There is no controversy about the use of chemotherapy: the most powerful drug against the particular organism isolated should be given as soon as possible, in adequate dosage and for a sufficient period. The recurrence of the clinical picture of sepsis with too early cessation of the drug has often been noticed—for example, Hyman and Leiter, 1944. Lyons (1941) reported two consecutive cases of staphylococcal cavernous sinus thrombophlebitis treated with sulphathiazole and heparin, with recovery. Each of these cases had a bacteraemia which lasted six and eight days respectively, and he advised continuing the sulphathiazole for three months in a dosage sufficient to maintain the blood level at 5 mg. per 100 ml. Schall (1941) reported three further cases of staphylococcal cavernous sinus thrombophlebitis successfully treated with sulphathiazole and heparin. There is little doubt that if control of the pyaemia can be obtained by chemotherapy for a sufficient time, this is likely to be successful in curing the thrombophlebitis. For staphylococcal infections the antibiotic of choice is now aureomycin (Long, 1950), and Spink and Yow (1949) have reported five cases of staphylococcal bacteraemia treated with aureomycin, with four recoveries.

According to Van Duyn and Van Duyn (1940), the idea of trying to stop the spread of infection from a diseased vein into the general circulation originated with John Hunter in 1793, when he advised putting a compress on the vein just above the suppuration. Since then, and until the development of chemotherapy, the mortality of suppurative thrombophlebitis has been proportional to the inaccessibility of the septic focus and the difficulty of eradicating it (Rosenow and Brown, 1938). Before the advent of sulphonamides vein ligation was the only rational therapy, but the mortality was still high: septic thrombophlebitis of the neck, for example, had a mortality of 20–30% even with operation (Iglauer, 1942).

The present value of proximal ligation of the thrombosed vein is more debatable. Kern and Berman (1945) reported a case of ilio-femoral thrombophlebitis following pneumococcal lobar pneumonia, empyema, and septicaemia, which proved resistant to sulphonamides and dicoumarol; the patient was cured, however, after ligation of the inferior vena cava above the thrombus and a course of penicillin. Which one of these procedures played the major part in the patient's recovery it was impossible to say, but they felt justified in stating that the convalescence was very definitely shortened by the surgical intervention, and the danger of embolism, minor or fatal, was eliminated. In contrast, a case described by Kirk (1947) illustrates that proximal ligation without control of the pyaemia is likely to be fatal. His case of suppurative ilio-femoral thrombophlebitis due to *Aerobacter cloacae* was temporarily controlled with streptomycin, but drug resistance developed, and when infection spread to the opposite side the inferior vena cava was tied. In spite of this the patient developed septic meningitis on the sixth post-operative day and died two days later.

In practice few would doubt the wisdom of proximal ligation when the vein was easy of access, when there was a positive blood culture, and when the organism was resistant to the drugs available. Again, there is unlikely to be disagreement in adopting a conservative attitude if the site of the proximal end of the thrombus is inaccessible, if repeated blood cultures have been negative, if the organism is sensitive to the antibiotic, and

there is serious concomitant disease. Between these two extremes it may be difficult to come to a decision, but the chief indication for vein ligation is inability to control the bacteraemia with antibiotics.

Anticoagulant therapy is of less importance, but as it may prevent extension of the thrombus it should be given when possible. An open wound such as was present in the case described is of course an absolute contraindication. It is interesting that both cases described by Lyons (1941) developed pulmonary infarcts while receiving heparin.

Summary

A case of suppurative ilio-femoral thrombophlebitis arose from a transfusion incision infected with penicillin-resistant *Staph. aureus*, and this was treated with aureomycin. At operation the diagnosis was confirmed, but because of the organism's sensitivity to aureomycin, the repeated negative blood cultures, and the sustained clinical improvement proximal ligation was not performed. Failure to give the aureomycin for a sufficient period initially is believed to have resulted in two recurrences, but after 125 mg. had been given six-hourly for 28 days (total 14,000 mg.) the condition was finally cured. The treatment of suppurative thrombophlebitis has been considered briefly.

REFERENCES

- Barker, N. W. (1934). *Proc. Mayo Clin.*, **9**, 191.
 Hyman, A., and Leiter, H. E. (1944). *J. Mt Sinai Hosp.*, **10**, 583.
 Iglauer, S. (1942). *Arch. Otolaryng.*, *Chicago*, **36**, 381.
 Kern, H. M., and Berman, E. (1945). *Amer. J. Surg.*, **69**, 120.
 Kirk, G. D. (1947). *Ibid.*, **73**, 606.
 Long, P. H. (1950). *Lancet*, **1**, 420.
 Lyons, C. (1941). *Ann. Surg.*, **113**, 113.
 Rosenow, E. C., and Brown, A. E. (1938). *Proc. Mayo Clin.*, **13**, 89.
 Schall, L. A. (1941). *J. Amer. med. Ass.*, **117**, 581.
 Spink, W. W., and Yow, E. M. (1949). *Ibid.*, **141**, 964.
 Van Duyn, E. S., and Van Duyn, J. (1940). *Ann. Surg.*, **112**, 294.

Medical Memoranda

Case of Ovarian Pregnancy

The occurrence of an ovarian pregnancy is still rare enough to excite interest. It is estimated to occur in 0.7–1% of all ectopic pregnancies. In recent years the subject has often been reviewed (Isbell and Bacon, 1947; Bolton, 1949; Deweese, 1949), and the numbers of authentic cases have been variously calculated as approximately 60 (Curtis, 1941), 52 (Way, 1941), and 50 (Novak, 1947).

CASE REPORT

A woman aged 21, married for one month, was admitted to hospital on October 20, 1949, complaining of pain in the abdomen. Four months before admission (three months before marriage) she first had coitus. Her next menstrual period was 14 days late but otherwise normal. The following period, which occurred 28 days later, was normal. She then married and engaged in coitus, but the menstrual period which was imminent did not occur. Seven days after her marriage she suddenly collapsed in the street and complained of dizziness, low abdominal pain, and vomiting. There was no vaginal bleeding.

She was admitted to another hospital believed to be suffering from acute food-poisoning, but was discharged after three days, though still complaining of intermittent abdominal pain, and she stayed in bed at home.

A week later a profuse vaginal haemorrhage occurred associated with abdominal pain localized to the left side. Large clots were passed, and the bleeding lasted three days.

The pain still persisted. Apart from an "interval" appendicectomy two years previously she had been quite healthy. Menstruation began at 14 and had been quite regular, with normal loss.

On admission her general condition was good; the mucous membranes were of normal colour; pulse 92, temperature 97.8° F. (36.55° C.), respirations 20, blood pressure 118/70. The abdomen was not distended, the wall moved freely, the umbilicus was not discoloured. There was slight tenderness in the left iliac fossa, but rigidity or free fluid was not detected. Examination per vaginam showed healthy vulva and urethra, softish mobile cervix. There was no enlargement of the uterus, which was anteverted, but any attempt to move it caused great pelvic pain. A tender ill-defined solid mass about 2 in. (5 cm.) in diameter was palpable in the pouch of Douglas, apparently continuous with the left adnexa. The right appendages were normal. Per speculum a healthy nulliparous cervix was seen.

The urine was normal. A blood count showed: leucocytes, 8,100; erythrocytes, 4,000,000; haemoglobin, 90%. A tentative diagnosis of a left ectopic pregnancy was made.

On the sixth day after admission a profuse vaginal haemorrhage occurred with moderate pain in the left iliac fossa. Exploratory laparotomy was then decided upon.

Operation.—This was carried out by one of us (L.G.) on October 26. On opening the abdomen the peritoneum was normal in colour, and no free blood was seen. Uterus, tubes, and right ovary were normal in appearance. The omentum was adherent to the posterior aspect of the uterus and left broad ligament by filmy adhesions which separated readily, revealing the left ovary, to which was attached a mass of blood clot the size of a tennis ball. Adjacent loops of adherent bowel were peeled off easily and the mass and about half of the ovary were removed. No corpus luteum was seen on the right ovary, nor was there macroscopic evidence of endometriosis. The abdomen was then closed in layers.

Convalescence was uneventful; the patient was ambulant on the fourth day and was discharged on the ninth post-operative day. Salpingography performed on November 26 showed patency of both tubes.

Pathological Report (J.E.).—"The specimen consists of about half of an ovary, to the free surface of which is attached a firm laminated egg-shaped mass of blood clot 4 cm. in diameter. On the cut surface of the ovary a corpus luteum of pregnancy 1.5 cm. in diameter is visible. On breaking away fragments of blood clot, villi are seen in the neighbourhood of the corpus luteum and adjacent ovarian tissue. No foetus was found. Sections show syncytial masses and chorionic villi embedded in the ovarian tissue and invading the corpus luteum. Many of the villi are already degenerated. The ovarian stroma is exceedingly vascular, but no pseudo-decidual cells are evident; the zonal layer is heavily infiltrated with polymorphs, plasma cells, and macrophages, but this reaction is not seen elsewhere in the ovary. The histological picture of the corpus luteum coincides with that of an early pregnancy, with the central core occupied by a recent organizing clot. There is no evidence of ovarian endometriosis."

We wish to thank Professor E. Farquhar Murray for his helpful suggestions and for permission to publish this case, and Mr. D. Harland for his technical assistance.

L. GANZ, F.R.C.S.Ed., M.R.C.P.I.,
Senior Registrar, Department of Gynaecology.
J. E. ENNIS, M.B., B.S.,
Consultant Pathologist.

Dryburn Hospital,
Durham.

REFERENCES

- Bolton, John P. (1949). *Ohio St. med. J.*, **45**, 353.
Curtis, A. H. (1941). *Surg. Gynec. Obstet.*, **72**, 1039.
Deweese, W. J. (1949). *Minn. Med.*, **32**, 272.
Isbell, N. Paul, and Bacon, W. B. (1947). *Amer. J. Obstet. Gynec.*, **54**, 329.
Novak, Emil (1947). *Gynaecological and Obstetrical Pathology*, 2nd ed., p. 455. Saunders, Philadelphia.
Way, S. (1941). *Brit. J. Obstet. Gynaec.*, **48**, 473.

Strangulated Spigelian Hernia

Spigelian hernia occurs along the semilunar line, usually near the level of the arcuate ligament. It penetrates the broad fascial band by which the internal oblique and transversalis muscles are inserted into the rectus sheath, but lies under the aponeurosis of the external oblique muscle. This tense aponeurosis obscures the tumour and makes it difficult to palpate. The hernia has a tough rigid neck and is often covered by a thick layer of extraperitoneal fat.

CASE REPORT

A stout woman aged 65, with a lax pendulous abdomen, had a history over several years of periodic abdominal distension and vomiting, sometimes with icterus of the skin and typical gall-bladder colic. Cholecystectomy was performed in August, 1947. The gall-bladder was small and packed with stones; the common duct was free of stones. Colic and icterus were immediately relieved, but the attacks of distension and vomiting continued unabated, and became more frequent as time passed.

On May 20, 1949, she developed sudden severe pain in the right iliac fossa. This pain travelled slowly to the epigastrium, and then became generalized. The most severe pain was constantly in the right iliac fossa. Vomiting began 12 hours after the onset of symptoms and became very frequent and voluminous. She was admitted to Mr. J. Campbell's surgical unit in the Southport Promenade Hospital 20 hours after the onset of symptoms. On admission her temperature, pulse, and respiration were normal. Dehydration was obvious and proclaimed the violence of the vomiting. Tenderness in the right iliac fossa was extreme. The patient winced when the examining hand had done little more than touch the skin. A tense oval swelling about 3 by 2 in. (7.5 by 5 cm.) was palpated in the right iliac fossa, lying within the substance of the abdominal wall, parallel with the inguinal ligament and about 2½ in. (6.25 cm.) above it.

Strangulated Spigelian hernia was diagnosed. An incision was made over the swelling and the hernia was revealed after the external oblique aponeurosis had been incised. The sac contained omentum and strangulated loops of small intestine, which were kinked and bound together by tough adhesions, suggesting a fairly prolonged tenancy in rather inadequate quarters. The neck was rigid and grasped the sac tightly; it was big enough to admit two fingers. The worst of the adhesions were divided, and the intestine was returned to the abdomen, where normal colour was rapidly regained. The layers of the abdominal wall were defined and the wound repaired. Recovery was uneventful.

COMMENT

This case is interesting, as the apparent continuation of symptoms following cholecystectomy were ascribed to some residual liver damage for which she had been treated. The onset of acute strangulation at first closely imitated acute appendicitis. The correct diagnosis was given by the development of intestinal obstruction with the presence and site of the tumour.

Reid (1949) reports a case of Spigelian hernia which imitated an acute appendicitis to perfection. The above case illustrates how deceptive this rare hernia can be and the advisability of bearing it in mind when abdominal symptoms of an obscure nature are found.

We thank Mr. John Campbell for permission to publish details of this case.

D. WATSON, M.B., Ch.B.
BETTY SCOTTER, M.B., B.S.

REFERENCE

- Reid, D. R. K. (1949). *Brit. J. Surg.*, **36**, 433.