



When “Touch”, “Feel” and “Look” Give us the Answer during Image-Guided Biopsies

While all biopsy results are eventually the domain of the histopathologist, as radiologists, we can often make their tasks easier by describing the feel or the look of the lesion during the biopsy.

Here are 3 cases where the look, feel and the result of touching the lesion gave us the answer even before the final histopathology report.

Case 1: “Look” - Seeing the Answer in the Biopsy Material Itself

This 72-years old lady with ocular melanoma came with backache. The MRI showed spine lesions, for which a CT guided biopsy (Fig. 1) was requested. The biopsy material (Fig. 1E) was pitch-black, confirming that this was indeed metastasis from melanoma, even before the actual histopathology report.

Case 2: “Feeling” the Pathology

This is a 36-years old man who had swelling of the face for over a year. CT scan showed a mass (Fig. 2) encasing the SVC causing SVC obstruction. During the biopsy, the mass was hard (Fig. 2C) and gritty, suggesting that this was likely just fibrosis, allowing a diagnosis of mediastinal fibrosis to be confirmed by the pathology.

Case 3: “Touching” the Lesion to Get an Answer

This 32-years old man was found to have an apical hemithorax mass on a Covid-19 CT scan (Fig 3). The lesion had mild uptake on PET/CT and showed typical characteristics of a neurogenic tumor. When the needle touched the lesion (Fig. 3D), the patient described an “electric current” coursing through this arm, confirming that this was a neurogenic tumor. The histopathology diagnosis was schwannoma.

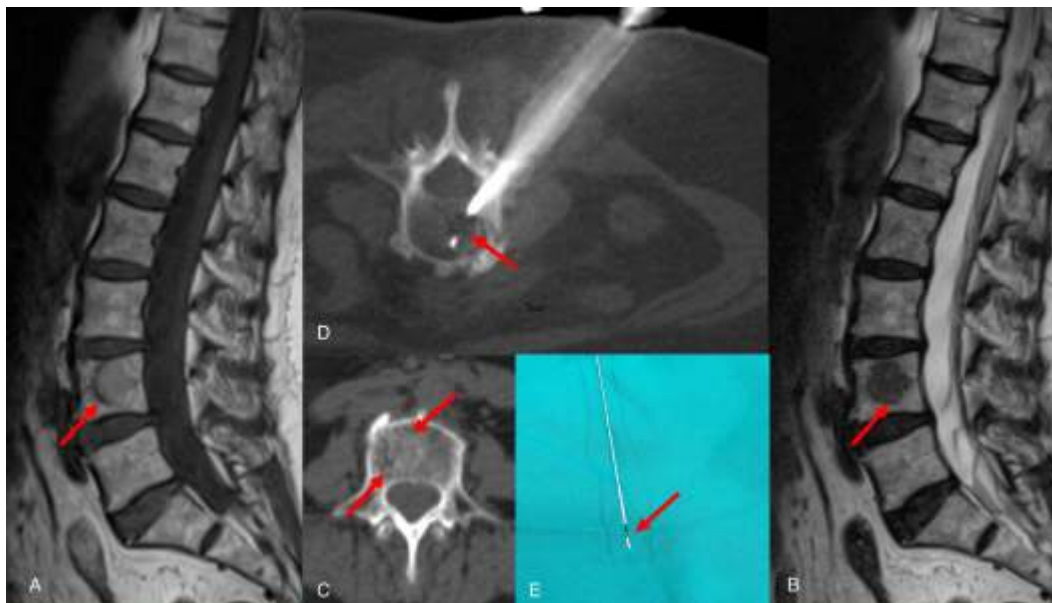
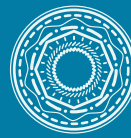


Fig. 1: Metastasis from malignant melanoma. 72-years old lady with ocular melanoma had backache. T1W (A) and T2W (B) sagittal MRI images of the spine show a focal lesion in the L4 vertebral body with subtle sclerosis on the axial CT (C) image. The CT guided biopsy (D) was performed using a transpedicular route. The biopsy material (E) was black, confirming that this was melanin and hence consistent with metastasis from melanoma.



At a glance:

- ◆ Biopsy results are the domain of the pathologist.
- ◆ Findings during the biopsy, related to touch, feel and the look of the biopsy material can help us arrive at a diagnosis, often before the pathologist.

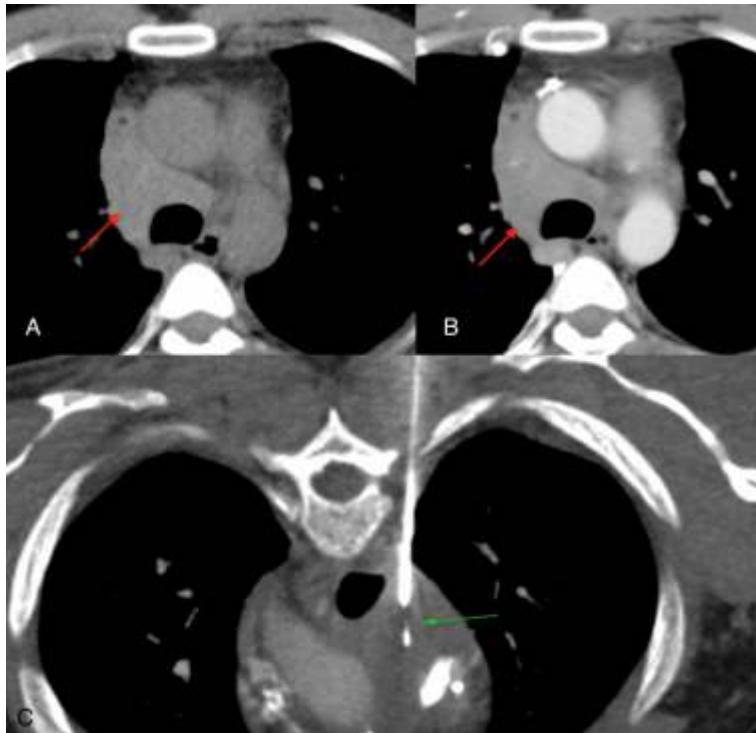


Fig. 2: Mediastinal fibrosis. 36-years old man with edema of the face for 1 year. The plain CT scan (A) shows a mildly hyperdense mass, which encases and narrows the SVC on the contrast study (B). The biopsy was performed using an extrapleural approach. The mass was hard, needed strength to penetrate and was extremely gritty. This is typical of densely fibrotic lesions and histopathology confirmed the “feel” suspicion of mediastinal fibrosis.

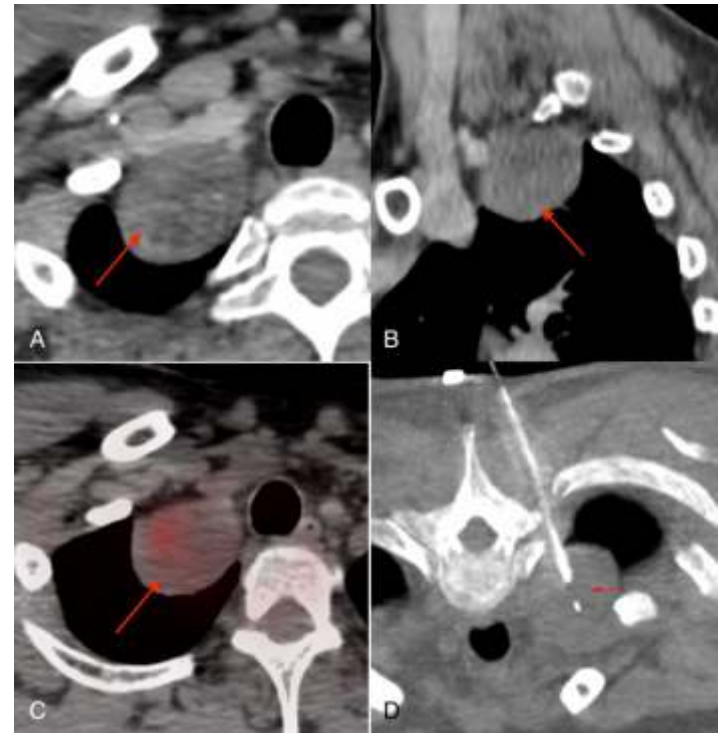


Fig. 3: Mediastinal schwannoma. 32-years old with an incidentally detected mass in the right apical hemithorax. Axial (A) and sagittal (B) CT scan images show an extrapleural apical mass with mild uptake on PET/CT (C). The biopsy was performed in the prone position using an extrapleural approach. The moment the needle “touched” the lesion, the patient described an “electric” current in the arm, confirming that this tumor was of neurogenic origin. The pathology report confirmed that it was a benign schwannoma.

Subscribe to INNER SPACES : info@jankharia.com

Online version : <http://picture-this.in/index.php/inner-spaces/>

Main Clinic

383 | Bhaveshwar Vihar | Sardar V. P. Road | Prarthana Samaj | Charni Road | Mumbai 400 004 | T: 022 66173333

Cardiac, Chest & Interventional Twin Beam CT

Nishat Business Centre | Arya Bhavan | 461 | Sardar V. P. Rd | Next to Marwari Vidyalaya | Mumbai 400 004 | T: 022 6848 6666

PET / CT, Organ Optimized 3T MRI

Gr. Floor | Piramal Tower Annexe | G. K. Marg | Lower Parel | Mumbai 400 013 | T: 022 6617 4444

Owner, Printer & Publisher: Dr. Bhavin Jankharia

Published at: Dr. Jankharia's Imaging Centre

Bhaveshwar Vihar, 383, S.V.P. Road, Prarthana Samaj, Charni Road, Mumbai 400 004.

