Clinical case review

A woman with anorexia who wishes to be pregnant

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A woman whose anorexia nervosa has caused her to be amenorrhoeic for a decade requests treatment to induce ovulation so she can get pregnant. How should she be helped?

Psychiatrist's commentary by Professor Beumont, Professor of Psychiatry, Department of Psychological Medicine, University of Sydney, Academic Head, Department of Psychiatry, Royal Prince Alfred Hospital, and Director, Eating Disorders Unit, Wesley Private Hospital, Sydney, NSW.

Obstetrician's commentary by Dr De Costa, Senior Lecturer, Department of Obstetrics and Gynaecology, North Queensland Clinical School, James Cook University, Cairns Base Hospital, Cairns, Qld.

Case scenario

I have a 28-year-old patient who has been amenorrhoeic for approximately 10 years as the result of anorexia nervosa. At present, she is very thin and is not involved in any ongoing psychotherapy. She wants to have clomiphene to induce ovulation so she can get pregnant. Is this reasonable when the patient is not prepared to try to improve the primary reason for her infertility? Is it likely to work?

Psychiatrist's commentary

This is a common problem in clinical practice, and one on which the doctor should adopt an ethical stance.

Although clomiphene is unlikely to induce ovulation in this woman (because her oestradiol levels are likely to be too low),¹ a course of luteinising hormone releasing hormone (LHRH) would probably be effective.² However, pregnancy would be occurring during a state of chronic undernutrition. The pregnancies of patients with unresolved anorexia nervosa are often complicated, and perinatal morbidity and mortality are high. Even if the child is unaffected at birth, a patient with anorexia is often a poor mother, directing her own unresolved eating issues onto her child.3 An anorexic mother is part of the differential diagnosis of a toddler with failure to thrive.

Obstetrician's commentary

I am completely in agreement with Professor Beumont's views on the management of this problem.

Anorexia nervosa has a negative effect on the gonadotropin-releasing hormone (GnRH) pulse generator. As a result, luteinising hormone (LH) and follicle stimulating hormone (FSH) levels (and consequently, oestrogen levels) are low, and ovulation and normal menstruation do not occur. Amenorrhoea is the norm in people with anorexia nervosa.

Normal hypothalamic-pituitarygonadal function, with ovulation and the resumption of menstruation, usually returns when weight is regained, even after many years – a body composition of about 23% fat being necessary for the maintenance of regular ovulation and menstruation.⁴

The results of experimental treatment with gonadotropins support the concept of a deficiency of endogenous GnRH secretion in women who have anorexia nervosa.²

Clomiphene acts by blocking the negative feedback of oestrogen on GnRH. In anorexia nervosa, it will therefore be effective only in those patients who have regained weight. As Professor Beumont has said, GnRH analogues could be effect ive in inducing ovulation in this patient.¹

However, I agree that such treatment is inappropriate in this very thin woman with a long history of anorexia nervosa, who clearly displays both chronic undernutrition and unresolved psychiatric problems. More appropriate treatment would be for her to regain weight up to a level of 90% of the average bodyweight for her height (when spontaneous ovulation and regular cycles should return), and for her to maintain this gain and the associated changes in eating behaviour and attitude to body size. Only if ovulation did not return in the presence of suitable weight gain should clomiphene be prescribed.⁵

There can be some improvement in eating disorders in pregnancy, particularly where bulimia is a feature; although, equally, there may be exacerbation of symptoms. Even in those cases where there is improvement, postnatal relapses are common, and all patients with eating disorders have a high risk of postnatal depression.

The incidences of miscarriage, and of premature and low birthweight infants, are higher in women with unresolved anorexia nervosa in pregnancy.⁶ In this patient with longstanding anorexia nervosa, the possibility of secondary osteoporosis and fractures is of concern.⁷ There are higher rates of perinatal mortality and morbidity in the offspring of mothers with untreated anorexia nervosa compared with the rest of the population.⁸ Mothers with eating disorders have greater difficulty breastfeeding their infants than those without such disorders, and an unresolved eating disorder in a mother may contribute to eating problems in the child.⁹

Several studies have shown that the outcome of pregnancy in a woman who has recovered from anorexia nervosa is compatible with normal pregnancy outcomes, although the pregnancy should be closely supervised to ensure adequate prenatal nutrition and to monitor fetal growth. It would be desirable in this case to involve the partner in all aspects of the management of the anorexia, and in ongoing supervision of the pregnancy.

In summary, this woman is most

likely to succeed in becoming pregnant, and the pregnancy to proceed to a successful outcome, if the anorexia nervosa itself is adequately treated. She should be counselled to recover before attempting pregnancy. MT

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