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Case Reports

Sternocleidomastoid muscle metastasis of breast cancer: case report

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Summary

The authors report a case of 84-year-old women, with dysphagia to liquids and solid foods, and with infiltration of right sternocleidomastoid muscle that compressed the upper third of the esophagus to the thoracic hull. The biopsy of sternocleidomastoid muscle permitted the diagnosis of metastatic breast cancer relapse after 22 years.

Key words: Sternocleidomastoid; Breast cancer; Muscle metastasis; Atypical relapse.

Introduction

In literature, muscle metastasis of breast cancer is rare [1], especially the sternocleidomastoid metastasis localization [2]. Apparent extrinsic obstruction in the upper third of the esophagus represents an infrequent symptom of breast cancer relapse [2]. In this case, the atypical metastases with typical imaging representative of sarcoma, can lead to a diagnostic mistake.

Case Report

In October 2012, a 84-year-old women, presented an important dysphagia to liquids and solid foods. The clinical history of the patient was characterized by hypertensive heart disease, appendectomy, cholecystectomy, and breast cancer (invasive ductal carcinoma) in 1990 treated with tumorectomy and axillary lymph node dissection, followed by adjuvant radiotherapy.

The dysphagia symptom appeared in July 2012 and was associated with progressive decrease of weight. In August 2012 a first attempt of esophageal-gastric endoscopy showed stenosis with normal esophageal mucosa. In October 2012, second esophageal-gastric endoscopy showed a severe impassable stenosis of esophagus. A body CT-scan was then performed. It evidenced an important infiltration of right sternocleidomastoid muscle that compressed the upper third of the esophagus up to the thoracic hull (Figure 1). A small left pleural effusion was also evident. A PET CT-scan showed no hypermetabolism on the abdomino-pelvic level, but confirmed infiltration of right sternocleidomastoid muscle with fair hypermetabolism (3-4 SUV MAX) of right sternocleidomastoid, upper-third of the esophagus, left visceral pleural, and showed fair hypermetabolism of bone (pelvic iliac left, rachis C2 and T3, and bilateral rib cage). Blood analyses of CA 15.3 and ACE was respectively, 75 UI/L and eight µg/ml.

A biopsy of sternocleidomastoid muscle and histological analysis revealed an invasive ductal carcinoma, Ki 67 5%,

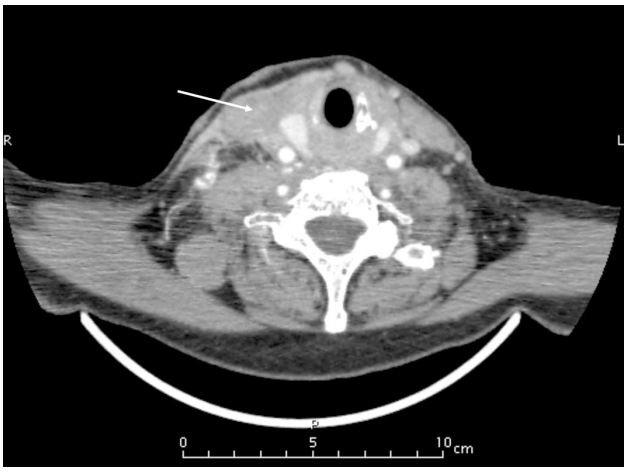

Figure 1. — CT scan showing infiltration of right sternocleidomastoid muscle with compression of the esophagus, causing its lumen to be concealed.

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hormonal receptor positive, and HERB2 negativity. In accordance with the histology of the first diagnosis, invasive ductal carcinoma in 1990, the last histological analysis, confirmed beyond any doubt, a relapse of metastatic breast cancer.

Compatibly with the performance status of patient, the authors prescribed chemotherapy with paclitaxel, weekly 80 mg/m^2, every three to four weeks for three months, in association with desonumab (one injection per month) with a partial morphological response (RECIST 1.1), and with an excellent clinical response. The patient resumed eating liquid and solid foods. While closely following hematologic tolerance with important asthenia (grade II), the authors stopped paclitaxel and began hormone therapy, always in association with denosumab. After 12 months of hormone therapy (anastrozol) always in association with desonumab, the patient continued to present a good clinical, biological (normalization of CA15.3 and ACE), and morphological response.

Conclusion

Histological analyses had confirmed a singular relapse of metastatic breast cancer after 22 years. The clinical history associated to histological analyses of muscle biopsy had permitted the correct diagnosis, with a consequent best therapeutic approach. In these modern times, characterized with innovative diagnostics, the importance of the anamnesis is never set aside.

References

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