



NILDE

Network Inter-Library Document Exchange

Il presente documento viene fornito attraverso il servizio NILDE dalla Biblioteca fornitrice, nel rispetto della vigente normativa sul Diritto d'Autore (Legge n.633 del 22/4/1941 e successive modifiche e integrazioni) e delle clausole contrattuali in essere con il titolare dei diritti di proprietà intellettuale.

La Biblioteca fornitrice garantisce di aver effettuato copia del presente documento assolvendo direttamente ogni e qualsiasi onere correlato alla realizzazione di detta copia.

La Biblioteca richiedente garantisce che il documento richiesto è destinato ad un suo utente, che ne farà uso esclusivamente personale per scopi di studio o di ricerca, ed è tenuta ad informare adeguatamente i propri utenti circa i limiti di utilizzazione dei documenti forniti mediante il servizio NILDE.

La Biblioteca richiedente è tenuta al rispetto della vigente normativa sul Diritto d'Autore e in particolare, ma non solo, a consegnare al richiedente un'unica copia cartacea del presente documento, distruggendo ogni eventuale copia digitale ricevuta.

Biblioteca richiedente: Biblioteca IRCCS Istituto Oncologico Veneto IOV - Padova

Data richiesta: 14/12/2016 09:18:05

Biblioteca fornitrice: Biblioteca Interdipartimentale di Medicina - Biblioteca di Chirurgia Generale e dei Trapianti d'Organo

Data evasione: 15/12/2016 08:24:43

Titolo rivista/libro: Clinical nuclear medicine (Online : Lippincott Williams & Wilkins) (Online : Lippincott Williams & Wilkins)

Titolo articolo/sezione: A Solitary Metastasis for a Malignant Schwannoma in the Gallbladder Detected by18F-FDG PET/CT

Autore/i: Evangelista L, Burei M, Basso U

ISSN: 1536-0229

DOI: 10.1097/RLU.0000000000001263

Anno: 2016

Volume: 41

Fascicolo: 8

Editore:

Pag. iniziale: 666

Pag. finale: 667

A Solitary Metastasis for a Malignant Schwannoma in the Gallbladder Detected by ^{18}F -FDG PET/CT

Laura Evangelista, MD, PhD,* Marta Burei, MD,* and Umberto Basso, MD†

Abstract: A 63-year-old woman with a history of malignant schwannoma in the left shoulder (pT1aNxMx) was treated with surgical resection in 2012. During follow-up, patient developed a metastasis in the right lung treated by further surgical intervention. For a suspicion on persistent disease in the lung, patient was sent to FDG PET/CT examination, which showed a focal uptake in the gallbladder. The patient underwent cholecystectomy, and a solitary metastasis from schwannoma was diagnosed by pathology. This case highlights that, in patients with a malignant schwannoma, a careful differential diagnosis should be made in case of a significant FDG uptake in the gallbladder.

Key Words: gallbladder neoplasms, PET, peripheral nervous system neoplasms

(*Clin Nucl Med* 2016;41: 666–667)

Received for publication February 8, 2016; revision accepted March 31, 2016. From the *Nuclear Medicine and Molecular Imaging Unit, and †Oncology Unit 1, Veneto Institute of Oncology IOV–IRCCS, Padua, Italy.

Conflicts of interest and sources of funding: none declared. Correspondence to: Laura Evangelista, MD, PhD, Nuclear Medicine and Molecular Imaging Unit, Veneto Institute of Oncology IOV–IRCCS, Via Gattamelata, 64 35128 Padua, Italy, E-mail: laura.evangelista@ioveneto.it.

Copyright © 2016 Wolters Kluwer Health, Inc. All rights reserved.

ISSN: 0363-9762/16/4108–0666

DOI: 10.1097/RLU.0000000000001263

REFERENCES

- Ohta R, Hirata Y, Oneyama M, et al. Schwannoma of the gallbladder: report of a case. *Fukushima J Med Sci*. 2010;56:38–43.
- Northover JM, Terblanche J. A new look at the arterial supply of the bile duct in man and its surgical implications. *Br J Surg*. 1979;66:379–384.
- Koh T, Taniguchi H, Kunishima S, et al. Possibility of differential diagnosis of small polypoid lesions in the gallbladder using FDG-PET. *Clin Positron Imaging*. 2000;3:213–218.
- Gardini A, Saragoni L, La Barba G, et al. Simultaneous occurrence of primary diffuse large B-cell lymphoma and extranodal marginal zone (MALT) B-cell lymphoma in the gallbladder: a case report. *Pathologica*. 2009;101:230–234.
- Okuyama Y, Fukui A, Enoki Y, et al. A large cell neuroendocrine carcinoma of the gall bladder: diagnosis with ^{18}F -FDG-PET/CT-guided biliary cytology and treatment with combined chemotherapy achieved a long-term stable condition. *Jpn J Clin Oncol*. 2013;43:571–574.
- Willekens I, Goethals LR, Brussaard C, et al. Correlative imaging in gallbladder carcinoma. *JBR-BRT*. 2014;97:291–294.
- Win AZ. Renal cell carcinoma metastasis to the gallbladder detected by FDG-PET/CT. *J Clin Med Res*. 2014;6:482–486. Erratum in: *J Clin Med Res*. 2015;7:368.
- Murguía E, Quiroga D, Canteros G, et al. Gallbladder metastases from ductal papillary carcinoma of the breast. *J Hepatobiliary Pancreat Surg*. 2006;13: 591–593.

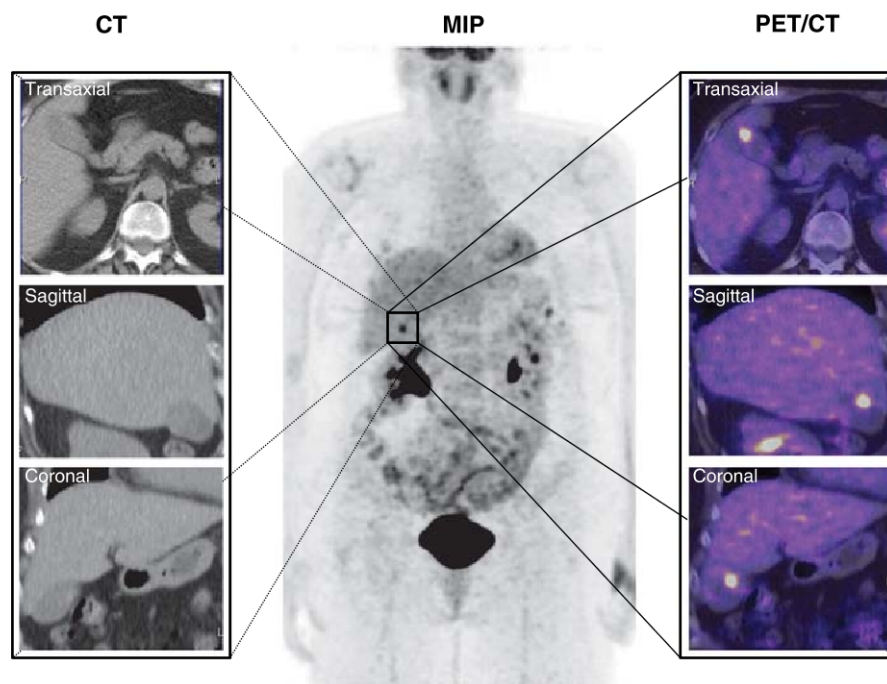


FIGURE 1. A 63-year-old woman with a history of malignant schwannoma (maximum diameter, 3.5 cm) in the left shoulder was treated with surgical resection on April 2012. Because of positive margins, the patient was resented to the surgical resection, which resulted completely negative. The patient has a history of diabetes mellitus (type II), hypertension, and hypercholesterolemia. After 4 months from the primary surgery, for a suspicion on an enlarged lymph node in the left axillary, the patient was studied by ultrasonography and fine-needle cytology, which demonstrated an absence of pathological findings. From December 2012 to March 2014, the patient was observed by serial chest CT and MRI of the shoulder. In March 2014, CT imaging demonstrated the appearance of 2 lung nodules, respectively, in the lower lobe of the right lung and in the upper lobe of the left lung. In May 2015, chest CT scan showed an increase in transaxial diameter of the nodule in the lower lobe of right lung (from 4 to 8.5 mm). The lung nodule was excised by a lower lobectomy, and the histopathological analysis was compatible with a metastasis from malignant peripheral nerve sheath tumor. PET/CT scan was requested by the oncologist for a suspicious of persistent disease in the right lung. However, although FDG PET/CT reported only a slightly uptake in the right lung, precisely in the site of the previous surgical approach, it revealed a solitary focal uptake in the bottom of the gallbladder (SUV_{max} 8.1). To differentiate primary from secondary cancer in the gallbladder, the patient underwent cholecystectomy revealing a metastasis from malignant schwannoma. Metastases from malignant and benign schwannoma in the gallbladder are extremely rare.^{1,2} Some examples of focal FDG uptake at PET/CT images have been reported in literature. In the majority of cases, gallbladder was the site of primary benign/malignant cancer³⁻⁶ or the metastatic site from renal cell carcinoma⁷ and breast cancer.⁸