An incision was made along the line of the fifth rib and costal cartilage, from the mid-sternal to the mid-axillary line. On exposure of the rib, it was seen that the fifth costal cartilage had been severed close to the costo-chondral junction and the parietal pleura was open for about 1½ in. (4.4 cm.) vertically. The rib and cartilage were excised subperiosteally from sternum to posterior axillary line, and the bed of the rib was incised medially and laterally from the edges of the original wound. After spreading the other ribs to open the wound, it could be seen that the left side of the thorax was occupied by a large quantity of blood clot, obscuring the viscera completely. About 3 pints (1.7 litres) of clot and blood-stained fluid were removed. No evidence of injury to the lung could be found; but a blood clot was protruding through a wound in the pericardium about 1½ in. (3.8 cm.) long on the anterior aspect close to the left border. The opening was enlarged to form an L-shaped flap, which was turned back, and the clots were removed from the pericardial cavity. This rendered the heart visible, and it was seen that ½ in. (1.3 cm.) lateral to the anterior coronary vessels, towards the left border of the heart, there was an incised wound lying in the length of its fibres and about 1½ in. (3 cm.) long. No blood was issuing from this wound and no attempt was made to separate the wound edges, which had adhered to each other. Five interrupted sutures of size 0 chromic catgut were inserted deeply, using each suture as a stay whilst inserting the next stitch, before cutting the ends. As much of the remaining clot as possible was removed from the pericardial space and the pericardium was closed loosely with 00 chromic gut. After further careful inspection the thorax was closed in layers without drainage, the left lung being inflated by the anaesthetist. The patient was then returned to the ward, and at that time his systolic blood pressure was 96 mm.

The following evening the mediastinum had deviated to the right and respiration was becoming laboured. There was dullness at the left base and both lungs were moist to auscultation. Aspiration of the left side of the chest yielded 10 oz. (280 ml.) of heavily blood-stained fluid. A similar aspiration after a further 24 hours yielded 12 oz. (340 ml.) of fluid, not so heavily blood-stained. No further aspirations were necessary, but an attempt was made to regulate the transfusion so that the blood pressure remained at about 100 mm.

The patient made an uneventful recovery and was discharged from hospital four weeks after admission. When seen six weeks later his only complaint was pain at the left base on coughing. There was no dyspnoea on moderate exertion.

I wish to thank Mr. P. W. Bleasdale for permission to publish this case; also the anaesthetist, without whom the operation would have been impossible. Last, but by no means least, I thank the nursing staff and laboratory technicians of the hospital.

R. W. LAWRIE, M.R.C.S.

A Case of Acute Nephritis in Pregnancy

Acute nephritis occurring during pregnancy is said to be rare. O'Dwyer and Montgomery (1954) reported three cases, and state that a search of the literature yielded only a further 23 cases. They suggest that with conservative treatment the course of acute nephritis is not adversely affected by pregnancy.

The following case of acute nephritis occurring in the fourth month of a second pregnancy is reported. The pregnancy resulted in normal delivery at term and apparent recovery of the mother. This was followed two years later by a third successful and normal pregnancy and delivery.

CASE REPORT

A 2-gravida aged 31 was first seen at the antenatal clinic on August 28, 1951, when three months pregnant. Her first pregnancy in 1945 had been normal. Her general condition was satisfactory. The urine contained no albumin,

the blood pressure was 130/70, and the haemoglobin 84% (12.5 g.). She attended again on September 11, when her general health remained satisfactory, the urine contained no albumin, the blood pressure was 120/70, and she had gained 1 lb. (0.45 kg.) in weight. There was no oedema present at either attendance.

On September 15 she developed a sore throat which lasted for three days, but did not seek medical advice until a week later, when she first noticed the dark red colour of her urine. On September 27, after three days of complete rest in bed at home, she was admitted to hospital on account of the rapid appearance of considerable oedema.

On examination on admission she looked ill, her face was pale and distinctly puffy, and there was considerable pitting oedema of the abdominal wall, sacrum, and legs. She was in no pain. The throat appeared normal. Her temperature, heart, and lungs were normal. The pulse rate was 80-84 a minute. The blood pressure was 144/92. There was no tenderness in the abdomen or renal angles and micturition was painless. The uterus corresponded to an 18-weeks pregnancy. The urine was a smoky red, boiled nearly solid, and a catheter specimen showed a heavy deposit of albumin, 6 pus cells per 1/6 field, many red blood cells, and a few epithelial cells. No casts were reported but much amorphous debris. Culture gave a scanty growth of *Bact. coli*. A throat swab showed no β haemolytic streptococci. In the first 24 hours 55 oz. (1.6 litres) of urine was passed and the albumin present measured 2 g. per litre (Esbach).

Treatment at the outset comprised absolute rest in bed and restriction of fluids and salt. Milk, fruit drinks, and glucose were allowed, and added vitamins. During the first 14 days in hospital the urinary output remained satisfactory; the oedema slowly lessened and disappeared. The urine remained, however, smoky red, and on October 10 the albumin measured 6 g. per litre (Esbach). The haemoglobin was 54% (8.5 g.). The retinae were normal and the patient looked and felt better. The blood pressure varied from 140/88 to 148/92. During the next ten days the urine became normal in colour, the albuminuria diminished to 2.5 g. per litre (Esbach), and the blood pressure fell to 130/80. Oral iron was given and the protein in the diet was rapidly increased. She was discharged home to rest in bed on October 22. She was readmitted twice for a few days in November and again in January for reassessment.

On November 8 albuminuria was 1.5 g. per litre (Esbach) and the blood pressure 112/70, and on January 2, 1952, a catheter specimen of urine showed a faint trace of protein, and the deposit an occasional leucocyte and red cell with some epithelial cells and debris. Cultures showed no significant growth. The pregnancy proceeded normally. The blood pressure was 124/82 and haemoglobin 80%. The patient continued resting, mostly in bed, at home, on a normal diet with added vitamins and iron.

On February 26 she was normally delivered, in hospital, of a healthy 8 lb. 3 oz. (3.7 kg.) infant. The placenta appeared to be normal. At post-natal examination on April 16 she looked well, her blood pressure was 116/90, and an ordinary specimen of urine showed a faint trace of albumin.

Two years later, on March 3, 1954, after a normal pregnancy, she was normally delivered of her third child, a healthy infant weighing 8 lb. 10 oz. (3.9 kg.). Her blood pressure remained normal and was 120/70 at the sixth month, 10 days before delivery, and in the puerperium. The urine remained protein-free throughout. There was no oedema present before delivery. Post-natal examination six weeks later was normal.

I gratefully acknowledge the help given by Mr. William T. Kenny. I also thank Dr. John M. Malins, who kindly saw this case and confirmed the diagnosis of acute nephritis.

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