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OLGU SUNUMU

A NECK MASS MIMICKING THYROID NODULE: RARE PRESENTATION OF A METASTASIZING LUNG ADENOCARCINOMA

TİROİD NODÜLÜNE BENZER BOYUN KİTLESİ: METASTAZ **YAPAN AKCİĞER KANSERİNİN NADİR BULGUSU**

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ABSTRACT

Metastasis to the thyroid gland is a rare entity. Particularly the lung origin is an extremely rare situation. Here we presented a patient with a neck mass sited at the right thyroid region. Histopathological examination of the mass revealed “malign disease with an origin of lung adenocarcinoma”. Our report indicates that otolaryngologists, general surgeons, practitioners and pulmonologists need to be aware of this unusual presentation in order to perform accurate diagnosis of the patient.

Key words: lung adenocarcinoma, metastasis, neck mass, thyroid nodule

ÖZET

Tiroid bezine mestastaz nadir görülen bir durumdur. Özellikle akciğer kaynaklı metastaz oldukça nadirdir. Bu olgumuzda sağ tiroid lobu bölgesinde boyun kitlesi olanbir hasta sunulmuştur. Kitlenin histopatolojisi “akciğer kaynaklı adenokarsinom” olduğunu ortaya koymuştur. Bu olgumuz göstermektedirki, kulak-burun-boğaz, genel cerrahi, göğüs hastalıkları uzmanları ve pratisyen hekimler hastalarına doğru bir tanı koyabilmeleri için böylesi nadir bir prezentasyonun farkında olmalıdır.

Anahtar kelimeler: akciğer adenokarsinomu, metastaz, boyun kitlesi, tiroid nodülü

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INTRODUCTION

Neck is a complex part of the body that harbors numerous organs and tissues such as thyroid gland and lymph nodes in it. Although the primary malignancies of thyroid gland and lymph nodes are frequently present as a solitary mass in the neck, also metastasis from other parts of the body such as "nasopharynx, larynx" might be the source of these presentations (1). While the metastases in the upper and middle neck (level I-II-III-V) are frequently related to head and neck cancers, the lower neck (level IV) involvement is usually associated with primaries below the clavicles (2). Concerning about the central compartment of the neck (level VI), there are few reports about the metastatic involvement of this level and it is usually related to the malignancy of the larynx, hypopharynx, trachea, esophagus or thyroid (3).

CASE REPORT

A 40-year-old female patient presented with a palpable mass located at the inferior central compartment of the neck for 1 month. She had no other subjective complaint about the mass. In the examination, mass was non-tender and located adjacent to the inferior pole of the right thyroid gland and it has vertical movement toward the hyoid with swallowing together with the thyroid gland. Other parts of the neck were free of mass or other lesions. Ultrasonographic evaluation of the neck revealed "a solid mass, 4x2 cm in dimension, adjacent to the right inferior pole of the thyroid capsule but out of the thyroid tissue". Other evaluations such as complete blood count, X-ray of the chest etc. were normal. After the physical examination and radiological evaluation, surgical intervention was planed under general anesthesia. Limited Kocher incision was made initially and mass was dissected from the adjacent thyroid capsule. Frozen section procedure was performed for the mass and initial result was revealed as "malign pathology". Subsequently "right sided total thyroidectomy" has been performed in order to evaluate the thyroid gland for the possible primary. Initial frozen section procedure of the right thyroid tissue was free of both malignancy and nodule formation. So the procedure was terminated and specimens were sent for the final pathological evaluation. No perioperative or postoperative complication had occurred and patient was discharged without problem. Ten days after the hospital discharge, patient was admitted to the same hospitals' emergency with a complaint of "dyspnea" and "respiratory distress". She was conscious and free of cyanosis. After the initial examination, radiologic evaluation of the chest was performed by computed tomography (CT). CT of the chest was revealed "multifocal bilateral bronchial lesions" and patient was referred to pulmonologist for further pulmonary evalua tion after the initial treatment. Final results of the histopathologic examination of the specimens were revealed "lung adenocarcinoma metastasis to the lymph node" (Figure 1,2,3) and "disease free thyroid". Afterwards patient was scheduled to undergo further pathologic sampling of the bronchial lesions.

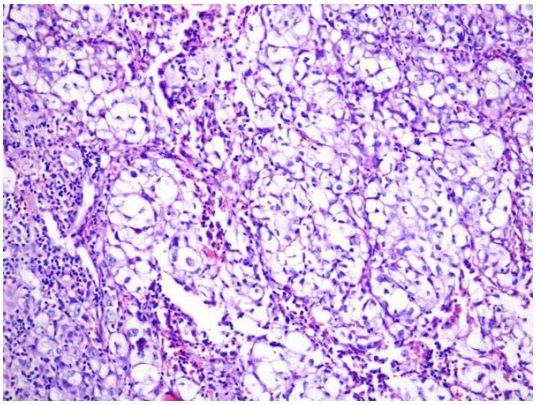

Figure 1: Excisional lymph node biopsy showed poorly differentiated carcinoma (H&E, original magnification ×200)

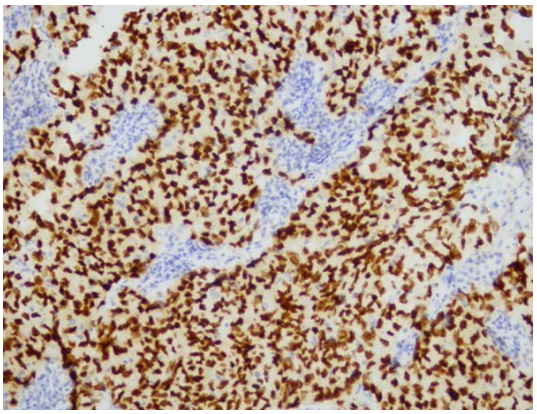

Figure 2: The tumor cells demonstrated diffuse positive nuclear staining with antibody to thyroid transcription factor TTF-1. (Original magnification 200x)

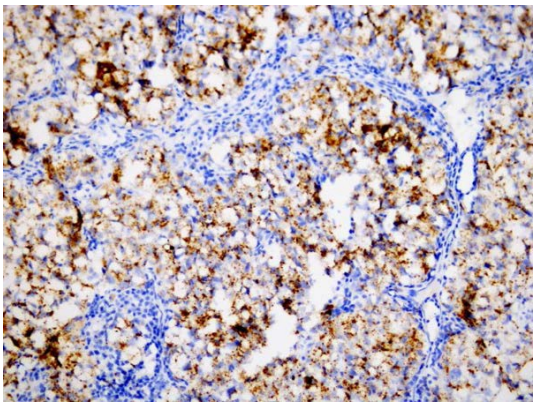

Figure 3: The tumor cells demonstrated cytoplasmic staining with Napsin A. (Original magnification 200x)

DISCUSSION

In case of a mass located in or adjacent to thyroid gland and moves together with the gland itself after swallowing is a very well known phenomenon that usually warns clinician about the pathologies of thyroid gland such as thyroid nodule. Concerning about thyroid nodules, it is expected to be in benign nature 95% of cases (4). Malign nodules are generally related to the primary carcinoma of the gland itself. More specifically, distant metastasis to the thyroid gland as a solitary mass is extremely rare condition (5). The most common sites of the primary tumor for metastasis to the thyroid gland include kidney, breast and lung (6). Among lung cancers, metastasizing to the thyroid, adenocarcinoma is the most common histologic type (7). Distant metastasis from lung cancer occurs most frequently to the brain, bone and liver (8). When a lymph node in the neck is involved during the case of a lung cancer, it is frequently occurs at the level of the supraclavicular region. In the case we presented here is a very rare presentation and few reports were published about this topic (9,10). It is not always possible to distinguish between benign and malign lesions by the physical or radiological examinations. Our case showed that malign lesions can mimic solid and benign thyroid nodules. Definitive histopathological result is the key factor to perform accurate distinction between benign and malign lesions. The central compartment of the neck, particularly the thyroid region might be involved by the metastasizing lung cancers especially the adenocarcinoma type.

According to our experience and other literature findings, we may conclude that in case of a solitary mass situated at the thyroid region, clinicians need to be prepared for both usual and unusual malignancies such as metastasizing lung adenocarsinoma.

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