PP-T-09

FLEAS AND TICKS: A CASE OF SIMULTANEOUS DIAGNOSIS OF PAPILLARY THYROID CANCER AND SYSTEMIC MASTOCYTOSIS

https://doi.org/10.15605/jafes.037.AFES.136

Thanh Hoang, Kevin Brown, Zachary Bloomer, Jennifer Hatfield, Mohamed Shakir
Walter Reed National Military Med Center, Bethesda, United States

BACKGROUND
There is no known association between systemic mastocytosis and thyroid cancer. Here, we report a woman diagnosed with papillary thyroid cancer (PTC) and systemic mastocytosis, simultaneously.

CASE
A 43-year-old female presented with cervical lymphadenopathy for 3 weeks. She denied any fever, night sweats, flushing, or skin rash. CT scan showed bilateral enlarged cervical lymph nodes with bilateral thyroid nodules. Imaging also revealed multiple lytic lesions in her spine and pelvis. On physical examination, she had palpable cervical lymph nodes with a hard left-sided thyroid nodule. Neck ultrasound revealed a 2.1 cm left hypoechoic thyroid nodule with microcalcifications and cervical lymph nodes. Fine needle aspiration of the thyroid nodule and lymph nodes confirmed PTC. The patient underwent total thyroidectomy with neck dissection, histology confirmed classic PTC (pT3N1bM0). Postsurgical serum thyroglobulin was 17.0 ng/mL and I131 scan showed no metabolic activity in the axial skeleton. Subsequent bone marrow biopsy of the pelvic lytic lesions revealed systemic mastocytosis. The patient was treated with intravenous 4 mg zoledronic acid every 3 months with improvement.

PTC is an indolent malignancy with an excellent 10-year survival rate with rare bone metastases (<4%). Systemic mastocytosis is a proliferation of mast cells that has a wide clinical spectrum from indolent disease to mast cell leukemia. The axial skeleton is affected in up to 50-70% of patients. The most common malignancies known to be associated with systemic mastocytosis are melanoma and non-melanoma skin cancers.

In our patient, initial findings of multiple lytic lesions raised concern for thyroid cancer metastasizing to the bones. However, there was no functional radiographic evidence of metastases. correct diagnosis of concurrent systemic mastocytosis required bone biopsy. Our patient is currently doing well with a good prognosis for both conditions.

CONCLUSION
This is the first known case report of a patient being simultaneously diagnosed with PTC and systemic mastocytosis.

PP-T-10

VAN WYCK GRUMBACH SYNDROME INDUCED BY PRIMARY HYPOTHYROIDISM

https://doi.org/10.15605/jafes.037.AFES.137

Nidhi Joshi[1] and Harish Joshi[2]
[1]*D Y Patil Medical College, Kolhapur, India*
[2]*Endocrine and Diabetes Care Center, Hubbali, India*

BACKGROUND
We should always consider the possibility of partial or complete forms of premature puberty when dealing with primary hypothyroidism, particularly if the hypothyroidism diagnosis is delayed. Conversely, one should always keep in mind the possibility of primary hypothyroidism causing precocious puberty of the peripheral type.

CASE
An 8-year-old female was brought to the endocrine clinic due to short stature. She stands at 110 cm and weighs 31 kg. Her bone age was delayed by more than 2 years. Her TSH and anti-TPO antibodies were elevated. Following therapy with thyroxine 88 mcg daily, she was urgently brought to the clinic by her mother due to vaginal bleeding noted on the 25th day of thyroxine intake. She was noted to have thin-walled ovarian cysts and a thin endometrium on ultrasound indicating a peripheral type of precocious puberty. The serum estradiol and LH levels were in the prepubertal ranges. The parents were reassured and were asked to bring their daughter after 2 months for follow-up.

CONCLUSION
Her peripheral precocious puberty is likely due to the high TSH which can bind to the FSH receptors leading to the formation of thin-walled cysts and subsequent estradiol rise causing threshold bleeding which mimics menarche. The subsequent withdrawal of estradiol due to degenerating cysts may also trigger a random bleed. Unless there is heavy menorrhagia, specific therapy is not needed as the cysts tend to disappear spontaneously.