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Recurrent thyroid carcinoma with massive ulcerated neck secondaries

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ABSTRACT

Carcinoma of thyroid is a predominantly female disease. Of this, papillary carcinoma has the highest incidence. Total thyroidectomy followed by lifelong thyroxine is the standard way of management. Recurrences can be either local or regionally in the nodes. Recurrences are due to either the tumour being aggressive or to inadequate treatment. We report here a case of recurrent papillary carcinoma of thyroid with massive ulcerated neck nodes.

1. INTRODUCTION

Carcinoma of thyroid is a quite frequently encountered disease. Papillary and Follicular are the two types of differentiated thyroid carcinomas. Papillary carcinomas have a multicentric origin and commonly spread to the neck nodes. Blood borne metastases occur when the capsule of the thyroid is invaded. We report here a case of recurrent papillary carcinoma of thyroid with massive ulcerated neck nodes.

2. CASE REPORT

A 85 year old lady presented to the outpatient department with painful swellings on both sides of the neck for the past 2 years. One of the neck lumps was ulcerated. She had undergone total thyroidectomy 4 years back for papillary



Figure 1
Recurrent Thyroid Cancer with Neck Metastases – Front View



Figure 2
Recurrent Thyroid Cancer with Neck Metastases – Left view of the Lymph Node

carcinoma of thyroid. She had never been subjected to radio-iodine scan/ablation and was taking thyroxine irregularly.

On examination of the neck, there was a 12 x 5 cms fixed lump on the left side and a 7.5cms x 7.5 cms fixed lump on the right side. There was an ulcer on the surface of the left lump. The lumps were hard and had dilated veins on their surfaces. There was also a 5 x 3 cms hard, fixed, midline neck swelling in the region of thyroid. On investigating, the chest X-ray and abdominal sonography were normal. Fine Needle Aspiration Cytology of the neck lesions revealed papillary carcinoma of thyroid. As she was a poor surgical risk, she was referred for palliative external radiotherapy. She was also restarted on thyroxine.

3. DISCUSSION

Papillary carcinoma of thyroid is one among the two types of differentiated thyroid cancers; the other being follicular carcinoma. Papillary carcinomas are the commonest thyroid malignancies. They usually present as a swelling in the thyroid or as enlarged cervical nodes due to an impalpable carcinoma of thyroid. They are diagnosed on Fine needle aspiration cytology, when papillary structures are seen on microscopy. They are known for their multicentric growth. Lymph node spread is common and blood borne metastases occur when the tumour infiltrates the capsule of thyroid.

The treatment includes total/near-total thyroidectomy followed by radioactive iodine ablation and TSH suppression with thyroxine. Cervical recurrence occurs in up to 25% of patients with papillary thyroid carcinoma due either to the aggressive biology of PTC or to inadequate treatment (Kouvaraki et al. 2004). Besides clinical examination, several diagnostic tools, such as ultrasonography, ¹³¹I scanning, [¹⁸F] fluorodeoxyglucose positron emission tomography and thyrotropin stimulated thyroglobulin measurement can detect tumour recurrences (Frilling et al. 2000).

In patients with well differentiated thyroid carcinoma, ultrasonography and Fine needle biopsy are the most sensitive methods for the detection of local recurrence or regional lymph node metastases. FDG-PET is a useful

diagnostic tool in patients with a negative I ¹³¹ scan and a raised level of Thyroglobulin (Frilling et al., 2000, Frilling et al., 2001). In addition, even in patients with palpable lymph nodes, ultrasonography helped to guide the extent of lymphadenectomy (Stulak et al., 2006).

In Differentiated thyroid carcinoma, patients treated by radical primary approach and showing a low risk of recurrence, only half of all relapse cases are diagnosed by the rise of serum Thyroglobulin level. Regular sonography contributes to the second half of diagnoses. Thus, a special weight should be put on neck sonography as the important element of regular follow up in low risk Differentiated Thyroid Carcinoma patients (Krajewska et al. 2006). Cervical recurrences, predominantly in lymph nodes, occur in 14% to 30% of patients with papillary thyroid cancer. Postoperative surveillance for recurrent Papillary Thyroid Carcinoma increasingly includes thyrotropin-stimulated thyroglobulin and high-resolution ultrasonography. This combination commonly can detect recurrent disease as small as 5 mm (Stulak et al. 2006).



Figure 3

Recurrent Thyroid Cancer with Neck Metastases – Right view of the Lymph Node

Surgery is the mainstay of treatment of local and regional recurrences. Surgery is followed by radioactive iodine ablation or external radiotherapy. The inclusion of comprehensive ipsilateral central and lateral neck dissection in the re-operation for patients with lateral neck recurrence of Papillary Thyroid Carcinoma is an optimal surgical strategy (Roh et al. 2007). For locally recurrent Papillary Thyroid Carcinoma, systematic neck dissection is recommended over local resection of recurrent tumours (Uruno et al. 2004).

Initial total thyroid ablation with total thyroidectomy and radioiodine was associated with a lower rate of local relapse, although cause specific survival was unaffected. Many patients at risk for local recurrence received postoperative radiotherapy, which did not significantly affect the risk of local relapse or Cause Specific Survival in the entire group. A beneficial effect of Radiotherapy was demonstrated in the subgroup of patients with papillary tumors and microscopic residuum. Patients with postoperative macroscopic residual disease appeared to benefit from Radiotherapy (Tsang et al. 1998).

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