

Hypercalcemia in locally advanced laryngeal cancer: an etiology to consider and a case report

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Introduction

Although Primary hyperparathyroidism is the most common cause of hypercalcemia in the general population, it is a less frequent cause of hypercalcemia among patients with cancer. It is estimated that approximately 80% of the hypercalcemia in cancer is mediated by humoral hypercalcemia of malignancy resulting from elevated parathyroid hormone-related peptide (PTHrp), while almost 20% is the result of local osteolytic hypercalcemia .

Aim of the study

The aim of this work is to present a clinical case of head and neck cancer associated with hypercalcemia and the etiological and therapeutic management

Methods

We report a case of hypercalcaemia diagnosed during the preoperative assessment of laryngeal cancer.

Conclusion

Although primary hyperparathyroidism is a less common cause of hypercalcemia in malignancy, it nonetheless should not be overlooked and an elevated calcium concentration cannot always be attributed to a known malignancy..

Results

- 75-year-old man Diabetes and a history of alcohol and tobacco
- Laryngeal dyspnea overlaid on chronic hoarseness that the patient had neglected.
- **Upon examination:** A poorly defined, hard, midline cervical mass was observed, adjacent to the thyroid cartilage, with skin infiltration. Clinically suspicious cervical lymph nodes were present.
- **CT scan:** extensive tumoral process of the larynx invading the three levels, classified as T4aN2.
- **Direct laryngoscopy + biopsy** confirmed the diagnosis of laryngeal squamous cell carcinoma.
- Asymptomatic **hypercalcemia of 2.8 mmol/L** was incidentally discovered during the pre-surgical biological assessment.
- Parathyroid hormone **(PTH)= 123 ng/L,**
- **Parathyroid scintigraphy = negative**
- The patient underwent **an extended total laryngectomy with total thyroidectomy and central and bilateral lateral neck dissection.**
- **Postoperatively:** calcium and PTH levels normalized.
- **The final histopathological examination** confirmed the **cancer diagnosis** and identified a **2 cm parathyroid adenoma** .