

Papillary Thyroid Carcinoma Presenting As a Cystic Lesion in Neck: A Case Report

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ABSTRACT

Local lymphatic spread is common in patients with papillary thyroid carcinoma (PTC). Lymph node metastasis to the neck may undergo cystic degeneration which consequently delays the diagnosis and the treatment of underlying thyroid malignancy. In this study we presented a patient with a cystic lesion in the neck as the only finding on physical examination. A benign etiology was considered initially, but papillary thyroid cancer was reported after surgical excision of the lesion.

Keywords: Papillary Thyroid Carcinoma; Cystic Degeneration

INTRODUCTION

Papillary thyroid carcinoma (PTC) is the most common type of endocrine tumors and constitutes approximately 1% of all malignancies. It usually presents as a mass in the thyroid gland but presentation as a lump in the neck is not rare [1]. Lymph node metastasis from PTC may rarely undergo cystic transformation [2]. It may be indolent and mimic the clinical course of a benign lesion which consequently delays the diagnosis and treatment of the underlying malignancy. In this study we described a patient presenting with a cervical lymph node as the initial finding.

CASE DESCRIPTION

A 40 years old male presented in East Surgical Ward, Mayo Hospital Lahore with complaint of right sided neck swelling for the last 8 months. There were no symptoms of fever, malaise, weight loss or dysphagia. There was no family history of thyroid malignancy or head and neck irradiation in childhood. There was no positive history of TB contact. On examination there was 4 x 4 cm cystic swelling in right posterior cervical chain, painless and mobile along with multiple enlarged ipsilateral cervical lymph nodes. Thyroid gland was not palpable. Thyroid scan showed small Multinodular Goiter and Extra thyroidal swelling involving right side of neck. FNAC reveals hemorrhagic smear with few atypical cells. Free T4 was 16.5 pmol/L (11.5-23.0 pmol/L) and TSH 2.39 mIU/L (0.30-5.0 mIU/L). Enhanced CT

Neck showed subtle enhancing nodule in right thyroid lobe and one nodule seen in left thyroid lobe (Figure 1).



Figure 1: Enhanced CT Neck showed subtle enhancing nodule in right thyroid lobe and one nodule seen in left thyroid lobe.

A large cystic lesion on right lateral side of thyroid gland extending up to lower neck with subtle necrosis and multiple enlarged Lymph nodes along right internal jugular chain. Thyroid and cricoid cartilages are normal. Impression: Papillary Papillary thyroid carcinoma with lymphadenopathy.

Total thyroidectomy and right modified neck dissection was done. Post operative course was smooth. Histopathology report showed: Classical papillary thyroid carcinoma, multifocal, large focus measures 2.5 cm. Lymphovascular invasion is noted.

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Metastatic carcinoma involving level 2 lymph nodes. 1 out of 10 positive lymph nodes in level 3. Metastatic papillary carcinoma level 4. All three lymph nodes positive in level 5. Salivary gland uninvolved by tumor. He was referred for radioactive I131 ablation after scan.

DISCUSSION

A cystic lesion in the neck may prove to be a branchial cyst, teratoma, epidermoid cyst, cystic hygroma, dermoid cyst, branchiogenic carcinoma or squamous cell carcinoma of the head and neck. Any underlying malignancy must be considered if the patient is 40 years and older while the diagnosis is usually a congenital cervical cyst in the younger patients [3]. Papillary thyroid carcinoma spreads to local lymph nodes in approximately 36% to 40% of the patients and it may rarely present as a cystic cervical lesion [4,5]. The cystic metastasis may not progress in size over time and mimic the clinical course of a benign lesion [6]. It may be diagnosed as a branchial cyst or cystic hygroma incorrectly thereby the diagnosis and the treatment of the underlying malignancy would be delayed.

Fine needle aspiration biopsy (FNA) is a practical procedure that can be used in evaluating the cervical lumps suspicious for malignancy. However it is of limited importance if performed to semisolid or cystic lesions. As in our case FNAC was unremarkable. The sensitivity and specificity of the procedure can be increased if performed along with US, but, FNA may still fail if the lesion is purely cystic and has no solid part.

CONCLUSION

Any cystic lesion in the neck should be assumed as malignant until proven otherwise. An FNA from the solid part of the cystic lesion would be of great value to establish the diagnosis preoperatively which certainly saves time and avoids unnecessary surgery.

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