Thyroid as a target of metastases: a case of metastatic seminoma in a patient who died of a second cancer

Franco Mattavelli1, Paola Collini2, Natalia Pizzi1, Nicola Nicolai3, Elisabetta Pennacchioli4, and Roberto Salvioni3 for the Thyroid Study Group

1Otorhinolaryngology Unit, 2Pathology Department, 3Urology Unit, and 4Surgical Department, Fondazione IRCCS Istituto Nazionale dei Tumori, Milan, Italy

ABSTRACT

Background. The typical route of metastatic spread of testicular seminoma is through lymphatic pathways, whereas hematogenous dissemination is less frequent. The thyroid is a rare site of metastases from any cancer, but any patient with a previous oncologic disease should inquire about a thyroid nodule.

Case report. We present a case of a 37-years-old man with a testicular seminoma with a peculiar metastatic spread behavior, with previously unreported histological findings. The initial clinical appearance was of a stage I testicular tumor with normal tumor markers. Nevertheless, the tumor appeared to have spread directly to the thyroid gland and subsequently to latero-cervical nodes, about 3 years after the first diagnosis. Perhaps the patient could have been treated with chemotherapy alone, as he developed a second cancer 6 years after the diagnosis, and that event could have been related to delivered therapies, mainly radiotherapy.

Conclusion. This type of seminoma spread has previously been described only once, and it is not a typical route for metastasis by seminoma. In view of this unusual finding, we reinforce the need for accurate diagnostic planning of any thyroid nodule occurring in a patient with a previous cancer history. Accurate staging is crucial in planning the treatment and follow-up of seminoma. Currently, greater attention is due to management of the disease at diagnosis, as emerging data support a risk of a second cancer among patients treated with radiotherapy and chemotherapy for a testicular cancer.