CASE REPORTS

CUSHING'S SYNDROME IN A ZAMBIAN YOUTH

R.B. Kihn, M.B.,Ch.B.(Cape Town)
M. S.(Cape Town)*

Department of Medicine and Surgery, Veterans Administration, Washington D. C. U.S.A. and.

J.C.Davidson, M.B.,Cn.B.(St. And.)
M.R.C.P. (Edin.)

Consultant Physician, Lusaka Central Hospital

*** Formerly Consultant Surgeon, Lusaka Central Hospital.**

CUSHING'S syndrome is an uncommon disorder in the European and has seldom been reported in the African. [1., 2.] This case is reported as no record of the condition in a Zambian has been found.

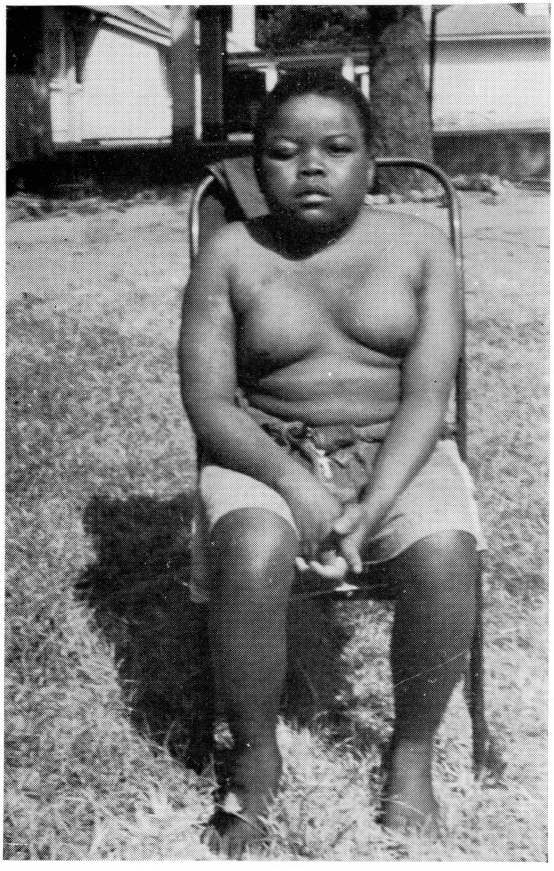

Fig.1.Patient shows classical features of Cushing's syndrome

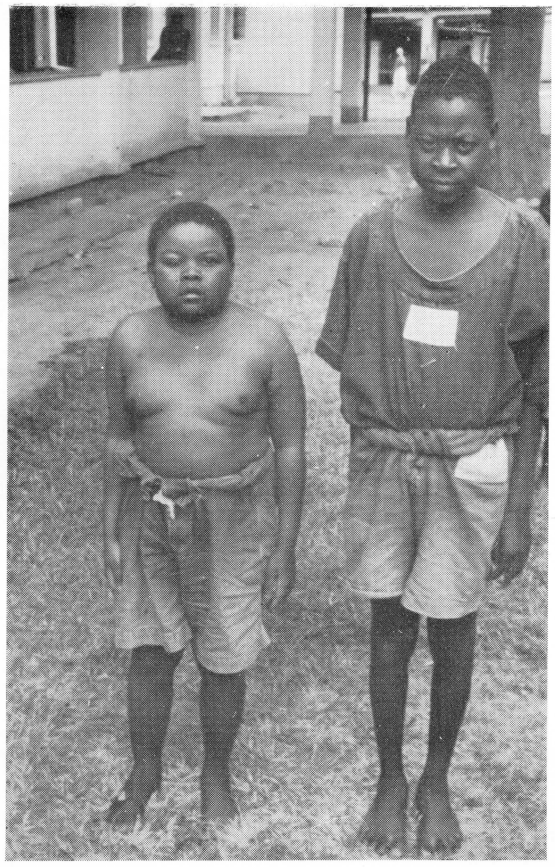

Fig. 2. Patient with a normal boy of the same age. showing retardation in height.

CASE HISTORY

The patient a male African of 15 years was referred to hospital by the Late Mr. L. Nixon health inspector in the Gwembe Valley as a case of pituitary tumour. For a year he had suffered from backache, morning occipital headache, generalised pruritus and increasing obesity. He had had an ulcer on his left foot for five months.

EXAMINATION

Obese, marked buffalo hump, short stature—height 53 ins: moon face, drooping right eye lid (old injury); (Fig. I). (Fig. 2.) Purple striae on the hips, thighs and abdominal wall; ulcer dorsum on left foot.

C.V.S. Apex beat displaced to the left.; Aortic second sound exaggerated; B.P. 190/120: Fundi—grade 2 hypertensive retinopathy.

INVESTIGATIONS

1. E.C.G. left axis deviation, horizontal heart.
2. Hb 12.8 Gms%. 3. Blood urea 12 mgm%.
4. Glucose Tolerance Test. Fasting 83 mgm %; 1/2 hour 108 mgm%; 1 hour 117 mgm %; 1 1/2 hours 104 mgm%; 2 hours 104 mgm %;

Continued on page 137

Continued from Page 135

2 1/2 hours 96 mgm %.

5. Serum electrolytes; Na 140 mEq/L ;K5.6 mEq/l
6. Radiological, Investigations.
   —Chest x-ray moderate cardiac enlargement.

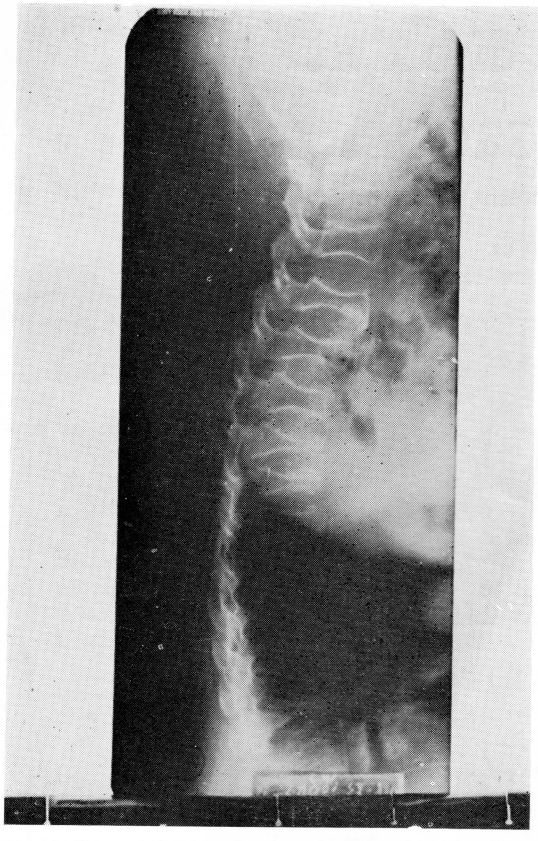

Fig. 3. X-ray of spine showing osteoporosis and collapse of vetebrae.

   —Dorsal and lumbar spine (fig. 3.) gross osteoporosis, and collapse of vertebrae.
   —Presacral, air insufflation and I.V.P. no definite evidence of adrenal tumour.
   —Bone age about 12 years.
7. Urinary 17 hydroxycorticosteroids 7.85 mgms/24 hours.
   Urinary 17 ketosteroids 9.19 mgms/24 hours.
   Urinary 17 hydroxy corticosteroids 13.9 mgms/24 hours.

Unfortunately due to technical difficulties the dexamethasone suppression test was not done but as the patient was a florid case of Cushing's syndrome and as the most likely diagnosis was adrenal hyperplasia [3] it was decided to proceed with operation.

FIRST OPERATION

The right adrenal was explored through a loin extraperitoneal approach removing a rib. It was assessed to be enlarged and 9/10 was removed.

SECOND OPERATION

Six weeks later the left adrenal was approached in a similar manner. This gland too was thought to be enlarged, although not excessive. It was removed completely.

The patient was prepared with cortisone for the first adrenal operation by means of the regime outlined by Montgomery and Welbourne. [4]. The preparation commenced two days before operation, was continued between operations and the dose gradually reduced from the third day after the second operation. There was a normal response to the operative procedures. The temperature rose and remained elevated for the first 72 hours postoperatively. Electrolytes were monitored and showed no abnormality.

SUBSEQUENT PROGRESS

He progressed well, the blood pressure slowly returning to lower levels. Two months after the second operation he collapsed with a cough, chest pain and vomiting; the blood pressure was unrecordable and the pulse impalpable. Immediate treatment with intravenous hydrocortisone and antibiotics resulted in recovery and he was discharged a few weeks later, on oral cortisone acetate 12.5 mgms twice daily.

Three months later he had lost most of his original complaints and the stigmata of Cushing's syndrome. (Fig. 4). We had difficulty in recognising him as the same boy. The blood pressure was 120/80.

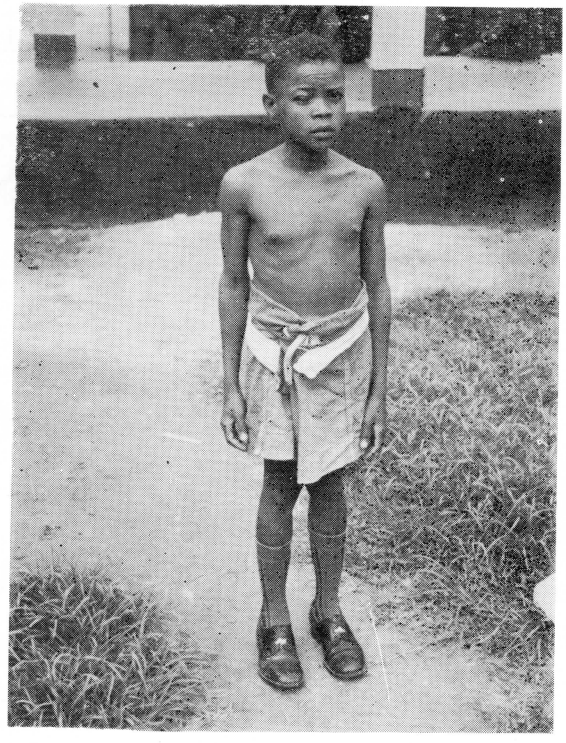

Fig. 4. The patient three months after operation.

DISCUSSION

The response to treatment clinched the diagnosis in this case beyond doubt. Until the true nature of Cushing's syndrome is known treatment will not be completely

Continued on page 139

Continued from page 137

rational. As there are no facilities for pituitary irradiation in Zambia adrenalectomy was decided upon. There appears to be little to choose between an attack on the pituitary or the adrenals as remission occurs in about half the patients treated by either method.[5]

Unfortunately like so many patients in Central Africa he has not attended for further follow up. He may have succumbed to infection associated with adrenal insufficiency or suffered a recurrence.

SUMMARY

A case of Cushing's syndrome treated by adrenalectomy is described.

ACKNOWLEDGEMENTS

We wish to thank Dr. M. M. Nalumango, Permanent Secretary Ministry of Health for permission to publish. We thank Mr. J. D. Staples, A.M.I.L.T. for the laboratory investigations and Dr. K. M. Khurana for radiological help.

REFERENCES

1. Trowell, H. C. (1960) Non-Infective Disease in Africa, Edward Arnold, London.
2. Rachman. I. and White, A. (1966) Cent. Afr. J. Med. 12, 17.
3. Bishop, P. M. F. (1954) Recent Advances in Endocrinology J. & A. Churchill, London.
4. Montgomery, D. A. D. and Welbourne, R. B. (1963), Clinical Endocrinology for Surgeons.
5. Leading Article (1965) Brit. Med. J. 2, 379.