primary bone tumor or metastasis, but it should be suspected when
the pain is continuous, even at rest, and there is no improvement
with analgesic therapy. When given pain with these characteristics,
simple radiography should be taken of the affected region, as it is a
test that provides much information. At middle age, and mainly
over the age of 60, the primary diagnosis initially includes a
metastatic origin, and then a primary tumor such as giant-cell
umor or osteosarcoma. Among the lung tumor types, non-small-
cell lung cancer most frequently presents bone metastasis, most of
which (66%) are detected at the time of the initial diagnosis. When
these lesions are metastatic, their management varies depending
on possibilities for survival. Even though the prognosis is very
poor, surgery of the area, especially if the hip is involved, provides
the patient with much better mobility and a high quality of life.
The best surgical option is complete resection of the metastasis,
especially when it is a single metastasis, and substitution of the
bone defect by implanting a megaprosthesi. The components are
generally cemented for fast bone incorporation and to be able to
rapidly make the patient mobile.3,4

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Thyroid Cyst Diagnosed by Endobronchial Ultrasound-guided
Transbronchial Needle Aspiration in a Patient With Lung
Cancer*

Diagnóstico de quiste tiroideo mediante ultrasonografía
endobronquial sectorial con punción-aspiración en un paciente
con cáncer de pulmón

Dear Editor,

We present the case of a 69-year-old patient, ex-smoker, dia-
betic and dyslipidemic, who was referred from another center
with the diagnosis of pulmonary adenocarcinoma obtained with
bronchoscopy that demonstrated a tumor in the orifice of the
anterior segmental bronchus of the right upper lobe. Positron-
emission tomography CT (PET-CT) confirmed a paramediastinal
mass with increased uptake (SUVmax. 15 g/ml) in the RUL
compatible with a malignant tumor, right lower paratracheal lymph-
phadonopathy with a fatty center with no FDG uptake and a right
upper paratracheal lesion measuring 8 mm, which was discretely
hypermetabolic (Fig. 1A and B) and interpreted as a lymphadeno-
pathy. Given these findings, the mass was staged as T3N1m0. As
the patient was a candidate for radical surgical treatment, it was
considered necessary to obtain samples in order to rule out N2
affectation.

Sectorial endobronchial ultrasound (Olympus BF-UC 180F,
Olympus, Tokyo, Japan) revealed a right lower paratracheal lymph-
phadenopathy measuring 13 mm × 10 mm with a fatty center
(Fig. 1C) that was aspirated and resulted negative for malign-
ant cells; in addition, there was a hypoechoic nodule in the
upper right paratracheal region (practically subglottic), measuring
8 mm × 7 mm (Fig. 1D), which Doppler ruled out as a possible blood
vessel. The ultrasound characteristics of said lesion were suggestive
of a cyst, and needle aspiration obtained a liquid that the patholog-
ical analysis demonstrated to have follicular cells in plaques and
groups, abundant macrophages and hemosiderophages on a back-
ground of colloid material, all of which were compatible with a
thyroid cyst.

The existence of false positives from PET-CT in the mediasti-
nal staging of lung cancer requires cytohistologic confirmation
based on minimally invasive techniques such as ultrasound bron-
choscopy. In this direction, recently published studies report a
negative predictive value of PET-CT of 95%.1

Most thyroid nodules detected in patients with pulmonary neo-
plasm are usually benign lesions. Nonetheless, thyroid metastases
in lung cancer have been described by some authors.2 It is for
this reason that cytohistologic confirmation is essential when
given a patient with malignant lung disease.

Thyroid cysts are nodules with liquid content, located in the
thyroid and differentiated from the rest of the parenchyma. Some
papers have been published about the clinical implications and rec-
nommended management in neoplastic patients in whom uptake
is detected by PET in the thyroid. The prevalence of this finding
ranges between 1.2% and 4.3% of cases. The risk for malignancy
of these lesions can reach 33%, corresponding with thyroid carci-
nomas (medullar or papillary), and in no case was it a metastasis
of a primary neoplasm. In addition, the value of the SUVmax is not
useful in order to differentiate between the benign or malignant
nature of these lesions; therefore, cytohistologic confirmation is
highly recommended.3,4

After reviewing the literature to date, we have only identi-
fied one single case published in a patient with small-cell lung
 cancer.5

We would like to emphasize the importance of confirming
positive PET-CT findings in the mediastinum in patients with
lung cancer, as well as the usefulness of sectorial endobronchial
ultrasound for the identification and complication-free
needle-aspiration of thyroid cysts.

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mediante ultrasonografía endobronquial sectorial con punción-aspiración en un
Fig. 1. (A) Axial chest CT slice in the mediastinal window showing an upper right paratracheal nodule. (B) The cross-sectional PET-CT slice shows evidence of a right upper paratracheal lesion that is discretely hypermetabolic. (C) Ultrasound image of the lower right paratracheal lymphadenopathy, measuring 13 mm × 10 mm, with a fatty center. (D) Subglottic hypoechoic nodular image, measuring 8 mm × 7 mm, corresponding with a thyroid cyst.

References


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