affected limb.

Case report. A 73-year-old lady presented with painful swelling of the right knee and thigh of five weeks duration, preceded by stiffness of the knee for two months. Over the three days prior to admission, she had noticed marked bruising above and medial to the knee. She denied any injury to her knee and had no previous history of joint disease. Examination revealed a swollen thigh with ecchymosis anteriorly from mid-thigh to below the knee. The swollen area was warm and there was a diffuse cystic swelling behind the knee. Movements were full. In view of the possibility of deep venous thrombosis the patient was fully anticoagulated with heparin. However, other investigations, including a venogram showed no abnormality. An arthrogram was therefore performed and showed extensive leakage from the posterolateral aspect of the suprapatellar bursa into the soft tissues of the thigh (Fig. 1). A sizeable Baker's cyst was also noted. Aspiration of the knee produced bloody synovial fluid which was negative for culture, cystals and rheumatoid factor. The patient improved with rest, a crêpe bandage and nonsteroidal anti-inflammatory drugs. At one year follow-up the knee was clinically normal.

Discussion. Spontaneous rupture of the suprapatellar bursa has not, as far as we know, been previously reported in the literature. Indeed, reports of rupture associated with trauma (Duncan 1974) or with arthritis (Nahir et al 1980; Coulton and Popert 1986) are rare when compared with the relatively common rupture of a popliteal cyst into the calf. The additional finding of a popliteal cyst in our case has also been found in some reported cases of suprapatellar bursa rupture and may cause diagnostic confusion. A rapid rise in the intra-articular pressure due to fluid overproduction has been suggested as the cause of rupture, and studies in cadaveric knees have shown the suprapatellar pouch to be the place most vulnerable to rupture (Dixon and Grant 1964). However, in view of the unreliability of the physical signs we urge that patients suspected of having a deep venous thrombosis but found to have a normal venogram, should have an arthrogram to exclude not only rupture of a popliteal cyst, but also of the suprapatellar bursa. The whole lower femur as well as the knee and upper tibia should be included in the examination.

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REFERENCES


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