After operation a routine blood count showed: red cells, 3,050,000; Hb, 64% (8.2 g.); colour index, 1.08; white cells, 22,000 (N. polymorphonuclears 47%, lymphocytes 39.5%, monocytes 13%, N. metamyelocytes 0.8%); one normoblast seen in counting 200 white cells; anisocytosis; platelets normal in number; many atypical lymphocytes present; ? glandular fever. A review of the case was then made and glandular fever seemed to be the correct diagnosis.

The Paul-Bunnell test showed:—first post-operative day: patient 1 in 24, control nil; seventh post-operative day: patient 1 in 96, control nil; fourteenth post-operative day: patient 1 in 24, control nil.

The patient was given aureomycin, 2 g. at once, and 0.5 g. six-hourly for four days. He made a satisfactory convalescence, and was discharged home on the sixteenth day in good health, when the white-cell count had fallen to 11,300 (N. polymorphonuclears 41%, eosinophils 6%, lymphocytes 43%, monocytes 10%).

The following pathological report on the ruptured spleen was received. "*Microscopical Report*:—Spleen (18 by 10 by 4.5–6.5 cm.; 580 g.). There was a large double cruciate tear on the medial surface (upper pole). Capsule entirely stripped from convexity of spleen ? following subcapsular haemorrhage. Pulp semi-fluid due to autolysis resulting from the usual failure of fixative to penetrate splenic tissue in bulk. (The peripheral 0.5 cm. of pulp was well fixed.)" "*Provisional Histological Report*:—The splenic pulp is unusually cellular. Most of the cells are mononuclears, including lymphocytes, lymphoblasts, and atypical larger cells. Plasma cells are present. There is an unusual proportion of polymorphs in the pulp. Some sinuses are distended with atypical mononuclears. Similar cells have infiltrated the capsule to a slight extent. There is a fresh subcapsular haemorrhage. The follicles are small and widely spaced, germinal centres are practically absent. Spleen: rupture (infectious mononucleosis)."

When seen 12 weeks after discharge the patient was quite well and the white blood cells numbered 8,400 per c.mm. (monocytes 10%). Many of the lymphocytes were atypical.

COMMENT

In 1922, before infectious mononucleosis as a separate clinical entity was recognized, Friesleben described spontaneous rupture of a spleen in a patient who was probably suffering from this disease. Since then a number of cases have appeared in the literature (King, 1941; Ziegler, 1944; Davis *et al.*, 1945; and Smith and Custer, 1946).

Usually some history of minor trauma prior to the rupture is obtained. It may be straining at defaecation, twisting in bed, or a definite slight blow. Signs of rupture may follow at once or appear in a few days, either suddenly or after symptoms suggesting intermittent bleeding. Rupture mostly occurs after the fourteenth day of the disease, suggesting that the changes in the spleen require this time to produce enough fragility in the organ for spontaneous rupture to occur. Ziegler described one fatal case, and four of Smith and Custer's seven patients died.

Histology.—The capsule is infiltrated with lymphocytes and large mononuclear cells, and there is oedema of the capsule and the subjacent pulp. The trabeculae are infiltrated with mononuclear cells to a greater degree than the capsule. A varying degree of dissolution of the trabeculae is present. Splenic pulp is increased in bulk and the pattern is blurred. The blood sinuses contain mononuclears which are often densely packed. Follicles are few per unit area, are small, and lack germinal centres. The histological pattern is thus typical enough to enable a diagnosis to be made.

I am indebted to Mr. B. T. Rose for permission to publish this case.

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Pregnancy following Haematosalpinx

Pregnancy following haematocolpos and haematosalpinx is rare enough to justify recording the following case.

CASE REPORT

The patient was referred to Mr. V. B. Green-Armytage at the age of 17, after she had had a year of monthly pain, which was thought to be due to the delayed onset of menstruation. Mr. Green-Armytage, who has kindly supplied details which he has allowed me to record, states: "When seen, she had a typical haematocolpos and haematometra together with right and left iliac fossa pain suggesting overflow into the tubes. So the abdomen was opened. She had a bilateral haematosalpinx, and the distended uterus was sitting on the top of a mountain of haematocolpos. An assistant incised the anatomical vaginal defect and then I slowly milked the blood in the tubes into the uterus and away it went. There was just over one and a half pints of fluid (750 ml.), and I was interested to find on either side that a certain amount of the retained blood in the tubes was able to leak out of their fimbrial ends into the peritoneal cavity. Later I confirmed the patency of the tubes with carbon dioxide insufflation and salpingogram, and was able to give a good prognosis when she married."

Another gynaecologist who was present at the operation writes: "I well remember the haematocolpos, haematometra, and haematosalpinx which had further become haematoperitoneum. Vividly I recall the mahogany staining of the great omentum at laparotomy."

The patient was married in December, 1948, and became pregnant in February, 1951, at the age of 29. The only obstetric abnormality was some hydramnios. Labour started spontaneously at 42 weeks. The first stage lasted 18 hours and the second one hour. After an episiotomy, a 9½-lb. (4.3-kg.) baby girl was born spontaneously and thrived.

COMMENT

Because of its comparative rarity congenital vaginal atresia with its complications is only briefly described in most textbooks. However, in the Tropics the condition is by no means uncommon, and Mr. Green-Armytage's great experience there, together with the outcome in the above case, adds much weight to his opinion that laparotomy should be carried out in cases complicated by haematosalpinx.

Bernstein and Walter (1939) reported 19 cases of haematometra and thought that drainage from below is effective, thus avoiding a laparotomy. Curtis and Huffman (1950) stated that where there is haematosalpinx the tubes are usually closed. They believed that abdominal exploration should be reserved for those cases in which a pelvic mass remains after evacuation of the haematocolpos. In their review of 50 cases of congenital vaginal atresia, Christie Brown and Brews (1930) reserved laparotomy for those cases which had distended Fallopian tubes. They pointed out how undue abdominal pressure during examination could lead to tubal rupture, making salpingectomy and sometimes hysterectomy necessary.

When the tubes are found to be distended at laparotomy they should be emptied with care by milking blood into the uterus. If this is not possible, incision of the haematosalpinx (salpingostomy) would seem preferable to resection.

I have not been able to find in the literature a success similar to that in the above case, although in the opinion of Christie Brown and Brews the prognosis with regard to subsequent fertility in treated cases of haematocolpos is excellent. It is probable, however, that there have been similar cases, and it would be interesting to hear of them.

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