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Cushing's Syndrome Associated with Thymic Tumour in a 32 year old Zambian African Female

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INTRODUCTION

As early as 1928 Brown noticed the association of Cushing's Syndrome with Bronchial Carcinoma. Since then, similar cases have been recorded by different authors with increasing frequency. Biochemical and bioassay techniques have left little doubt that under these circumstances the adrenal hypersecretion responsible for the Cushing Syndrome is the result of stimulation of Adrenocorticotrophin (ACTH) or by an adrenocorticotrophin-like hormone elaborated by the malignant cells themselves. Recently, extra-adrenal carcinomas, especially those arising from thymus, the ovaries and the pancreas have been shown to produce similar adrenal hyperactivity with overt clinical and biochemical Cushing's Syndrome. To the best of our knowledge, however, none of these conditions have been described in the Southern African or Zambian Medical Literature.

CASE HISTORY

The patient is a female African of 32 years who was referred to Kitwe Central Hospital by a Psychiatrist at Kasama Hospital. The patient had suffered from loss of memory, depression, mental confusion, generalized body weakness, weakness of the lower extremities, backache, headache and swelling of the face for four months.

CLINICAL EXAMINATION

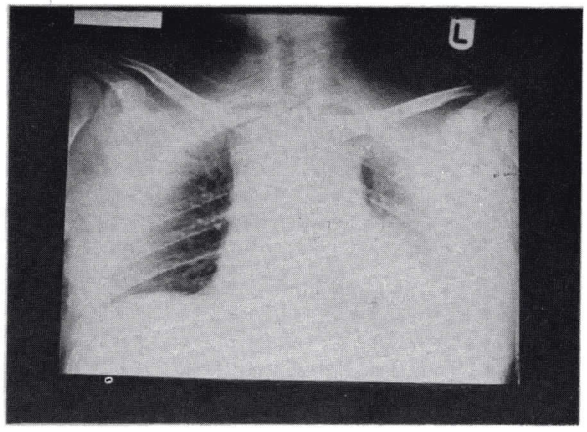
Obese, marked buffalo lump, moon face (Fig. 1) purple striae on the arms, the anterior abdominal wall and thighs, peticheal haemorrhages and Ichymosis on the skin of the arms, the trunk and the thighs. Complete loss of hair from the axillae and the pubis. The patient was irritable, uncooperative, mentally dull and confused. Her apex beat was displaced to the left and her aortic second sound exaggerated. The B.P. was 160/110 and the pulse 84/min. It was regular but hard and bounding in nature. Optic fundi: Grade II Retinopathy.

FIG. I

INVESTIGATIONS

1. CHEST X-RAY
   Marked widening of mediastinal shaddow 10–11 cm. Cardiomegaly with Cardio-thoracic ratio of 67%. Spontaneous fractures of the lower ribs (Fig. 2).
2. E.C.G.
   Left axis deviation and left ventricular hypertrophy.
3. X-RAY OF THE SPINE
   Osteoporosis of the cervical, thoracic and lumber

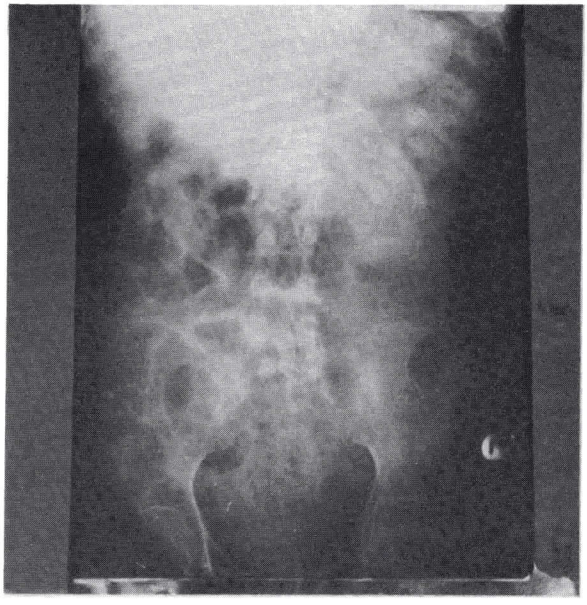
FIG. II



spines with collapse of L_1, L_2 and L_4.

4. I.V.P.
   Enlarged adrenals.
5. PNEUMOPERITONEUM
   Bilateral adrenal Enlargement.
6. SKULL X-RAY
   Sella Turcica is normal in size and shape.

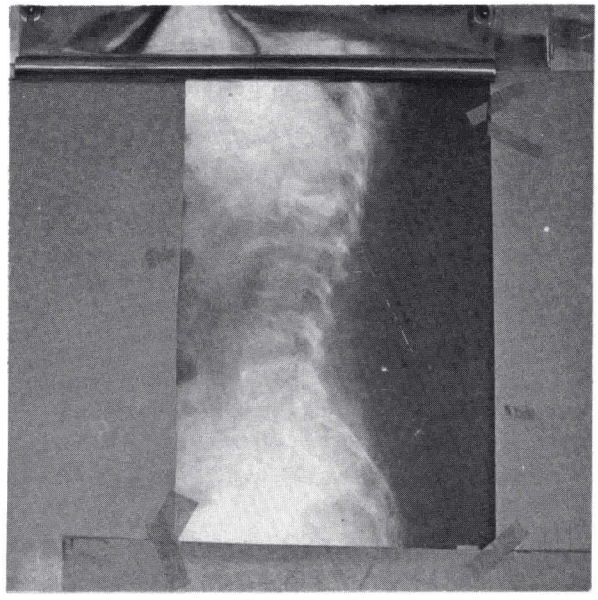
FIG. III



7. HAEMATOLOGY
   HB 13 G%
   W.B.C.S. – 11,200
   Platelets – 114,000
   Prothrombin Index – 100%
   Bleeding Time – 3 mins., 50 secs.
8. Urinary 17 hydroxycordicosteroids: 14 mgms/24 hours.
   Urinary 17 ketosteroids: 11 mgms/24 hours.
   Due to technical difficulties, the examethazone suppression test was not done.
9. BLOOD CHEMISTRY
   Blood glucose – 225 mgms/100 ml.

G.T.T. Fasting	:	365 mgm%
½ Hour	:	454 mgm%
1 Hour	:	481 mgm%

FIG. IV



1½ Hours	:	510 mgm%
2 Hours	:	618 mgm%
2½ Hours	:	548 mgm%
Serum Sodium	:	145 mEq/L
Serum Potassium	:	2 mEq/L
Serum Chlorides	:	86 mEq/L
Serum Bicarbonates	:	36 mEq/L
Serum Calcium	:	10 mgms%
Serum Phosphorous	:	2 mgms%
Serum Proteins:		
Total	:	7.1 G%
Albumin	:	2.8 G%
Globulins	:	4.3 G%

TREATMENT

A. SURGICAL
   Was not advisable due to the advanced stage of the disease and due to the general poor and debilitating condition of the patient.

B. MEDICAL
   This could only be symptomatic:
   (1) Proteins rich diet
   (2) Oral hypoglycaemics, Tolbutamide 500 mg – 8 hourly.
   (3) Methyldopa: 500 mg – 8 hourly.

DISCUSSION

Though widely described in Europe and America, Cushing's Syndrome associated with Extra-adrenal

malignant tumours, has not yet been reported from Africa in general and from Zambia in particular.

This case is, however, to the best of our knowledge, the first of its kind to be described and documented from this part of the continent. Our treatment of the case was purely medical owing to the advanced state of the condition.

SUMMARY

A case of extra-adrenal Cushing's Syndrome, due to thymic tumour has been described for the first time in Zambia and also in Southern Africa.

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