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ATYPICAL PRESENTATION OF TUBERCULOSIS IN ENDOCRINE SURGERY

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INTRODUCTION

- Tuberculosis is an uncommon infection affecting the thyroid, parathyroid, adrenal glands, pituitary glands as well as breasts.
- As they have atypical presentations it can pose a challenge to the treating surgeons in proper diagnosis and treatment.

DISCUSSION & CONCLUSION

- TB is ubiquitous.
- TB may present in thyroid in the form of malignancy, abscess, or thyroiditis.
- In the adrenal gland it may present as Adrenal insufficiency, benign adenoma or mimick adrenal malignancy.
- In breast TB may mimick conditions ranging from fibroadenoma to carcinoma including granulomatous mastitis.
- Hence a high degree of suspicion is required in diagnosing and treating atypical presentations of a thyroid, adrenal or breast lumps especially in TB endemic regions like Asia, Eastern Europe and Africa.

CASE VIGNETTES

CASE VIGNETTES 1:-

History:-

- A 53 year old gentleman came with rapidly increasing neck swelling for the past 15 days with associated dysphagia, voice change, headache and pain on neck movements.

Clinical examination:-

- A 15 *12 cm swelling was noted in front of the neck with restricted mobility on deglutition and lower border of the swelling was non palpable. Trachea was pushed to left side. Berry's sign was positive on right side with multiple level II, III,IV,V cervical lymphadenopathy. VDL showed right vocal cord palsy and a working diagnosis of **anaplastic carcinoma** was given.

Diagnostic procedures:-

- **CECT neck and thorax:-** (Fig 1) Possibility of malignant growth in the right lobe of thyroid of size of 9.8* 8.2cm with retrosternal extension. Necrotic lymph nodal mass in right level III, IV and V. Right IJV thrombus and right carotid artery encasement with ? secondary lung metastasis.
- **FNAC:-** Granulomatous lesion from both right and isthmus.
- **CORE BIOPSY: -** (Fig 2) Chronic inflammatory pathology with reactive fibroblastic proliferation with many epitheliod and giant cells and a small foci of caseous necrosis. IHC :- TTF-1 Positive, PAX8 –ve, P53 –ve, CBNAAT:- negative

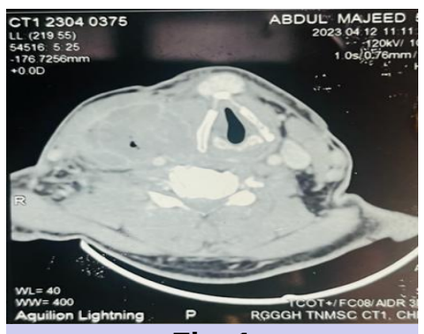

Fig. 1

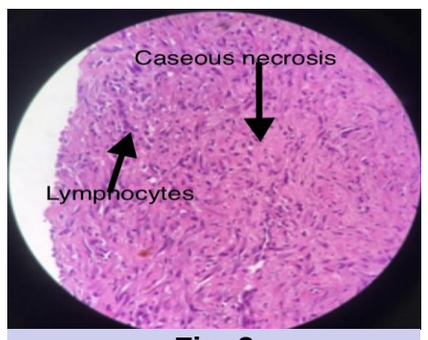

Fig. 2

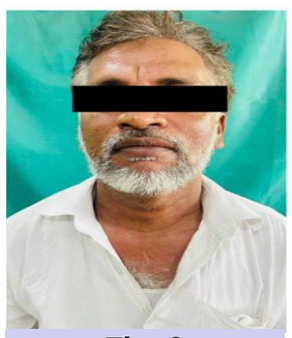
Fig. 9

- This patient was initiated with Anti Tuberculosis Treatment(ATT). Pain , dysphagia and size of swelling decreased rapidly after starting ATT. **Patient had complete resolution of symptoms and mass totally disappeared within 1 month of ATT course** (Fig 9).

CASE VIGNETTES 2:-

History:-

- 35 year old male presented with weakness of both lower limb with a working diagnosis of poly radiculopathy. He had left sided abdominal pain with low grade fever for 2 weeks. P/A:- mild tenderness+ both iliac fossa, BS+. He underwent CECT abdomen and was found to have a left adrenal incidentaloma.

Diagnostic studies:-

- **CECT Abdomen:-** A well defined hypodense lesion of size 5.9*5.2cm in Left adrenal gland with relative washout of 48 % and absolute washout of 70%. Retroperitoneal lymphadenopathy + with ascites and peritoneal thickening.
- **PET-CT:-** Left adrenal lesion of size 4.3*4.8*5.9cm (? Primary tumour) with suv max of 9 with retroperitoneal lymphadenopathy. (Fig 3).
- **CT Guided core biopsy** showed granulomatous lesion with possible tuberculous etiology, hence a diagnosis of **TB adrenal gland** was made. (Fig 4).

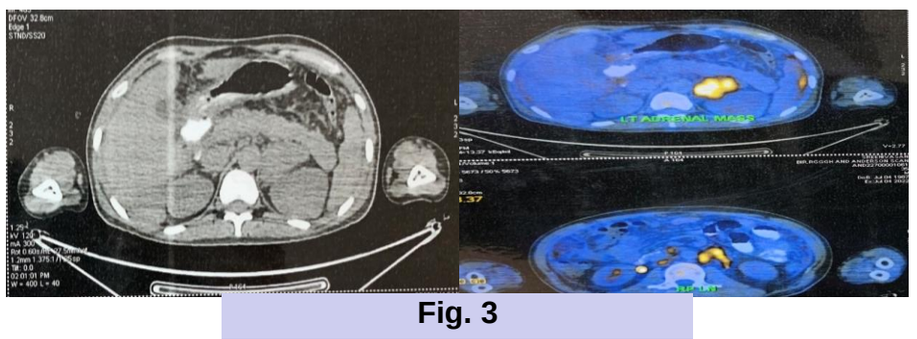

Fig. 3

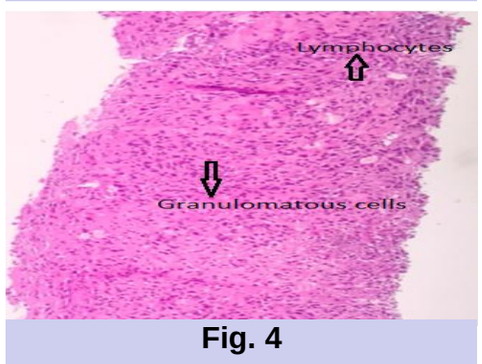

Fig. 4

- This patient was also started on ATT. His repeat CECT abdomen showed reduction in size to 3.2*2.8 cm after 3 months with resolution of symptoms.

CASE VIGNETTES 3:-

History:-

- A 52 year male came with rapidly increasing swelling and pain in the neck 1 week. He had cough and expectoration.

Clinical features:-

- A tender fluctuant swelling of size 8*5cm present in front of the neck which moves with deglutition. Level V Lymph nodes were palpable on both sides. (Fig 5)

Diagnostic methods:-

- Usg neck:- showed a hypoehoic area of approximately 10*8 cm with internal Brownian movements+ below the strap muscle arising from the right lobe of thyroid. Multiple cervical lymph nodes+ level III & IV , V both sides. Patient underwent I&D. Pus of about 30ml with caseous discharge let out and a diagnosis of **thyroid abscess** was made.
- Culture and sensitivity showed **Acid fast bacilli+**(Fig.6), **CBNAAT:- positive**

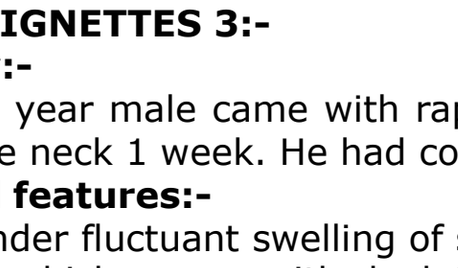
Fig. 5

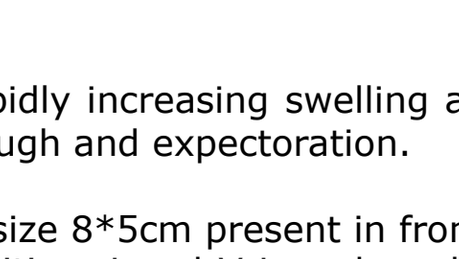

Fig. 6

- He was started on I.V antibiotics and Anti Tuberculosis Treatment. He had complete resolution of the abscess. On follow up scan USG revealed atrophic and fibrotic right lobe.

CASE VIGNETTES 4:-

History:-

- A 41 year old premenopausal lady came with a left breast lump for 1 month. Swelling was gradually progressing, not associated with pain, breast trauma, nipple discharge & fever.

Clinical findings:-

- A lump of size of 5*5cm in the left upper outer quadrant, minimal tenderness+, moves along with breast tissue and surface nodularity+, anterior axillary lymph nodes were palpable.

Diagnostic studies:-

- Sono mammogram:- A well defined hypoechoic lesion of size 4.5*5 cm noted left breast at 9-11'o clock position (BIRADS IVA) lesion.(Fig 7). FNAC:- showed granulomas, and mixed inflammatory cells. CORE BIOPSY:- revealed Langhans giant cells and caseous necrosis, hence a diagnosis of **Tubercular Mastitis** was made. (Fig 8).

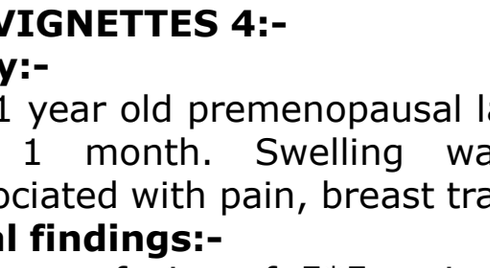

Fig. 7

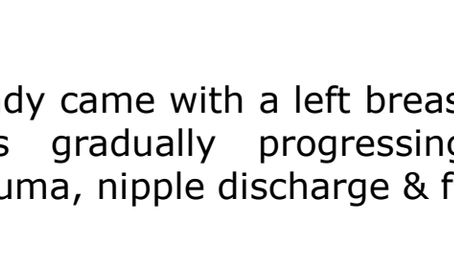

Fig. 8

- This patient too was initiated ATT and a 75% reduction in size of lump after 4 months was noticed.

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