Original Research Paper

Volume -10 | Issue - 3 | March - 2020 | PRINT ISSN No. 2249 - 555X | DOI : 10.36106/ijar

General Medicine

UNFAMILIAR PRESENTATION OF ACROMEGALY WITH NEUROFIBROMATOSIS AND HYPER PROLACTONEMIA

B. Madhava Rao*	Asso. Prof., Department of General Medicine, Maharajas Institute of Medical Sciences, Nellimarla 535217 *Corresponding Author
Gowtham B	Department of General Medicine, Maharajas Institute of Medical Sciences, Nellimarla 535217
L. Srinivasa Rao	Department of General Medicine, Maharajas Institute of Medical Sciences, Nellimarla 535217
Bilal Md. Sheik	Department of General Medicine, Maharajas Institute of Medical Sciences, Nellimarla 535217
Harshavardan D	Department of General Medicine, Maharajas Institute of Medical Sciences, Nellimarla 535217
Rajasekharreddy. M	Department of General Medicine, Maharajas Institute of Medical Sciences, Nellimarla 535217

ABSTRACT Acromegaly results from anteriorpituitary adenoma with hypersecretion of growth hormone. Acidophilic adenoma secrete both growth hormone and prolactin (in our case) , we report a case of increase in growth hormone and prolactin with associated neurofibromamatosis and hirsuitism.

KEYWORDS : Acromegaly-Hyperprolactonemia-Hirsuitism-Neurofibromatosis

Case history:
40 yrs old female presented since the age of 30 yrs with acral enlargements (hands and feet) Fig.1, bony promineneces of face (frontal bossing) with wide gap between the teeth of lower jaw, oily skin, decreased distant vision in both eyes, irregular menses and cutaneous nodules on left forearm , lower back (2x2 cm) and OA changes in both knees (Fig. 1), dorsal kyphosis , increased size of fingers and toes, coarse facial features with history of galactorrhoea and snoring. No past history of diabetis, hypertension, asthama, tuberculosis, seizures. Physical findings include pitting edema of feet, wrinkles on forehead, 2 x 2 cm mobile subcutaneous nodules over left forearm and lower back (circled ones Fig. 1). Pulse rate 88 per minute,blood pressure 190/110 mm.Hg. Cardiac examination revealed forcible apex beat., Respiratory system and abdomen examinations were normal. Genu valgum deformity of both knees (Fig. 1) present. Hirsuitism score 18/36. Clinical diagnosis of acromegaly, galactorrhoea, hirsuitism, hypertension and diabetis made.

Investigations:
Opthalmological exam – showed bitempioral hemianopia with more involvement of right eye (Fig.2) , X-ray of skull lat view (Fig. 3) showed increased diploe, erosion of posteriorclinoid process, enlarged and widened pituitary fossa (sella turcica). MRI of brain in T1 and T2 images (Fig. 3) showed heterogenous cystic component compressing optic chiasma.

Biochemistry showed raised blood sugars , increased prolactin and growth hormones (table 1). Biopsy of subcutaneous nodules confirmed nerurofibroma histology (spindle shaped cells, irregular nuclei, lying against myxoid background).

Management:
Treated with metformin,dopamine agonists bromocriptine and carbergoline., SRIF receptor ligands octerioide and anti hypertensives. Increased nocturnal prolactin levels treated with cyproheptadine. These measures helped in shrinkage of tumour size. Later submitted to transsphenoidal pituitary surgery. Within 4 hrs after surgery growth hormone level decreased, prolactin level remained normal, vision improved but patient developed SIAADH postoperatively which was managed conservatively. Neurofibromas excised.

Followup:
Periodically with T1 and T2 weighed MRIs, growth hormone, prolactin, cortisol and perimetry showed no recurrence of pituitary tumour

DISCUSSION:
We presented this case of acromegaly for its unfamiliar association with neurofibromatosis and hirsuitism and hyperprolactonemia. Literature shows 50% of patients with acromegaly have elevated prolactin levels. Postoperatively measurement of growth hormone showed fall in growth hormone to less than 1ug/L with significant decrease in blood pressure, LV mass and heart rate.

Acknowlegements:
We are thankful to biochemistry, pathology, radiology, ophthalmology and cardiology departments of Andhra Medical College and King George Hospital, Visakhapatnam 530 002 for timely help and to the patient and her parents for giving permission for publication of the case.

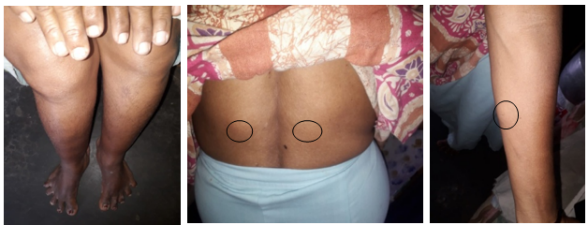

Fig. 1 genu valgum, acral enlargements and neurofibromatosis

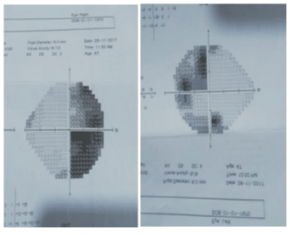

Fig : 2 Rt. eye & Lt. eye

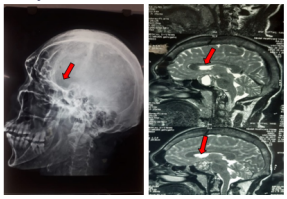

Fig: 3 Lat view skull X ray & MRIs

Table 1 Biochemistry

Fasting blood glucose 149 mg/dl
Serum growth hormone – 1hr 42.13 ng/ml
Postprandial blood glucose 277 mg/dl
Serum growth hormone – 2hr >50 ng/ml
Serum prolactin >200 ng /ml
Serum FSH 4.29 mIU/ml., LH 0.62mIU/ml
Serum cortisol (8am) 5.41ug/dL
Anti HCV, HIV 1 & 2, HBsAg non reactive

REFERENCES:

(1) Tauber JP, Babin T subcutaneous octeroide in the treatment of acromegaly J of clinical endocrinology and meta. 1989, 68., 917 – 924
(2) Arafu BM, Selman WR: improvement of Pituitary function after surgical decompression of Pituitary tumour.. J of clinical endo. Meta 1990: 71: 323 – 328
(3) Neuroopthamological evaluation of Pituitary disorder: Blackwell Scientific publication 2001 : 687-708
(4) Neurofibromatosis type 2 in 1st decade of life : Gandiosco, Listernick R, Fischer MJ, Campen CJ, Paz A, Gutmann DH: Neurology 2019 Sept 3: 93(10)
(5) Cusick J, Hagen T, Findling J: Inaapropriate secretion antidiuretichormone after transsphenoiedal pituitary surgery. N Engl J Medi 1984: 311: 36-38