During the post-operative period her hæmoglobin was 68% (10 g./100 ml.). Her blood group was O Rh. negative.

Discussion

Intraperitoneal hæmorrhage from a ruptured corpus luteum cyst is not so rare, and its possibility should be kept in mind whenever a case of suspected appendicitis during childbearing period, or a case of suspected ectopic pregnancy, is operated on. Another condition in differential diagnosis is a twisted ovarian cyst. It is not an uncommon experience that a normal-looking appendix is removed, when in fact the patient has a small hæmorrhage into the peritoneal cavity from a ruptured corpus luteum cyst. Whenever the diagnosis of appendicitis is in doubt in such women, a paramedian or pfannenstiel incision should be used.

The clinical picture of such a case is a fairly definite one. Usually she complains of pain in the right or left iliac fossa, nausea, vomiting, fainting and collapse. Depending on the amount of blood loss, signs and symptoms of shock would be present. Unlike ectopic pregnancy, signs and symptoms of pregnancy would not be present. Another important differentiating point is that there is no large abdominal mass palpable because the ovarian cyst has ruptured.

Gurewicz and Thomas (1960) reported a case of massive intraperitoneal hæmorrhage from a ruptured corpus luteum as a complication of long-term anti-coagulant therapy. Hunter and Hill (1960) reported a case as a complication of leukæmia.

According to Rosenthal (1960) the range of age is 20 to 35 years. He reported a series of 11 cases, the youngest of 13 years. Posterior colpotomy and culdoscopy has been recommended in some cases, but in many cases only the presence of blood in the pouch of Douglas would be confirmed.

Summary

(1) A case of massive intraperitoneal hæmorrhage resulting from a ruptured corpus luteum cyst is described.

(2) Whenever a woman in the childbearing period of her life presents with acute pain in the iliac fossæ and signs of intraperitoneal hæmorrhage, the possibility of this condition should be kept in mind.

(3) In cases of small hæmorrhage from a ruptured corpus luteum, the patient has to be observed in the hospital, and conservative treatment may suffice in such cases.

We are grateful to Mr. E. Harford Rees and to Mr. T. Henry Wilson for their guidance in publishing this case report. Also we thank Mr. J. Coulter, of Armour Pharmaceutical Laboratories, for getting us the photomicrograph of the histological slide of this case.

REFERENCES

- FITZGERALD, J. A., and BERRIGAN, M. V. (1959): Accurate Diagnosis of Ovarian Vascular Accidents: Review of 32 Instances with Clinical Conclusions, *Obstet. and Gynec.*, **13**, 175.
- GUREWICH, V., and THOMAS, D. (1960): Massive Intraperitoneal Hæmorrhage from a Ruptured Corpus Luteum: A Rare Complication of Long-term Anticoagulant Therapy, *New Engl. J. Med.*, **263**, 909.
- HUNTER, D. T., and HILL, J. M. (1960): Leukæmia, Ovulation and Fatal Intraperitoneal Hæmorrhage, *Obstet. and Gynec.*, **15**, 364.
- ROSENTHAL, A. H. (1960): Rupture of the Corpus Luteum, Including Four Cases of Massive Intraperitoneal Hæmorrhage, *Amer. J. Obstet. Gynec.*, **79**, 1008.

BRONCHIAL CARCINOMA PRESENTING AS CARDIAC TAMPONADE

W. A. PENMAN, M.B., Ch.B.(Edin.), M.R.C.P.(Edin.)

Consultant Physician, The Royal Isle of Wight County Hospital, Ryde, I.o.W.

BRONCHIAL carcinoma is a common disease but this manner of presentation and mode of death are unusual.

Case Report

Ten days before admission this patient, a male, aged 39, had a rigor and went home from his work to bed. He later developed a slight cough and purulent

spit and gradually became more breathless. He was treated as a case of influenza by his practitioner, but because of his lack of response to treatment he was sent in as an emergency to hospital. There was no relevant previous or family history and he was a non-smoker.

Examination on admission showed him to be extremely dyspnoeic and cyanosed. Temperature was 97°, pulse rate 102/min., blood pressure 92/50 mm. Hg.

A paradoxical element was noted in his radial pulse. His jugular veins were engorged 3 cm. Heart: no enlargement detected, sounds were faint but pure. His liver was enlarged two finger-breadths below the right costal margin and evidence of right basal consolidation was present. There was no peripheral oedema. A diagnosis of right basal pneumonia was made and he was given chlortetracycline 250 mg. six-hourly.

The following day his general condition was much worse, the dyspnoea more pronounced and the paradoxical element of the pulse more clearly felt. A pericardial effusion was suspected. Chest X-ray showed congestion in the lungs with consolidation at the right base. The heart shadow, though generally enlarged, was not typical of pericardial effusion. X-ray and screening of the chest on the following day did show evidence of a pericardial effusion. A pericardial paracentesis was done on the same day and 20 ml. of heavily blood-stained fluid were removed. While this was being done the paradoxical element in the pulse disappeared and his breathing became much easier. The pericardial sac was not emptied and re-screening of the heart at that time showed no change in size or contour. The aspirated fluid revealed no tubercle bacilli on direct microscopy or culture and only endothelial cells were seen on direct examination.

Radiological examination two days later showed complete clearing of the consolidation, but the pericardial effusion became more obvious and his clinical condition deteriorated rapidly. Seven days after his paracentesis the pericardium was again tapped and 450 ml. of very heavily blood-stained fluid were removed. The pericardial sac was emptied as nearly as possible and a pericardial rub developed. Once again he felt much better and the pulsus paradoxus disappeared and, in fact, he was able to take a few steps without much breathlessness. ECG: elevation of the ST segment in

all leads initially; this later persisted in precordial leads only. There was no inversion of the T waves. On the following day his general condition rapidly deteriorated and he became acutely dyspnoeic and died.

At autopsy a grossly distended pericardial sac containing 1,500 to 2,000 ml. of heavily blood-stained fluid was found and infiltration of the pericardial wall around the pulmonary veins by tumour tissue was seen. The heart was small, the myocardium flabby and the chambers dilated and the valves healthy. Careful dissection of the bronchial tree showed thickened mucosa at a distance of 2 cm. in a secondary division of the left upper lobe bronchus. The lumen was partially occluded and some direct spread had occurred into the adjacent lung. Several lymph nodes in the left hilum and upper mediastinum were largely replaced by tumour, each pleural sac containing about 50 ml. of blood-stained fluid.

The liver contained about 12 secondary nodules, roughly 4 cm. in diameter. Several lymph nodes in the porta hepatis and along the aorta contained tumour tissue. The left adrenal gland was completely replaced by tumour. The brain was not examined.

Histologically the tumour from the bronchial tree was a spheroidal cell carcinoma with some adenocarcinomatous differentiation and the secondary spread showed a similar histology.

I have been unable to trace a case of bronchial carcinoma presenting with cardiac tamponade, though hæmopericardium is, of course, a known complication (Barbour, Hirst and Johns, 1961; Rukstinat, 1946).

I am indebted to Dr. R. Hill, Heathfield Hospital, Ayr, for permission to publish.

REFERENCES

- BARBOUR, B. H., HIRST, E. A., and JOHNS, V. J. (1961): Non-traumatic Hemopericardium: An Analysis of 105 Cases. *Amer. J. Cardiol.*, **7**, 102.
- RUKSTINAT, G. J. (1946): Hemopericardium from Pericardial Metastatic Carcinoma, *Arch. Path. (Chicago)*, **41**, 55.