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From Unit "A," Kandang Kerbau Hospital for Women.
Moderator: PROFESSOR B. H. SHEARES.

A Case of Intra-Abdominal Haemorrhage Complicating Pregnancy.

Case Report

Presented by Doctor K. T. Chan.

A Chinese patient aged 43 years, in the 30th week of her 13th pregnancy, was admitted into the service on 23rd June 1956. She complained of abdominal pain, dyspnoea and general malaise. Her previous medical and obstetrical history had been normal.

On examination, her general condition was poor. There was oedema of the feet and ankles. Her B.P. 140/80. Several spider angiomata were seen over her shoulders. On abdominal examination, the size of the uterus corresponded to 30 weeks gestation. A single foetus was presenting by the vertex and the foetal heart was heard.

Two days later, her dyspnoea increased and engorgment of the neck veins was noticed. The liver was thought to be palpable to a distance of two fingers breadth below the costal margin. Some crepitations were heard at the lung bases. Her temperature was 102°F. A provisional diagnosis of incipient heart failure was made and appropriate treatment was instituted, including systemic penicillin. The next day jaundice developed. Her haemoglobin was 42% and the total WBC was 10,200 per c.m.m. There was albuminuria+ and was also urobilin and urobilinogen. The icteric index was 40 and she had a direct triphasic Van den Bergh reaction. She was seen by a Medical Consultant who considered her condition to be due to a lung infection with a superimposed infective hepatitis and cardiac failure due to beri-beri. For the next 4 days her condition did not change very much. She was given a transfusion of packed cells and by 6th July there was some improvement though the jaundice persisted. A week later she complained of severe pain in the right hypochondrium and became quite drowsy. Her temperature was still elevated. The liver was still enlarged below the costal margin and tender. The possibility of amoebic hepatitis was considered. On 20th July the upper abdominal pain increased and a very tender mass was palpable in the right hypochondrium. Her B.P. fell and the pulse rate rose. The whole clinical picture suggested an "Acute abdomen" and it was decided to perform a laparotomy. An exploratory incision was first made over the right intercostal region by a Reid's incision. Old blood clots were encountered. This incision was closed and a midline incision was than made. Exploration was facilitated by a preliminary Classical Caesarean section. A live infant weighing 3 pounds 12 ounces was delivered. The intra-abdominal haemorrhage was found to be arising from the liver. The liver was found enlarged and "cirrhotic" and its capsular surface was found covered with extensive clots of blood. The Liver was biopsied and the abdomen closed. The condition of the patient was now grave and she died 14 hours later. Permission for autopsy was not obtained. The Pathologist's report on the liver Biopsy was "The normal architecture of the liver columns is lost in many areas and the cells are many layers thick with much mitotic activity. Areas of haemorrhage are also seen. Diagnosis "Liver Hepatoma."

Discussion

Doctor Seah opened the discussion. He said that the commonest causes of intra-abdominal haemorrhage in pregnancy were:—

(a) Haemorrhage from the Liver.

(b) Bleeding from Utero-Ovarian vessels.

(c) Rupture of the Spleen.

(d) Adrenal Haemorrnage.

As regards the first cause trauma is the commonest precipitating factor, although

reports of the 14 cases from the literature stated that all but two of the ruptures occurred in conjunction with pre-eclamptic toxaemia and 6 of the 14 cases were said to have had convulsions. The hepatic lesions of eclampsia may lead to a rupture of Glisson's capsule with a consequent sub-capsular haematoma. One should always consider this possibility when a patient with toxaemia develops signs and symptoms of shock associated with upper abdominal pain. Doctor Seah emphasised the pathological point that, whereas in trauma, the rupture causes the haemorrhage, in hepatic apoplexy, the haemorrhage causes the rupture.

Other causes of intra-abdominal haemorrhage are the rupture of the superiod mesenteric artery and the utero-ovarian vessels. This latter source is relatively common and pregnancy increases the frequency of such bleeding. It has been said that the capacity of the ovarian veins is increased over 60 times by the 36th week of pregnancy and the tension on their walls increased by over 2½ times. Hodgkinson and Christenson who reviewed the literature in 1951 found 72 cases of bleeding from Utero-Ovarian vessels with a mortality rate of 49.9%. When this haemorrhage complicated labour, the mortality was 76.3%. Doctor Seah continued by briefly mentioning the aetiology of splenic rupture and of adrenal haemorrhage. He suggested that the latter is probably not as rare as the number of cases would indicate. There is increased adrenal activity during pregnancy with hyperplasia and hypertrophy of the adrenal cortex. It has been shown that once the organism has become adapted to one type of stress, it decreases its ability to react and adapt itself to superimposed stress. Therefore when a pregnant woman is subjected to such conditions as abortion, haemorrhage, prolonged labour or eclampsia, greater demands are made upon the already over-active adrenal cortex. This may lead to acute adrenal insufficiency often characterised by haemorrhage and necrosis of the adrenal cortex.

Doctor Seah concluded by mentioning rarer causes of abdominal haemorrhage e.g. rupture of aneurysms of the renal artery and the splenic artery. The reported cases all terminated fatally. He also recalled the death of a nurse in this hospital from intra abdominal bleeding. The patient was in the fifth month of her second pregnancy. She was on duty and wore a tight abdominal binder to conceal the enlarging uterus. At about 9 a.m. while sitting in the ward, she suddenly felt faint and fell off the chair. When seen she was in a state of collapse and shock from which she died rapidly. At post-mortem, the liver showed a blurred lobular pattern and was very friable on the posterior surface. Over the Spigelian lobe there was a tear. The peritoneal cavity contained 2-3 pints of fluid blood with some clots. The liver histologically showed no evidence of fat necrosis.

Professor Sheares referred to the case presented. He drew attention to the rapid increase in the size of the mass in the right hypochondrium over a period of 18 hours and this sign, namely the very rapid increase in size of an intra-abdominal mass, should suggest haematoma formation.

Doctor Sinha mentioned two cases of intra-peritoneal haemorrhage reported in the journal of Obstetrics and Gynaecology of the British Empire by Macafee and Mages where the source of the bleeding was in the posterior vaginal fornix. He suggested that haemorrhage in pregnancy may be classified as follows:—

(a) Intra-peritoneal Haemorrhage.

(b) Extra-peritoneal Haemorrhage.

(c) Retro-peritoneal Haemorrhage.

He then proceeded to give examples of each type.
