



Scapular Mass on a Patient Lost to Follow-up: A Case Report

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Background

- ▶ Scapular masses are statistically more malignant than benign. Based on tumor progression, there exists a concomitant risk of impairing mobility, compressing nerves, and pathologic fracture.^{1,2}
- Diagnostic confirmation is through histopathology, which can indicate if chemotherapy is needed post-resection.
- Scapulectomy is recommended even in a benign case due to risk of malignant transformation.³
- Patients with allograft impaction after resection have better functional outcomes than without reconstruction.⁴
- ▶ Access to advanced diagnostic tools poses a significant challenge within developing countries.^{5,6}
- The lack of access hinders early accurate detection of diseases, which in turn contributes to poorer health outcomes for those individuals.
- In this absence, providers may opt for empirical treatments or unnecessary tests, resulting in hefty healthcare expenses.

Case

15-year-old Amazonian Peruvian male presented to a Medical Campaign setup in Iquitos with a palpable mass on right scapula which had been increasing in size for a year. The estimated size was 3 x 4 cm. He possessed no past medical history of allergies, chronic diseases, or regular medication intake. The patient and his mother denied weight loss, fatigue, night sweats, anorexia, cough, fever, chills, or bone/joint pain. On the physical examination, the patient was pale, afebrile, and spontaneously breathing. There was neither adenopathy nor organ enlargements. A CT scan was brought into the clinic which showed exostosis, primarily projecting posteriorly, and a small portion of it projecting anteriorly. Conflict within the family resulted in hesitancy towards biopsy. Ultimately, the patient was set up for biopsy in Lima via local connections and his physician. The sample analysis yielded the result of osteosarcoma. Resection, radiation, and chemotherapy were recommended, but there has been hesitation from family based on personal beliefs and financial hardship.

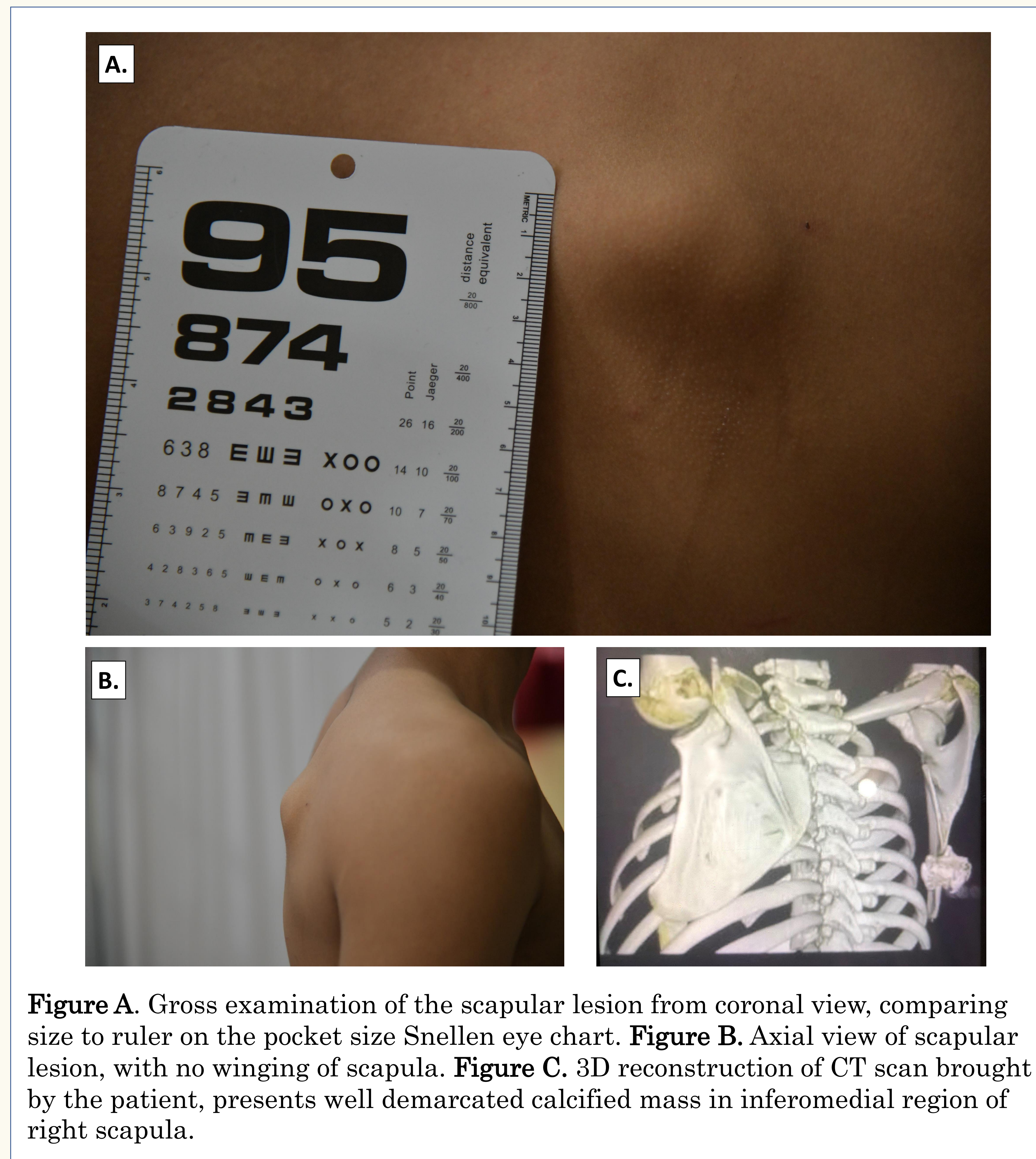


Figure A. Gross examination of the scapular lesion from coronal view, comparing size to ruler on the pocket size Snellen eye chart. **Figure B.** Axial view of scapular lesion, with no winging of scapula. **Figure C.** 3D reconstruction of CT scan brought by the patient, presents well demarcated calcified mass in inferomedial region of right scapula.

Differential Diagnoses

- ▶ **Osteosarcoma** – Based on the biopsy report along with presentation of diffuse pallor.
- ▶ **Osteochondroma** – Initially the primary diagnosis before the biopsy based on asymptomatic and comparative study.^{7,8}
- ▶ **Ewing sarcoma** – Based on age group.
- ▶ **Bone metastases** – Very rare in his age group.
- ▶ **Lipoma** – Ruled out on physical exam.

Discussion

- ▶ Hesitance towards biopsy showed a key difference in attitudes toward medicine in low-income regions of Peru compared to the United States. This emphasizes the important of medical service missions.
- ▶ The case presented a rare scapular osteosarcoma that was not diagnosed for over a year; this emphasizes the importance of healthcare accessibility regardless of socioeconomic status
- Differential diagnosis of a bone lesion can be narrowed from a single encounter, but as shown by the biopsy result, final diagnosis may not always match the presentation based on statistical likelihood.
- ▶ The biopsy will not have any significant impact on the patient's quality of life without access to more invasive diagnostic and corrective care.
- ▶ The family decision regarding treatment will be respected to maintain medical ethical integrity.

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