# Occult Papillary Carcinoma Thyroid presenting as Lateral Cystic Neck Mass. – A Case Report & Review of Literature.

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#### Citation

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#### **Abstract**

The appearance of a lateral cervical cystic mass as the only initial presenting symptom of occult thyroid carcinoma is uncommon. Its presence is often misdiagnosed due to the more frequent branchial cyst in young people. Although oronasopharyngeal squamous cell carcinoma has been reported as the main cause of lymph neck node metastasis, thyroid papillary carcinoma may be responsible for cervical cystic masses as the initial manifestation of the disease. This situation has been rarely reported, although solid masses are much more frequent. In most of these cases all such lesions may initially be considered as metastatic foci from a primary thyroid lesion. However, an alternative explanation by means of which ectopic thyroid tissue is associated with branchial cyst has to be considered, especially if no primary tumor is observed in the histological examination of thyroid gland. We present a rare case of cystic lymphnode metastasis of occult papillary carcinoma of the thyroid. We also discuss possible etiology for lateral papillary carcinoma in lateral neck cysts.

#### INTRODUCTION

Carcinoma of thyroid accounts for approximately 1% of Malignancies<sup>1</sup>. Papillary carcinoma is the most common type of thyroid malignances, with a female predominance<sup>1</sup>. 10% to 15% of these cases manifests as cervical lymphadenopathy & an occult primary lesion<sup>2</sup>. Isolated cystic metastases as the Presenting sign are extremely rare<sup>3,4</sup>. In the case reported, a cystic lesion in the patient's neck laterally proved to be an Occult papillary carcinoma.

# **CASE REPORT**

A 35 yr old man presented with swelling in left lateral aspect of neck of 3 years duration, which was noticed as a result of trauma (fig 1). Swelling was gradually progressive initially and has increased rapidly since 2 months. No other symptoms were referred by the patient.

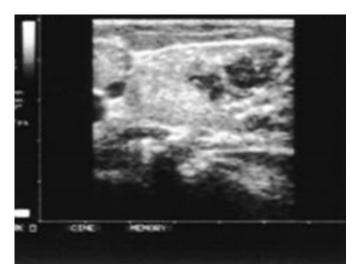
Figure 1



Local Examination revealed a diffuse swelling in the left lateral aspect of neck, measuring 6 x 3cms, extending from anterior border of sternomastoid muscle to posterior triangle of neck. Surface of the swelling was smooth with indistinct borders. Swelling was variable in consistency firm to cystic, non-tender and mobile. No abnormality could be made out clinically in thyroid and right side of the neck. A working diagnosis of post-traumatic hematoma of the neck was made.

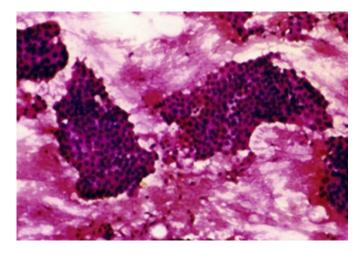
The patient underwent 2 conventional FNAs at 2 different places and a provisional diagnosis of branchial cyst versus organizing hematoma was made. Ultrasonography of neck revealed multiple lymph nodes in diffuse swelling of the lateral neck (fig 2).

Figure 2



Thyroid showed a focal lesion in the left lobe measuring 1x0.8 cms with microcalcifications in it. Right lobe and isthmus was normal. Radioactive iodine scan showed no cold nodules but for increased vascularity. Ultrasonography guided FNA of thyroid and lymph nodes showed the features of papillary carcinoma of the thyroid and metastases to lymph nodes (fig 3). The patient underwent radical neck dissection with total thyroidectomy.

Figure 3



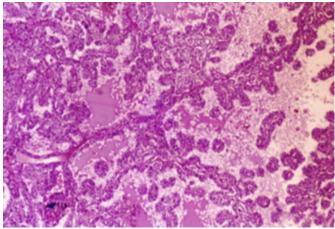
Gross examination showed gray brown mass along with thyroid measuring 13x11x5cms. External surface is nodular and congested. Cut section showed multiple lymph nodes and cystic spaces and a gray white granular area in left lobe of thyroid measuring 1.5x1cms (fig 4). 7 lymph nodes were dissected from the mass.

Figure 4



Histopathology of thyroid and lymphnodes confirmed papillary carcinoma thyroid with metastases in lymph nodes (fig 5).

Figure 5



#### **DISCUSSION**

Papillary carcinoma of thyroid presents itself as regional lymph node metastases from an occult primary source in 10 – 15% cases<sup>2,3,5</sup>. Although the presence of an occult primary tumor with palpable lymph nodes is not uncommon, the isolated finding of a cystic metastatic lesion in the lateral neck is. Wallace & Betstill<sup>5</sup> reported four cases of thyroid carcinoma manifested as a lateral neck cyst. In one case, the cyst was a direct extension of a papillary carcinoma with in the thyroid, in one case the primary lesion was palpable, in two cases, an occult primary lesion was found. Lougran<sup>6</sup> reported a case in which a cystic lesion in neck was thought to be a branchial cleft cyst but proved to be metastatic papillary carcinoma. It is advised that the finding of a lateral neck cyst should prompt an examination of the thyroid gland

with high resolution Ultrasonography, since thyroid scintigraphy has a limited ability to detect small tumors. Cystic degeneration of cervical metastases may cause the node to simulate the benign process. The presence of a solid component with the cyst, as shown by CT or Ultrasonography, should raise the suspicion of metastatic thyroid carcinoma.

Fine needle aspiration cytology is an important technique in the evaluation of thyroid disease. Which applied to cystic lesions, this technique is less sensitive & specific than aspiration of solid nodules, in cases of solid thyroid nodules, de los santos et al<sup>7</sup> reported a sensitivity of 100% & a specificity of 55% which were superior to the 88% sensitivity & 52% specificity when cystic nodules were evaluated. One would expect the limitations of this technique to apply to the evaluation of cystic metastases as well, as was shown by this case.

#### CONCLUSION

Papillary carcinoma of the thyroid is occasionally manifested as an occult primary lesion with palpable lateral cervical lymphadenopathy. When evaluating a cystic lesion in the lateral aspect of the neck, metastatic thyroid carcinoma should be included in the differential diagnosis. Solid elements with in the cystic lesion seen on ultrasonography or CT should raise the suspicion of this diagnosis. Aspiration cytology should be attempted but not definitively rule out thyroid carcinoma. Finally, high-resolution ultrasonography of thyroid may reveal a primary focus of tumor with in thyroid and assist in pre operative planning.

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