A RARE PRESENTATION OF BILATERAL PARATHYROID ADENOMA WITH STUPOR -A CASE REPORT

Dr. Mulamreddy Hema[1], Dr. Viraja Nimmagadda[2]
[1]*2nd Year Post Graduate, Department of General Medicine,*
[2]*Assisstant Professor, Department of General Medicine,*
Alluri Sitarama Raju Academy of Medical Sciences - Hospital

***Abstract*- parathyroid adenoma is benign neoplasm of parathyroid gland that leads to excessive production of parathyroid hormone causing primary hyperparathyroidism leading to hypercalcemia and associated clinical manifestations.**
Hypercalcemia is defined as total serum calcium >10.5 mg/dL or ionised calcium>5.6mg/dL.

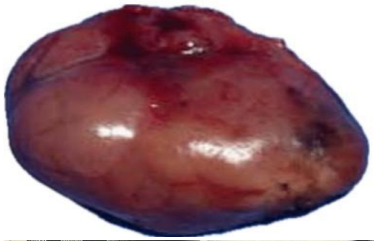
I. INTRODUCTION

Double parathyroid adenomas (DA) are seen in 2% to 4% of patients presenting with hyperparathyroidism. Hypercalcemia being a finding in emergency department is 0.5%.Altered level of consciousness is seen in 2.5% of all cases presenting to emergency department.Risk factor for the development of primary hyper parathyroidism is a history of prior neck irradiation. Genes typically suppressed regulating the cell cycle, such as MEN and CCNDI, have been recognised as playing an important role owing to the clonal nature of Adenoma.

II. CASE REPORT

A 54 year old female known diabetic presented to emergency with complaints of generalised weakness since 10 days and altered sensorium since 2 days. patient had no history of fever, weight loss. H/o vertebral fracture 10 years back due to trauma. For backache using calcium supplements 500 mg/day. On examination 54 year well built and nourished female patient was drowsy with GCS- 8/15 with pallor, dry skin & tongue, reduced skin turgor but Capillary refill time of 1s, bilaterally symmetrical pupils. CNS : GCS – E2V2M4, Movement of all 4 limbs to pain noted, Deep tendon reflexes : diminished, Plantars: Bilateral mute.No signs of meningeal irritation, No papilledema. cvs-s1,s2 heard ,no murmurs. Rs-bilateral normal vesicular breathsounds,no added sounds. P/A-soft,nontender,no organomegaly. Vitals - Temp-98,pr-117bpm Bp-100/80mm of Hg, Rr-20cpm spo2-98%Room air,GRBS-327mg/dl

- On evaluation
- ABG-pH – 7.46,HCO3 – 26,PCO2 – 35,Hb - 10,TLC – 12,290. DC-N/L/E/M/B – 65.7/24/4.0/6.0/0.3,Platelet – 4.48,Peripheral smear – Normocytic normochromic cells, Total leukocyte count increased. Differential count within normal limits.Urea : 63 Creat : 0.96,Uric acid : 8.7,calcium : 21.93,Phosphorous : 1.58 ,Sodium : 143 Potassium : 3.5, Magnesium : 1.7.LFT:TB – 0.61,SGOT and SGPT – 13, 13 ALP – 112,Protein – 8.3,Albumin – 4.3 ,Globulin – 4.0, A/G –1.1.CT Brain : Chronic lacunar infarct in right thalamus and capsulo ganglionic region. Intact parathyroid hormone-244 pg/ml.On USG neck- Bilateral inferior parathyroid adenomas largest measuring 23 x 18 x 10 mm,ACR Tirads 4 lesion of 1.8X0.7X0.6 cm in left. CT Abdomen : non obstructive renal calculus 2 mm, mild pancreatitis. CT Chest :Normal.Vitamin D – 26.82ng/ml.Thyroid profile – normal.Echo : EF : 55%, No RWMA, Concentric LVH, Moderate PAH.After treatment ca levels 21.93-16.41-11.88-10.08 With calcium decrease GCS improved from 8-15.



- It is the specimen showing parathyroid gland after parathyroidectomy
- Usg showing parathyroid adenoma

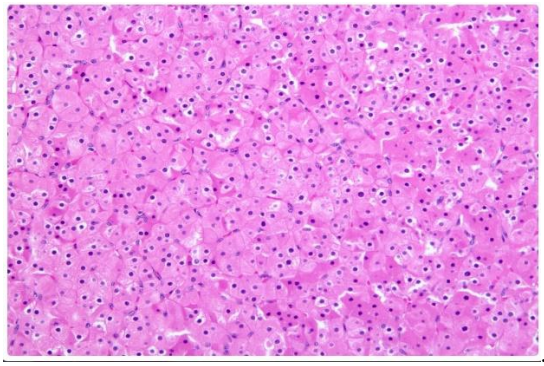


Fig 1: shows-oxyphil cells have abundant eosinophilic cyst

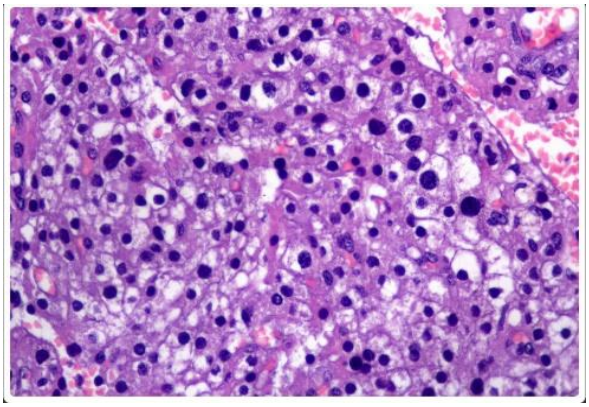


Fig 2 : shows Second image show fibrosis,hemorrhage.

III. DISCUSSION

Women, but not men, aged ≥50 years have a fivefold increase in incidence.
85% of patients are older than 50 years.
In 90% of cases, the primary hyperparathyroidism is asymptomatic,fatigue.
Musculoskeletal symptoms of PHPT remain the most common mode of presentation in developing countries, though renal manifestations too are commonly encountered.
Values greater than 14 mg/dL are associated with more frequent and severe symptoms which include lethargy, confusion, stupor, coma, pancreatitis, renal insufficiency, muscle weakness, arrhythmia, ventricular tachycardia.
Investigation-USG neck,Tc--99 sestamibi scan,Usg abdomen.
S.PTH,S.calcium,S.phosphorus.
Treatment-Adequate hydration
Calcitonin 4u/kg bd for 2 days
Bisphosphonates -zolendronate.
After stabilisation-Surgery-excision of gland.

CONSENT:
The consent was taken and signed by respective patient.

CONFLICTS OF INTEREST :
The authors has no conflicts of interest.

REFERENCES

[1]. BAILEY AND LOVE 28 edition
[2]. Walker MD, Shane E. Hypercalcemia: a review. Jama. 2022 Oct 25;328(16):1624-36.
[3]. Ojbindra KC, Dahal PH, Koirala M, Al Zaghal E. Unusual case of dehydration leading to severe symptomatic hypercalcemia. The American journal of case reports. 2022;23:e936204-1.
[4]. Ravioli S, Lafranchi A, Exadaktylos A, Haidinger M, Lindner G. Characteristics and outcome of severe hypercalcemia on admission to the emergency department: a retrospective cohort study. Swiss medical weekly. 2023 Apr 20;153:40069.
[5]. Kim KT, Jeon JC, Jung CG, Park JA, Seo JG, Kwon DH. Etiologies of altered level of consciousness in the emergency room. Scientific Reports. 2022 Mar 23;12(1):4972.
[6]. Goodsell KE, Ermer JP, Zaheer S, Kelz RR, Fraker DL, Wachtel H. Double adenoma as a cause of primary hyperparathyroidism:

Asymmetric hyperplasia or a distinct pathologic entity?. The American Journal of Surgery. 2021 Sep 1;222(3):483-9.