

Papillary carcinoma of Thyroid Presenting as Cystic Subcutaneous Swelling and Discharging sinus - A Case Report

Ameya Bihani, Jaini Lodha, Arpit Sharma, Jyoti Dabholkar

Department of ENT and Head and Neck surgery, Seth G.S Medical College, KEM Hospital, Mumbai, India

Abstract- Papillary carcinoma is the most common malignancy of thyroid gland and presents generally as a thyroid nodule. Extra thyroidal extension of papillary carcinoma involving exclusively skin is very rare. We present a case of 65 year old male with papillary carcinoma of thyroid arising from isthmus presenting as a cystic skin swelling with discharging sinus masquerading as adenaxal tumour/minor salivary gland tumour.

present in the subcutaneous plane with extension deep in to the strap muscles upto the area of thyroid gland. Laryngeal framework and tracheal architecture was intact. No other significant finding was seen. We planned a wide local excision of the tumour with local rotation flap to reconstruct the skin defect. For the surgery, a circumferential incision was taken. The tumour with involved skin was dissected away from the surrounding. The strap muscles were retracted and deeper portion of the tumour was explored. To our surprise, the swelling was arising from the isthmus of the thyroid gland suspicious of malignancy. Hence, total thyroidectomy with central compartment neck dissection was done with wide local excision of skin. The mass was adhered to trachea from which it was shaved off. Closure was done in three layers. Patient was sent for radioiodine uptake scan and ablation. srgher

I. INTRODUCTION

Papillary carcinoma is the most common type of thyroid malignancy constituting about 85% of the it^[1]. The most common presentation of thyroid carcinoma is solitary thyroid nodule and progressive enlargement of the thyroid gland. Papillary carcinoma can present as cystic swelling accompanied with enlargement of the thyroid gland. But papillary carcinoma presenting as cystic subcutaneous swelling with discharging sinus without clinically palpable thyroid gland is very rare. Here we present an case report of 65 year old male who presented with a cystic subcutaneous swelling with occasional mucoid discharge in midline in the neck.

Histopathology report of specimen showed focally encapsulated tumour composed of thyroid follicular cells arranged in papillae, follicles and small sheets with occasionally trabeculae pattern with presence of psammoma bodies. Cells were enlarged with optically clear nuclei. Section showed epidermis which is focally ulcerated with regions of squamous metaplasia. No abnormality was appreciated in right and left lobes of thyroid.

II. CASE REPORT

A 65 year old male presented with a lobulated cystic swelling in the midline in the neck with complaint of multiple episode of discharge which started and stopped spontaneously. The swelling to start with was small which increased progressively in last 5 years. The neck swelling extended from the thyroid notch upto supra sternal notch. The swelling was non tender, regular, fluctuant with smooth surface and had positive transillumination test. The skin over the swelling was adhered at few points to the swelling. There was a small about 5 mm punctum from which mucoid discharge was oozing. The swelling neither moved with deglutition nor on protruding the tongue. No neck nodes were palpable. Thyroid gland could not be palpated. Laryngeal crepitus was present. Indirect laryngoscopy did not show any abnormality. There were no complaints of change in voice, breathlessness or difficulty in deglutition.

FNAC of the swelling was done which was suggested differential of skin adenaxal tumour or sero-mucinous gland tumour arising from minor salivary gland tumour from larynx. Ultrasonography revealed a multicystic swelling with septations transgressing deep to plane of strap muscles. Keeping these differentials in mind, contrast enhanced CT scan was done which revealed a multilobulated cystic swelling predominantly

III. DISCUSSION

Papillary carcinoma of thyroid is the most common malignancy of thyroid gland. Extra thyroidal extension is seen in 4 to 16 percent of cases and carries with it an increased risk of disease recurrence and reduces overall survival rate^[1,2]. Extra thyroidal extension involves invasion of trachea, oesophagus, recurrent laryngeal nerve, strap muscles and skin. Patients with Extra thyroidal extension were more likely to fail treatment and to die of their disease than were patients without Extra thyroidal extension (77% versus 34% and 71% versus 13%, respectively; $P < 0.0001$). Local, regional, and distant failures were more prominent among patients with Extra thyroidal extension than among those without Extra thyroidal extension (48% versus 9%, 41% versus 16%, and 37% versus 11% respectively; $P < 0.0001$). Survival of patients with ETE was adversely affected by nonpapillary histology, distant metastasis, age > 45 , tumor size > 4 cm, and incomplete excision ($P < \text{or} = 0.05$)^[2]. Thyroid malignancy with skin involvement with discharging sinus arising from isthmus with normal thyroid lobes and no lymphadenopathy has never been reported before this case. There have been only two reported cases^[5,6] of thyroid

malignancy involving only skin as extra thyroidal extension and both of them were diagnosed pre-operatively on FNAC as thyroid pathology (one was malignancy^[5] and the other goiter^[6]) and on of them had positive lymph node metastasis^[5].

Most common cystic lesion seen in midline of neck are dermoid cysts, epidermoid cyst, teratoma, cystic hygroma and rarely adenaxal tumours of skin. In such cases, gold standard of management is ultrasonography guided FNAC. The overall sensitivity of FNAC in the diagnosis of neck masses was 83.01% and specificity was 78.94%. Sensitivity was highest (82.14%) for neck nodes^[3]. As for USG guided FNAC, The overall sensitivity of FNAC was 84.6 per cent and specificity was 96.4 per cent. 11 true positive, 54 true negative, two false negative and two false positive results were noted. Positive predictive value for diagnosing malignancy was 84.6 per cent and negative predictive value for malignancy was 96.4 per cent^[4]. Hence, FNAC reports help in indicating the pathology but should not be relied upon completely if clinically not correlating and meticulous observation during surgical exploration is required for correct and complete treatment of the disease.

IV. CONCLUSION

Papillary carcinoma of thyroid presenting as cystic skin swelling with discharging sinus is very rare but should be kept in consideration on assessing such lesion. Though FNAC is not very accurate in diagnosis of cystic lesion of neck but may be helpful in giving a clue about a possible diagnosis. USG and CT scan should be advised for assessing the origin and extent of the lesion. Papillary carcinoma of thyroid with extrathyroidal extension should be given aggressive treatment in form of total thyroidectomy with appropriate neck dissection followed by radioiodine ablation.

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AUTHORS

First Author – Bihani Ameya, Post Graduate Resident, Department of E.N.T and Head and Neck Surgery, Seth G.S. Medical College and K.E.M. Hospital, Parel, Mumbai. ameyabihani87@gmail.com

Second Author – Lodha Jaini V, M.S., DNB, E.N.T, Senior Resident at the Department of E.N.T and Head and Neck Surgery, Seth G.S. Medical College and K.E.M. Hospital, Parel, Mumbai., jainilodha@gmail.com

Third Author – Sharma Arpit, M.S., DNB E.N.T, Assistant Professor, Department of E.N.T and Head and Neck Surgery, Seth G.S. Medical College and K.E.M. Hospital, Parel, Mumbai. drarpitsharma@gmail.com

Fourth Author – Dabholkar Jyoti P, M.S. E.N.T, DLO, Professor and Head Of the Department, Department of E.N.T and Head and Neck Surgery, Seth G.S. Medical College and K.E.M. Hospital, Parel, Mumbai., drjpdabholkar@gmail.com

Correspondence Author – Bihani Ameya, Post Graduate Resident, Department of E.N.T and Head and Neck Surgery, Seth G.S. Medical College and K.E.M. Hospital, Parel, Mumbai. ameyabihani87@gmail.com



Fig. 1 cystic midline swelling with draining sinus



Fig 2.CT scan showing multilobulated cystic mass abutting isthmus of thyroid

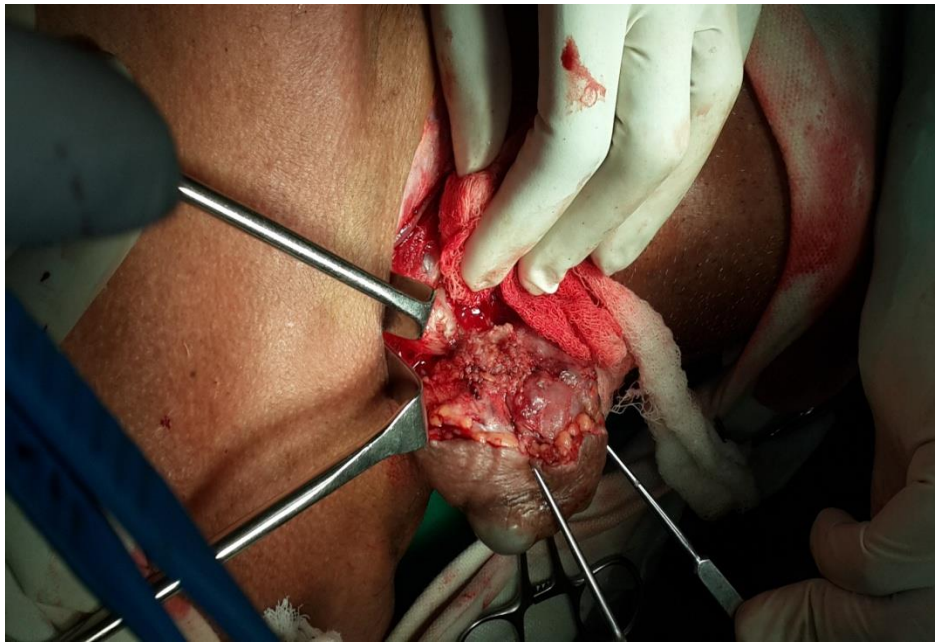


Fig 3.mass being seen arising from isthmus of thyroid and is dissected off the trachea