

A YOUNG WOMAN WITH A GIANT CYSTIC PARATHYROID ADENOMA PRESENTING WITH MYELOFIBROSIS

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INTRODUCTION

Parathyroid adenomas are rarely large in size. Here, we present a giant cystic parathyroid adenoma presented with pancytopenia.

CASE REPORT

Twenty two years old female patient presented with fatigue, bone pain, polyuria, a lump in the neck and pancytopenia. She had a pulsatile mass on the right side of the neck which compressed her trachea. She was evaluated by Hematology since her Hb was 4.7 g/dL, WBC was 2200 u/L, platelet count was 69000 u/L. Bone marrow biopsy revealed myelofibrosis. During her evaluation, she was found to have a brown tumor on her right mandible. Her laboratory values were: Ca: 12 mg/dL (8.6-10), P: 2.2 mg/dL (2.3-4.7), ALP: 135 U/L (35-104), PTH: 327 pg/mL (15-65), 25(OH)D: 6.8 ng/mL (30-80) and 24-hour urine Ca: 320 mg/day. She was referred to Endocrinology. Her bone survey revealed diffuse osteoporosis, and brown tumor of right mandible. T scores obtained by DXA were: Lumber vertebra: -4.3 Femur neck: -3.4 Distal radius: -5.6. Glomerular filtration rate was calculated as 72 ml/min. She had no history of renal stones and renal ultrasonography revealed no stones. Her parathyroid scan and ultrasonography confirmed the presence of giant parathyroid adenoma. Her neck MRI revealed a mass next to the right thyroid lobe, 8x8x14 cm in dimensions, extending into the mediastinum (Figure 1). She received iron and vitamin D for three months followed by adenoma excision. Her surgery was unique among other surgeries performed to patients with giant adenomas since it was only performed by a servical incision without the need for thoracotomy. After the excision, intraoperative PTH level was measured as 87 pg/mL. Three months after the operation her Ca, P, ALP and PTH levels and her blood count were normal.

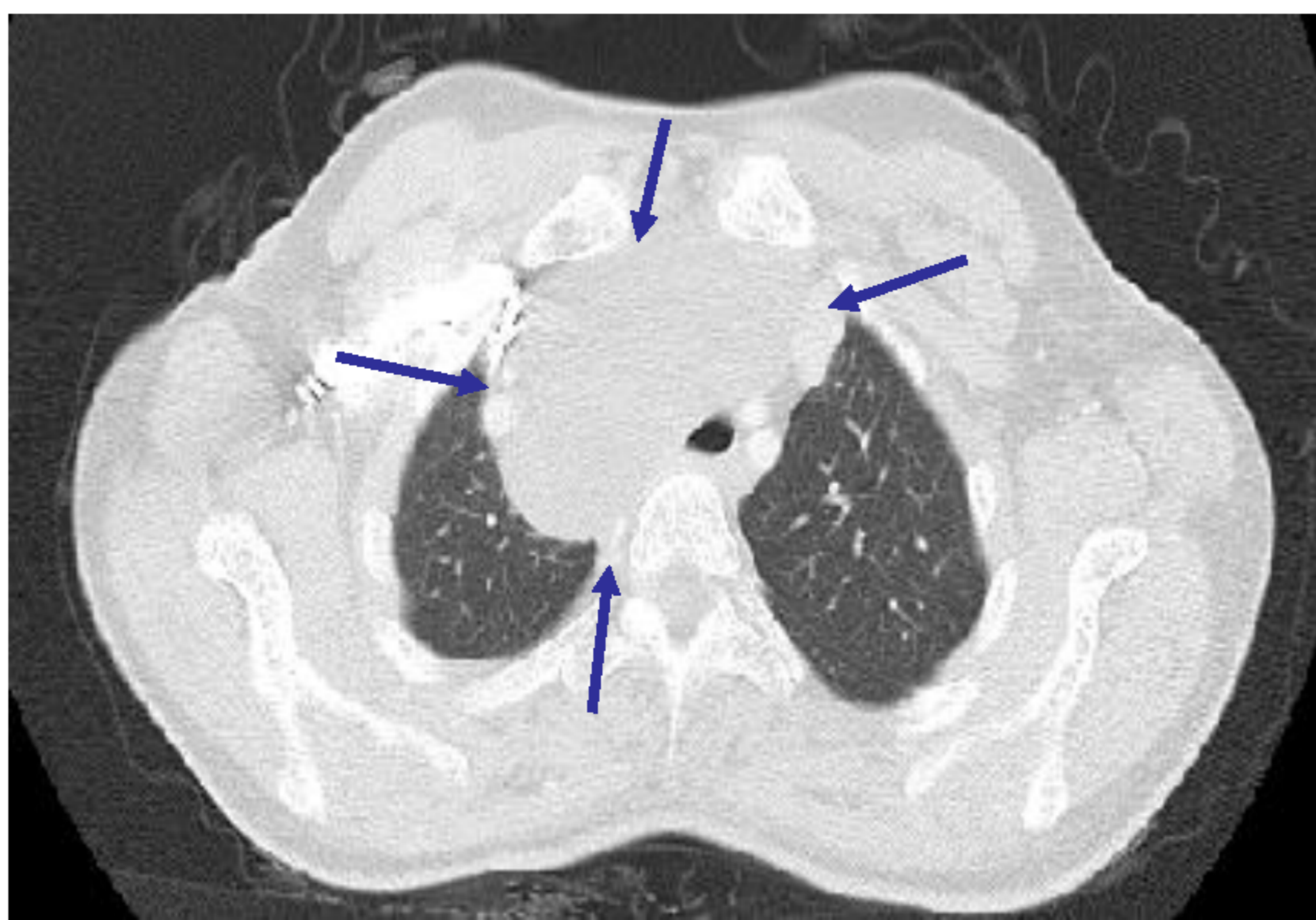


Figure 1. Neck MRI of the patient showing a mass next to the right thyroid lobe, 8x8x14 cm in dimensions, extending into the mediastinum (arrowheads)

CONCLUSIONS

Animal and human studies suggest a myelofibrotic role for high PTH levels. However, very few patients with primary hyperparathyroidism present with pancytopenia due to myelofibrosis. This patient with chronic primary hyperparathyroidism presented with myelofibrosis that resolved after parathyroidectomy.