

# Hemorrhagic Schwannoma with Purely Cystic Appearance in the Shoulder

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Benign schwannoma can display degenerative changes, such as hyalinization, hemorrhage, calcification, and cyst formation. Usually these degenerations are partially seen in the tumors<sup>1,2</sup>. We describe a case of a purely cystic schwannoma in the shoulder that mimicked a synovial cyst, hemorrhagic bursitis, and non-neoplastic hematoma<sup>3-5</sup>.

A 67-year-old woman presented with a 3 week history of enlarging tumor in her right posterior shoulder. Magnetic resonance images (MRI) showed a well circumscribed, round mass between the deltoid muscle and the triceps muscle. On T1 and T2 weighted images, the tumor was hyperintense to muscle with or without a fluid-fluid level. On Gd-DTPA T1 weighted images, enhancement was seen only in the periphery of the tumor (Figure 1). A percutaneous needle aspiration yielded 30 ml of bloody liquid. During excision, the proximal area of the tumor was extended to the axillary nerve, and a tumoral capsule that seemed to be epineurium was preserved (Figure 2). Macroscopically, the tumor was totally cystic with hemorrhagic content. Histological investigation revealed benign schwannoma. The postoperative course was uneventful and the patient has had no problem 16 months after the surgery.

Preoperative diagnosis for schwannoma is important to prevent a major neurological deficit at surgery. Failure to appreciate the possibility and nature of this tumor at the time of surgery may lead to catastrophic loss of function for the patient<sup>1</sup>. This case illustrated that clinicians should consider the possibility of schwannoma in patients who have purely cystic mass near the joint. Careful surgical dissection is needed for such cystic tumor.

## REFERENCES

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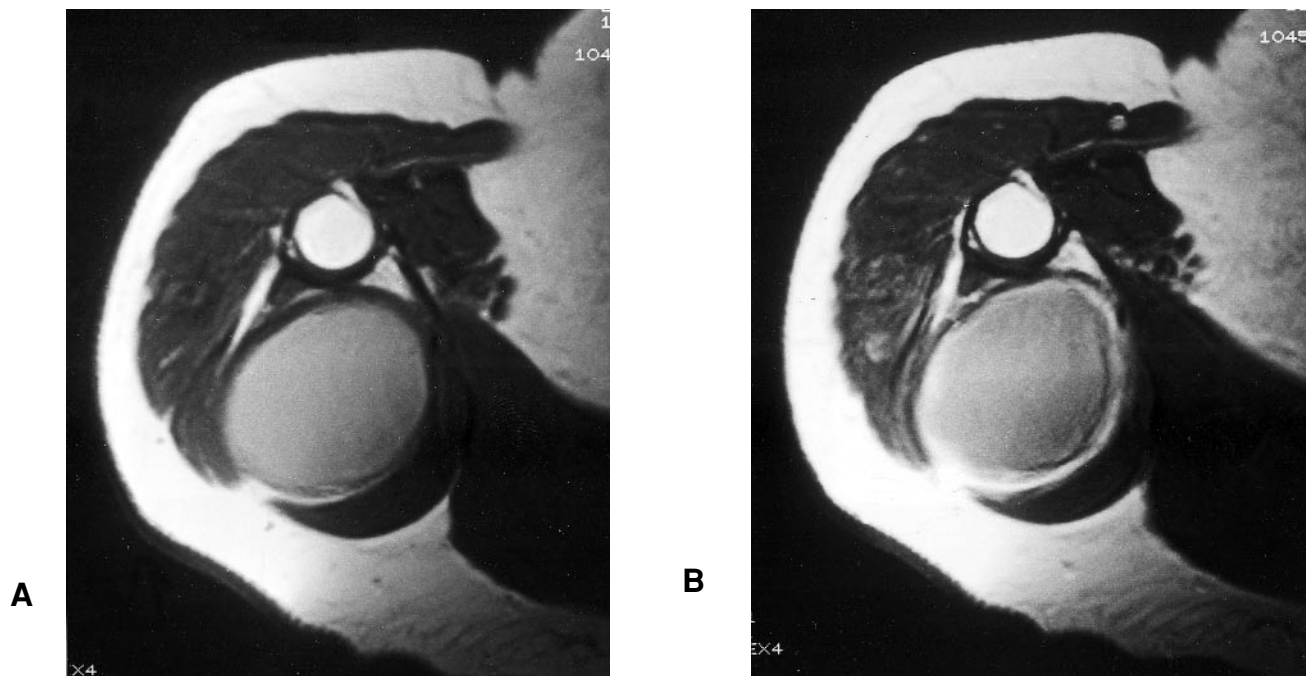




Figure 1. A. T1 weighted axial MRI shows well marginated tumoral mass with hyperintensity to muscle. B. T1 weighted axial MRI after iv gadolinium administration shows peripheral enhancement. C. T2 weighted sagittal MRI shows a hyperintense tumor with a fluid-fluid level.



Figure 2. At surgery a cystic schwannoma arising from the axillary nerve (arrowheads) is observed.