Hypopituitarism (Sheehan’s syndrome) presenting with organic psychosis

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Blau and Hinton (1960) described a patient who had psychotic symptoms apparently due to hypopituitarism and relieved by replacement therapy.

This paper is about a similar patient whose case seems worth presenting because (1) the diagnosis was made before coma had fully developed, and (2) the psychotic symptoms were the presenting symptoms and were apparent two years before coma developed.

CASE REPORT

The patient was a woman aged 55. For two years before her admission to a psychiatric hospital she started to develop delusions and auditory hallucinations—for example, she would not go out of the house because she was followed by a car; she said, ‘There is a man watching my house’, ‘Meetings are held in a hall behind my house to decide have me sent away’; she heard the occupants of an aeroplane telling her that she ‘will be put away’. She would sit in a chair for hours crying. She remained like this for nearly two years. At first she refused to see a doctor and rejected all efforts to help, even a domiciliary visit was not acceptable. Eventually she was persuaded to see a psychiatrist who recommended her admission and prescribed thioridazine 50 mg t.d.s.

On admission she was apathetic, retarded, hallucinated, disoriented; her memory was impaired and she gave an especially muddled and inaccurate account of recent events. She could repeat four digits forward and three backwards. A diagnosis of a paranoid state with an organic dementia was made.

A week after her admission she had a grand mal fit which was thought to be possibly due to the phenothiazine. Her blood pressure on admission was 150/80 mm Hg. A week later it dropped to 110/70 mm Hg, and she became more lethargic. On the same day her condition deteriorated rapidly, she became very lethargic, her blood pressure dropped further to 95/65 mm Hg and she became semi-conscious. This was when the author first saw her. She was semi-conscious, pale, had a dry skin, and no axillary or pubic hair (Figs. 1 and 2).

A history was obtained from her daughter. The patient had not been well since her last childbirth 21 years before. She had triplets, it was a difficult delivery, and she had a severe haemorrhage. Afterwards she developed amenorrhea, became pale, tired quickly, increasingly febrile, cold, and also lost her axillary and pubic hair. The diagnosis of hypopituitarism (Sheehan’s syndrome) was made. She was treated with intravenous hydrocortisone to which there was a dramatic response in her physical condition. Next day she became alert and a good history was obtained from her.

Her electroencephalogram (EEG) showed no normal alpha rhythm, but the EEG was dominated by a 6 Hz rhythm interspersed by short episodes of 2 to 3 Hz waves. This is common in fairly severe generalized abnormalities, including hypopituitarism.

Treatment was continued with oral cortisone (37.5 mg daily) and initially a small dose of thyroxine (0.05 mg daily), which was later increased (0.15 mg daily). With this...
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FIG. 2. The photograph shows the absence of pubic hair and a small paraumbilical hernia.

three days her blood pressure became 140/80 mm Hg. In
addition to the treatment for her hypopituitarism she was
given a phenothiazine. She responded dramatically to
treatment and within eight weeks was back to her normal
self again. She became well orientated; her memory was
back to normal for both recent and remote events; she
had no delusions or hallucinations; she lost her apathy
and became alert, ate and slept well, and was discharged
home.

DISCUSSION

Definite mental changes have been noted in patients
suffering from hypopituitarism who were not
approaching coma. These are commonly depression
with delusions (Sheehan and Summers, 1949) and
the loss of the alpha rhythm in the EEG (Hughes
and Summers, 1956). Although mental torpor,
depression, and delusions are often observed in
hypopituitarism, a transient organic psychosis as in

this and the patient described by Blau and Hinton
(1960) must be quite rare. This patient resembles the
one described by Blau and Hinton in that she
presented with a similar organic psychosis (dis-
orientation, memory and intellectual impairment to
such a degree that she had been diagnosed as a case
of dementia). This patient differs from Blau and
Hinton's patient in that the organic psychosis was of
a much longer duration. In their patient it lasted for
three months, in this patient it lasted for about two
years but was mild at the beginning and gradually
worsened. Their patient developed psychiatric symp-
toms after the coma. This patient's psychosis
preceded her pre-comatose state. Both patients had
hypotension. In the one described here this re-
sponded to intravenous hydrocortisone. Blau and
Hinton, however, had to give noradrenaline in
addition to the steroid to reverse the hypotension.

It is possible that the psychosis was due to a
combination of hypothyroidism, hypoglycaemia, and
hypocorticism. Depression and paranoid psychoses
have been reported in patients with Addison's
disease. In these patients cortisone produced the best
restoration of mental state (Woodbury, 1958). There
is no evidence in this patient that hypotension was a
factor in the production of her psychosis, as in
the patient described by Blau and Hinton. This
patient developed her psychosis some time before
her pre-coma state, while her blood pressure was
within normal limits.

SUMMARY

A 55-year-old woman has been described with
hypopituitarism presenting as an organic psychosis
which lasted for nearly two years. She slowly
deteriorated and went into the pre-coma of hypo-
pituitarism. When the diagnosis was made there was
a dramatic response to treatment with an apparently
complete return to normality within eight weeks.

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