Giant ovarian dermoid masked by obesity

B. E. MONK
M.B., M.R.C.P.

A. J. ISAACS
B.M., M.R.C.P.

SIR RICHARD BAYLISS
M.D., F.R.C.P.

Department of Endocrinology, Westminster Hospital, Dean Ryle Street, London, S.W.1

Summary

A 37-year-old female, weighing 194.1 kg, is described. Her gross obesity was in part due to a massive ovarian dermoid cyst weighing at least 42 kg, which had been overlooked in the past. A dermoid tumour of this size has not previously been reported. The possible presence of cystic ovarian tumours should be considered in patients presenting with severe generalized obesity.

Introduction

Massive ovarian tumours are usually readily diagnosable by the gross abdominal distension they produce. In the presence of severe obesity, however, the diagnosis may be more difficult. A patient is described who had a giant ovarian dermoid cyst which was overlooked for many years because of her obesity. A dermoid tumour of this size has not previously been described.

Case report

A 37-year-old nulliparous female was referred for treatment of gross obesity. Menarche had occurred at 14 years, but the patient had developed persistent secondary amenorrhoea at the age of 19, when she weighed 128 kg. At the age of 33 years she had been admitted to another hospital for weight reduction, and by dieting lost weight from 171 kg to 153 kg. Subsequently she relapsed and became increasingly disabled.

On examination she was 175 cm tall and weighed 194.1 kg. Her obesity was generalized, but the abdomen was disproportionately large and tense, and her girth measurement was the same as her height. Her right leg was chronically swollen with lymphoedema. The patient was barely able to stand unaided and had a marked lordotic posture when she did so, resembling the stance of a pregnant woman. It was this appearance that suggested the clinical diagnosis of an ovarian cyst. An ultrasound

scan showed a large transonic area directly beneath the anterior abdominal wall.

Admission to hospital was precipitated by severe cellulitis of the right leg resistant to antibiotic therapy because of the marked deterioration in her general condition it was decided to proceed to laparotomy as a life-saving measure. At operation an enormous cyst, densely adherent to the sigmoid mesocolon was found arising from the left ovary, and approximately 40 litres of murky straw-coloured fluid was aspirated. At a second operation 2 weeks later the cyst was freed from its adhesions and excised. The patient's postoperative weight was 140 kg, and her mobility was greatly improved.

The decompressed cyst was 25 cm in diameter. The solid material weighed 2 kg which together with its fluid content gives an estimated weight for the intact tumour of at least 42 kg. Histology showed a dermoid tumour containing hair follicles and thyroid tissue in its wall.

Discussion

There are a number of reports of massive ovarian tumours, but neglected cases are nowadays uncommon, although they still occur as in the case of a mucinous papillary cystadenocarcinoma weighing 90 kg (Symmonds, Spraitz and Koelsche, 1963). Such tumours are usually cystadenomas or cystadenocarcinomas (Beacham *et al.*, 1971), and there is a substantial mortality associated with their excision. Giant dermoid tumours are rare, the largest previously reported weighing 7 kg (Chalmers and Kurrein, 1961).

Massive ovarian tumours usually present with obvious abdominal distension, but in the presence of severe obesity this may be overlooked (Berkowitz, 1976). Investigations may be of limited value in this situation. In the present patient, plain abdominal X-rays were unhelpful; her girth was too great to

allow access to a body-scanning machine, and from the ultrasound examination only tentative confirmation of the clinical diagnosis could be made.

Clinical awareness is therefore essential if such large tumours are not to be overlooked in obese subjects. A lordotic posture, lymphoedema of the legs, and the disproportionate size of the abdomen may, as in this case, be suggestive features.

Acknowledgments

We should like to express our thanks to Mr Roger de Vere for his invaluable help in the management of this patient.

References

- BEACHAM, W.D., WEBSTER, H.D., LAWSON, E.H. & ROTH, L.M. (1971) Uterine and/or ovarian tumors weighing 25 pounds or more. *American Journal of Obstetrics and Gynecology*, **109**, 1153.
- BERKOWITZ, R. (1976) Massive ovarian enlargement in an obese patient. *Obstetrics and Gynecology*, **48**, 483.
- CHALMERS, J. & KURREIN, F. (1961) A giant dermoid cyst. *Journal of Obstetrics and Gynaecology of the British Commonwealth*, **68**, 315.
- SYMONDS, R., SPRAITZ, A. & KOELSCH, G. (1963) Large ovarian tumor, report of a case. *Obstetrics and Gynecology*, **22**, 473.