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Acromegaly and Depression

A. MARGO

There is only a small literature on the psychiatric complications of acromegaly. Manfred Bleuler (1954) reported an acromegalic man who had blunted affect and apathy and suggested that this clinical picture represented a special variation of the endocrine psychosyndrome. Avery (1973) reported a further case of depression and anxiety in association with the illness. There are relevant reviews by Michael and Gibbons (1963), Beumont (1972), Labhart (1974) and Lishman (1978).

The rarity of reports of pathological mood disorder in acromegaly encouraged me to describe the case of a 53-year-old woman with a chronic depressive illness beginning 12 years before acromegaly was diagnosed.

Case Report

A placid, happily married, reserved woman, aged forty-one, became ill shortly after an uncomplicated subtotal hysterectomy for menorrhagia. The major symptoms led clinicians over eight admissions to make a diagnosis of retarded 'endogenous depression'. It was of note that she had demonstrated very obvious psychomotor retardation which persisted over many years and that this was only briefly relieved by therapy. A wide variety of drug regimes were applied in adequate dose, but she remained sluggish, depressed, lacking in confidence and plagued with chronic headaches. Her descriptions of the headaches had latterly acquired a bizarre stereotyped quality, based on her notions of aetiology. She referred to the nerves in her head as 'drawn up', 'rolled and twisted', believing this to be caused by brain pathology. Although there was no additional evidence in support of a psychotic illness, she was convinced that the rolling and twisting was a concrete event and would not accept the reassurances of her physicians.

A dramatic change occurred in her facial appearance which led to a clinical diagnosis of acromegaly eventually being made in 1980.

Detailed studies were made of hormones and electrolytes. A paradoxical rise in growth hormone levels was found after a loading dose of 50 g glucose. This is characteristic of acromegaly, although the levels (7.1 mu/l—14.4 mu/l) were not exceptionally high.

Serum calcium was raised—2.93 mmol/l (normal—2.3—2.8 mmol/l). This reflects the metabolic disturbance which occurs in acromegaly. Other investigations (parathyroid hormone, prolactin, thyroid stimulating hormone, glucose tolerance test) were normal, while FSH 25 uL (normal—1–10.0), and LH 28.7 u/l (normal—1–9.7) confirm that she is menopausal. Pituitary fossa tomography yielded equivocal results, and there were no cognitive deficits elicited in an extensive psychological assessment.

She was treated with pituitary fossa irradiation. The paradoxical rise in growth hormone following glucose persisted, suggesting that a hypothalamic mechanism may operate in this disorder.

There has been no dramatic change since the radiotherapy four months ago, but she claims that she is no longer depressed, and her husband considers her to be 'somewhat more active'.

Discussion

Although the case exhibits many of the cardinal features of Bleuler's endocrine psychosyndrome, there is not the marked fluctuation of symptoms which is often considered to be the essence of that condition. The prominent motor retardation in this case conforms better to Bleuler's concept of a special acromegaly syndrome. A persistent complaint of headaches in acromegaly is quite typical. Labhart (1974) gives an incidence of 87 per cent for headache in acromegaly. It is uncertain whether the depressive illness was caused by acromegaly or whether two unrelated illnesses coincided for twelve years.

In support of the former relationship one can draw attention to studies of impaired growth hormone responses to clonidine (Checkley *et al*, 1981) in endogenous depression. With regard to the second relationship one should note that acromegaly is rare. Only 45 out of 36,000 attenders at the Medical Clinic in Zurich (Labhart, 1974) were given this diagnosis, an incidence of 0.1 per cent of out-patient attenders. The incidence of depression in those attending medical out-patients is known to be about 30 per cent and coincidence of uncommon and common conditions is not unlikely. A further possible relationship is that the physical illness may have had a non-specific influence in producing psychiatric morbidity through

accumulations of life events and impact on intra-familial dynamics.

The case is reported to draw the attention of psychiatrists to the possibility that a specific growth hormone abnormality may have been responsible.

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A. Margo, B.Sc., M.R.C.Psych., *Consultant Psychiatrist, Goodmayes Hospital, Barley Lane, Goodmayes, Ilford, Essex IG3 8XJ*

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