Author’s response to reviews

Title: Breast cancer metastases to the thyroid gland - An uncommon sentinel for diffuse metastatic disease: A case report and literature review.

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Dear editor,

thank you for your comments. We tried to address all the points to the best of our ability. Please find it below.

At the end of the Introduction there is a need to add a paragraph that explains why this case report is presented (what is unique and adds to the medical knowledge).

This has now been amended:

There are no prospective studies addressing the role of surgery in metastatic disease of the thyroid. Isolated thyroidectomy has been proposed as a local disease control option to palliate and prevent the potential morbidity of tumor extension related to the airway. Here, we present a rare case of a patient with breast cancer metastases to the thyroid gland, and review the evidence for the role of thyroidectomy in the context of the current literature. (lines 87-92)

More information is needed:

Give complete past medical, social, family, and environmental history. What medication was the patient on prior to diagnosis?
Additional information included:

Her past medical history included hypertension, controlled by Amlodipine and Losartan and diabetes, on treatment with Metformin. (lines 96-7)

The patient had no personal or familial risk factors for thyroid malignancy. (line 116-9-120)

Give detailed physical and neurological examination on the primary admission. What was the temperature, pulse, blood pressure and temperature, on admission? Was urinalysis done?

Is the editor referring to the initial diagnosis in 2004? Unfortunately, we do not have this information.

Give all results of laboratory findings (i.e. CBC, liver and renal functions), serology, microbiology etc).

What were the thyroid related laboratory results (TSH etc)

Additional information included:

Laboratory findings revealed a white cell count of 5.2 x109/L, haemoglobin of 115 g/L, and normal liver and renal function with an estimated glomerular filtration rate of 67ml/min/1.73m2. (lines 113-115).

We did not do the TSH level.

Give the duration and doses of all chemotherapeutic agent (lines 102-6, 122-3)

This has now been included:

Hormonal therapy initially consisted of 20mgs daily of Tamoxifen. After three years this was switched to an Aromatase inhibitor (Anastrazole 1mg daily) until 2009 when she completed 5 years of adjuvant endocrine therapy. The patient then subsequently relapsed with metastatic disease with lung nodules in 2008 and bone metastases were noted on bone scan four years later. She was commenced on 25 mgs once a day of Exemestane and 4mg intravenous monthly injections of Zoledronic acid in early 2014. Due to disease progression Capecitabine (1250 mg/m2 (based on total body surface area) twice daily) was commenced until after 6 cycles when it was discontinued due to Capecitabine-related toxicity and the patient was started on 2.5 mgs once a day of Letrozole and 150 mgs once a day of Ibandronic acid.
The chemotherapy was switched to 500mg intramuscular monthly injections of Fulvestrant and she continues to take the Ibandronic acid.

What medications (including doses) were administered at discharge. Did she receive Synthroid (what dosage?).

The patient was discharged on daily 125mcgs of Levothyroxine. (lines 131-2)

In the Discussion - describe what is unique in this case compared to what is available in the literature.

Additional information included and the paragraph now amended:

There are no prospective studies addressing the role of surgery in metastatic disease of the thyroid. Our patient with breast metastasis to the thyroid and co-existing lung and bone metastatic deposits, was managed with a total thyroidectomy with a good outcome. Isolated thyroidectomy has been proposed in previous studies [20, 37] as a local disease control option to palliate and prevent the potential morbidity of tumor extension related to the airway [37]. It has been also suggested that this may be beneficial for a selected group of patients with clinically significant and relatively isolated metastatic disease of the thyroid especially from a renal primary [25]; however, in the absence of prospective trials this is at best speculative. (lines 187-194)