

## IMAGE OF THE MONTH

## FDG Uptake in the Chest Wall of a Patient with Small-Cell Lung Cancer

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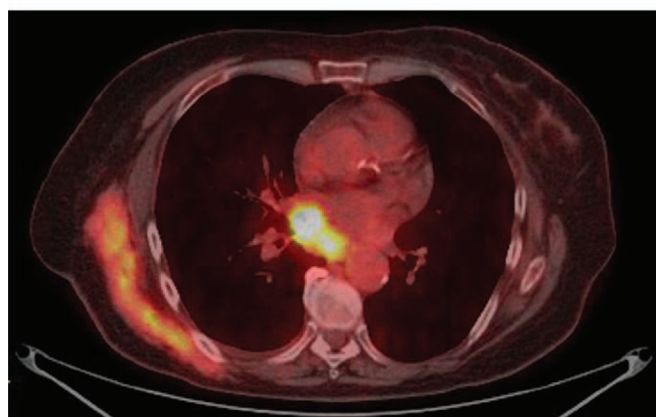
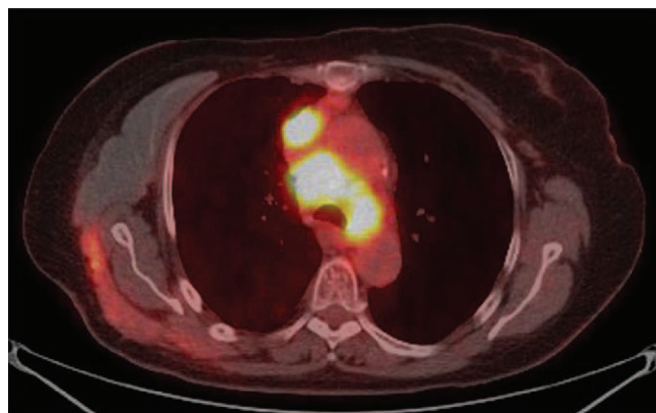
A 67-year-old woman was admitted for pain in her right dorsolateral chest wall. She had a 25-pack-year smoking history. At the age of 31 years, she had undergone a radical resection for right-sided breast cancer, followed by reconstructive surgery with the insertion of an implant. She received no radiotherapy. Ten years later, the implant was replaced manually after acute dislocation.

At physical examination, no abnormalities were observed except for a palpable right supraclavicular lymph node. Computerized tomography showed tumorous infiltration of the mediastinum and right supraclavicular region as well as thickening of the right chest wall (Fig. 1). Positron emission tomography showed uptake of fludeoxyglucose in

mediastinal and supraclavicular masses and uptake in the right lateral chest wall, except for the implant and a more dorsally located mass (Fig. 2).



**FIGURE 1.** Computerized tomography showing diffuse mediastinal tumor infiltration and a thickening of the right chest wall, hard to distinguish from the axillar and infra-scapular muscles and continuous with the breast implant. Infiltration of the subcutis suggests leakage of the implant with an inflammatory reaction.



**FIGURE 2.** Positron emission tomography showing extensive mediastinal and chest wall uptake (lower panel) but no uptake in dislocated implant and lateral leakage mass (upper panel).

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Tissue-core biopsies revealed small-cell lung cancer of the right supraclavicular mass and an inflammatory reaction, compatible with silicone gel leakage in the chest wall. Persisting low-grade inflammatory reactions because of breast implant leakage, as observed in our patient, were reported previously.<sup>1</sup>

The chest wall findings required differentiation from tumorous infiltration of the small-cell lung cancer because of

the huge implications for treatment and prognosis, although the presentation would be very unusual.<sup>2</sup>

#### REFERENCES

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