

Extensive Ecchymosis due to Rotator Cuff Tear

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Rotator cuff tear typically occurs in elderly women, and is often bilateral¹. The symptoms include mild to moderate pain, a severely limited range of shoulder joint motion, and recurrent shoulder swelling.

An 80-year-old woman who had rheumatoid arthritis presented with massive ecchymosis of her left arm. She was being treated for interstitial pneumonia with prednisolone (30 mg/day), and had been discharged from hospital 2 weeks earlier. She complained of mild pain in her left shoulder and could not raise her arm after noticing the ecchymosis. Contrast-enhanced computed tomography revealed subcutaneous edema and an isodense effusion around the shoulder joint and upper arm. Extravasation of contrast medium was not detected. The acromiohumeral distance was reduced. Laboratory tests revealed that coagulation was normal, C-reactive protein was 0.07 mg/dl, and hemoglobin was 11.0 g/dl (a decrease of 1.0 g/dl from 2 weeks earlier). Three days later, the ecchymosis on her left upper arm was yellow (Figure 1), while the forearm and dorsum of the hand showed



Figure 1. Large ecchymosis on the left shoulder forms a clear border with the trunk.



Figure 2. The left forearm bruising is darker than that on the upper arm, but spares the fingertips. There are also purple ecchymoses on the right forearm due to glucocorticoid therapy.

deep purple bruising that spared fingertips (Figure 2). Her arm was still edematous, but there was no pain. From the history and findings, we diagnosed a rotator cuff tear with massive ecchymosis^{2,3}. The ecchymosis resolved spontaneously after 1 month and has not recurred.

It is not uncommon to find blood-tinged synovial fluid in patients with rotator cuff tear. Further, more extensive bleeding can produce periarticular ecchymoses with extension onto the upper anterior chest wall and arm.

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