

**A CASE OF ANOREXIA NERVOSA TREATED BY A
COMBINATION OF PSYCHOTHERAPY,
INSULIN AND RESERPINE**

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RECENT contributions to the literature reflect the conflict of opinion regarding the etiology and treatment of anorexia nervosa. It has been described as a somatic disorder (Williams, 1958), a neurosis (Du Bois, 1949-50), and an illness caused by somatic, psychological, and environmental factors (Rathod, 1958).

CASE REPORT.

A girl of fourteen years was admitted to Belfast City Hospital on 10th December, 1956. There was a history of progressive loss of appetite over a period of twelve months, vague abdominal pain, and loss of some sixty-three pounds—her weight before the onset of symptoms having been about one hundred and thirty-seven pounds. She had begun to menstruate at the age of twelve years and had been quite normal in this respect until she started to lose both weight and appetite, since when she had not menstruated. The patient was extremely thin and emaciated. She took virtually no food spontaneously and, although not actually refusing it, had to be coaxed to take even the smallest quantity. She expressed acute dislike for all food.

Physical examination revealed no abnormality apart from profound emaciation.

Radiological investigation of chest, abdomen, gastro-intestinal tract and urinary system showed nothing abnormal, except for a small calcified abdominal gland. E.S.R. (Westergren) was 2 m.m. in one hour, and the blood W.R. was negative. No occult blood was found in the stools.

Psychiatric examination revealed her to be mentally alert with no psychotic or depressive features.

Psycho-therapeutic interviews were commenced with particular reference to topics which appeared to have a strong emotional significance for her. These were:—

1. The recent emigration of her sister.
2. Some difficulty with school work.

After nineteen days, it was clear that she was making no progress and it was decided to give her soluble insulin, starting with 5 units each morning and increasing daily by 5 units to a maximum of 30 units. Two hundred grams of

glucose and adequate vitamins were given orally each day, and she was encouraged to take as much food as possible, although without much success. The total gain in weight was only four and a quarter pounds in the following seventeen days. She was then also given reserpine 1 mg. twice daily. In six days she had gained eleven pounds and for the first time stated that she felt hungry, taking food spontaneously. After seven days reserpine was discontinued when œdema of the lower limbs and sacrum was noticed. She continued to have thirty units of insulin daily until her discharge from hospital thirty-six days after her physical treatment had started. She had gained thirty-two pounds weight in these thirty-six days.

Following her discharge from hospital, she continued to attend as an out-patient for psycho-therapeutic interviews. By the end of another sixty days she had gained a further forty-two pounds, and was actually heavier than she had been before the commencement of her illness. Her mother reported that she was happy, had an excellent appetite and was quite back to her former state of robust health.

COMMENT.

This case is of interest for several reasons. There was no improvement after psychotherapy alone. There was some improvement (gain in weight of four and a quarter pounds) after treatment with insulin over a period of seventeen days, and a dramatic improvement (increased appetite and eleven pounds weight gain) in a period of six days when reserpine was given in addition to insulin. Furthermore, the gain in weight continued after reserpine had been stopped and she continued to make progress, even when insulin was omitted and psycho-therapeutic interviews substituted.

Dally, Oppenheim, and Sargent (1958) suggest that reserpine alone makes a patient depressed and consider that chlorpromazine should be used instead. They found an average gain in weight of 4.2 pounds per week, but mentioned one case where weight increase was thirty-two pounds in fifty-six days, and another in which the patient gained twenty-five pounds in twenty-seven days. In the case reported above the total gain in weight over a period of ninety-six days was seventy-four pounds.

Using insulin and reserpine in cases of anorexia nervosa, one forms two fairly strong clinical impressions, namely:—

1. One large daily dose of insulin appears to be more effective than the same amount given in two or three divided doses.
2. Reserpine certainly causes depression if given over a lengthy period or to those who have shown previous depressive personality traits. It seldom appears to cause depression when given over short periods or to those with no such depressive traits.

REFERENCES.

- DALLY, P. J., OPPENHEIM, G. B. and SARGENT, W. (1958). *Brit. med. J.*, **2**, 633.
DU BOIS, F. S. (1949-50). *Amer. J. Psychiat.*, **106**, 109.
RATHOD, N. H. (1958). *Brit. med. J.*, **2**, 511.
WILLIAMS, E. (1958). *Brit. med. J.*, **2**, 191.