A 56-year-old woman was admitted to the hospital because of progressive paresis of the left arm. Clinical examination revealed upper brachial plexus palsy and complete anesthesia and analgesia in segments C5–7. MRI demonstrated diffuse tumorous infiltration of the left brachial plexus with centrifugal growth from the dorsal spinal root of segment C6. Biopsy of the lesion revealed a malignant schwannoma and resection was performed. Two months postoperatively, tumor recurrence was suspected on MRI in the left axilla and the supraclavicular part of the brachial plexus. However, it was not possible to define the extent of tumor recurrence exactly owing to limitations of MRI in differentiating viable tumor from postoperative scar tissue. PET imaging, conversely, provides functional data for detection of viable tumor regions and is considered a sensitive tool in the diagnosis of schwannoma.1 Accurate anatomic localization of focal tracer uptake is, however, difficult because of the reduced spatial information.2 Therefore, we decided to perform dual-modality PET/CT imaging using [18F]-2-fluoro-2-desoxy-D-glucose as a radioactive tracer. By combining function and anatomy, PET/CT was able to detect residual tumor in the dorsal roots of C4–7 and to define different sites of viable tumor along the axis of resection extending to the proximal left arm (figure). Based on the PET/CT data, operative exploration was extended into the spinal canal to obtain complete tumor resection.

Recurrent schwannoma: Diagnosis with PET/CT

Neurology 2002;59;1240
DOI 10.1212/01.WNL.0000033094.46060.6C

This information is current as of October 22, 2002

Updated Information & Services
including high resolution figures, can be found at:
http://n.neurology.org/content/59/8/1240.full

References
This article cites 2 articles, 1 of which you can access for free at:
http://n.neurology.org/content/59/8/1240.full#ref-list-1

Subspecialty Collections
This article, along with others on similar topics, appears in the
following collection(s):
All Imaging
http://n.neurology.org/cgi/collection/all_imaging
All Spinal Cord
http://n.neurology.org/cgi/collection/all_spinal_cord
CT
http://n.neurology.org/cgi/collection/ct
PET
http://n.neurology.org/cgi/collection/pet
Spinal cord tumor
http://n.neurology.org/cgi/collection/spinal_cord_tumor

Permissions & Licensing
Information about reproducing this article in parts (figures,tables) or in
its entirety can be found online at:
http://www.neurology.org/about/about_the_journal#permissions

Reprints
Information about ordering reprints can be found online:
http://n.neurology.org/subscribers/advertise