

Parathyroid Adenoma in an Elderly Patient with Unusual Presentation

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INTRODUCTION

In general parathyroid adenoma is not a common disease. Parathyroid adenomas often present a higher increase in the level of serum parathyroid hormone¹. Majority of patients may be asymptomatic or only with mild symptoms and are picked up on biochemical screening for another reason. Classical presentation of stones, bones, moans and abdominal groans is often quoted². This case report presents a rare picture of parathyroid adenoma in 70 yrs old male patient with pressure over left recurrent laryngeal nerve with left vocal cord palsy resulting in loss of voice.

Case report

A 70 yrs old man presented with history of dry cough with hoarseness of voice in Jan 2016 followed by gradual loss of voice in 45 days. There was no h/o fever, throat pain or loss of appetite or weight. He was not a smoker. He is a known case of hypertension with Ischaemic heart disease, underwent PTCA to RCA on treatment with clopidogrel, rosuvastatin, ecosprin, metoprolol and telmisartan. His General examination and systemic examination was inconclusive. Initially he was treated with cough suppressants, antihistaminics and PPI, but his hoarseness is increased along with difficulty in speaking in 30 days. As the patient had hoarseness followed by gradual loss of voice, direct laryngoscopy was done by ENT surgeon revealed paralysis of left vocal cord. His Complete blood Count revealed anaemia Hb10.4gm/dl with mild hypochromia and anisocytosis with hematocrit of 33.5. He

underwent CT scan Neck and Chest and Ultrasonography neck for further evaluation. CT scan of neck and chest revealed enlarged lymph node 2x2.4x3.2 cm at left superior paratracheal region with necrosis, resulting in left vocal cord palsy secondary to mass effect on the left recurrent laryngeal nerve. There was extensive coronary artery calcification noted. Ultrasonography neck showed enlarged elongated hypoechoic LN 1.8x0.7 cm at Left paratracheal region posterior to the left lobe of thyroid gland with loss of central echogenic hilum and increased vascularity. Thyroid gland was normal without any lesion. Small vascular hypoechoic nodule at lower pole of thyroid along medial external margin measuring 6 x 4 mms with possibilities of? thyroid nodule? Parathyroid nodule? parathyroid hyperplasia. USG guided biopsy was done for left paratracheal lymph node which was haemorrhagic. In view of above findings to r/o parathyroid adenoma or hyperplasia serum PTH and serum calcium levels were done. His serum PTH (intact) 68.5 (15-65pg/cc) which is just above normal range and S. calcium 9.5mg% (8.8-10.5mg%). There was a suspicion of ?parathyroid hyperplasia/? adenoma because of extensive coronary artery calcification with increased serum PTH and increased vascularity of nodule. He underwent conventional excision surgery with bilateral neck exploration on 23/2/16. After excision frozen section of tumor was diagnosed as a case of partly infarcted parathyroid adenoma with no histological features of malignancy. The lymph node behind the left lobe of thyroid showed central infarction with surrounding foreign body granulomatous reaction. Patient regained voice immediately after surgery. His serum calcium and serum Parathyroid hormone levels were within normal limits done in June 16.

DISCUSSION

Parathyroid glands may be located in many different positions in the neck from the pharynx to

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mediastinum. Parathyroid adenomas are most often located in the inferior parathyroid glands, but in 6 to 10% of cases parathyroid adenomas may be located in the thymus, the thyroid, the pericardium, behind the esophagus or pancreas³. Most patients with parathyroid hyperplasia or adenoma are asymptomatic due to widespread availability of laboratory screening for early detection⁴. Primary hyperparathyroidism is a generalized disorder of calcium, phosphate, and bone metabolism due to an increased secretion of PTH⁵. The elevation of circulating hormone usually leads to hypercalcemia and hypophosphatemia⁵. There is great variation in the manifestations. Patients may present with multiple signs and symptoms. Manifestations of hyperparathyroidism is classified into three categories,⁶ (a) skeletal changes because of bone resorption leads to pathological fractures, bone and joint pains (b) deposition of calcium in renal parenchyma leads to nephrolithiasis (c) gastrointestinal symptoms are subtle and include vague abdominal complaints and disorders of stomach and pancreas. Sometimes they encounter neuropsychiatric symptoms such as dementia or depression. Patients often complain mild subjective symptoms such as weakness and easy fatigability⁷, but due to the mechanical effect of the tumor such as dysphagia or a feeling of fullness considered rare since the tumors are usually small in size. But symptoms due to pressure per se are undoubtedly rare. In this case pressure symptoms are seen for the tumor which was located at lower pole of thyroid gland given constant pressure over left recurrent laryngeal nerve resulted in left vocal cord palsy with gradual loss of voice. When we searched the literature we have seen one case report published in *Annals of Surgery* February 1957 as parathyroid adenoma : A case report with unusual clinical features which revealed adenoma given pressure over right recurrent laryngeal nerve producing unusual clinical symptoms of coughing and forceful sneezing with repeated syncopal attack.

CONCLUSION

A case is reported on parathyroid adenoma without bone, kidney or gastrointestinal manifesta-

tions. Here patient had unusual presentation of hoarseness followed by loss of voice because of pressure over left recurrent laryngeal nerve resulted in left vocal cord palsy. Patient regained voice immediately after surgery. After surgery he is monitored for serum calcium 9.1 mg% and Parathyroid hormone (intact) 35.9 pg/cc levels in June 16 which were in normal limits.

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