INTRAPERITONEAL HAEMORRHAGE DUE TO COAGULATION DEFECTS

(Report of Two Cases)

by

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Coagulation defects during pregnancy and labour resulting in severe postpartum hemorrhage are well documented. The defect in question is usually one of hypofibrinogenemia or excessive fibrinolysis. This is usually an acquired condition.

Coagulation defects of congenital origin, however, are not very common specially in gynaecological practice and are likely to be missed unless special diagnostic aids are employed. Of the various factors described, the deficiency of P.T.A. factor resulting in severe postpartum haemorrhage or intra-peritoneal haemorrhage from a ruptured graafian follicle or corpus luteum cyst is one of the rarest conditions encountered.

The following two cases which we have come across over the years have been presented with a view to focus the attention of gynaecologists on this rare condition which may endanger the life of the woman in the discharge of her physiological functions.

Case 1

Mrs. H. Y., age 18 years, Mohmedan, was admitted on 28-2-62 at 8.00 P.M. for severe abdominal pain since morning. Last menstrual period was 15 days before the date of admission.

Past Illness

The patient gave a history of prolonged bleeding from small cuts and abrasions and severe and prolonged bleeding after tooth extraction. Her menstrual periods were prolongd and profuse 10-15/15-30. Married 2 years, sterile.

Clinical findings

At the time of admission, pulse 120 per minute, volume low, blood pressure 70/-mm. of Hg. Patient was very pale and restless.

Examination of the abdomen showed marked tenderness and signs of free fluid. Per vaginal examination showed no obvious pathology.

Based on the history and clinical findings, a clinical diagnosis of intraperitoneal hemorrhage from ruptured graafian follicle was made.

Complete hematological study was made, blood was grouped and matched and two units of fresh blood were transfused before operation.

Her bleeding time was 6'—20" minutes and clotting time was 13'—25".

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Operation

1-3-62, 11.00 a.m. Abdomen was opened through a subumbilical fedian incision and massive intraperitoneal hemorrhage was found. The bleeding point was a ruptured graafian follicle on the right side. Haemostasis was established by right oophorectomy. The peritoneal cavity was cleared of blood and abdomen was closed paying proper attention to haemostasis. Two more units of fresh blood were given. Injection hydrocortisone was also given to cambat the shock. She had bouts of epistaxis. The wound healing was greatly delayed because of a haematoma. Eleven blood transfusions were given i all. The patient was discharged a month later.

She came again to the hospital on 30-6-64 with similar complaints. At the time of admission her condition was very poor. She was treated in the same way as before. However, as she was already in irreversible shock at the time of the operation, she expired on 1-7-64 due to pulmonnary oedema.

This case was obviously one of pseudohemophilia though the exact deficiency and nature of the factor that was lacking could not be detected at that time.

Case 2

Mrs. V. D., aged 36 years, was admitted on 16-12-70 with a complaint of pain in the abdomen since the previous night. She also had a tearing pain in the rectum. She had vomited twice at night. Her menstrual periods were regular, but flow was profuse. Her last menstrual period was on 24-11-70. She was also getting pain in the right shoulder since the afternoon.

Obstetric History

She had 3 full term normal deliveries, all girls living, last one being 7 years old. She had severe postpartum hemorrhage during all deliveries requiring several blood transfusions. She was investigated for this at the hematological centre of the J. J. Hospital in Bombay and diagnosed as a case of P.T.A. deficiency (Hemophilia C). Husband had undergone vasectomy.

On general examination, she was very pale and restless, her pulse rate was 130 per minute, her blood pressure was 100/70.

Per abdominal examination: Marked tenderness and guarding were found all over but specially in the lower abdomen. Distension and signs of free fluid were present.

Per vaginal examination—very painful and a tense, tender cystic lump was felt in the left fornix. Small petaechial haemorrhages were seen on the arms.

The case was diagnosed as one of severe intraperitoneal hemorrhage due to a ruptured graafian follicle, specially as a history of coagulation disorder was available. Her blood was grouped and cross matched and fresh blood transfusion was started.

Investigation: Blood group O IV Rh. positive. Bleeding time 4'—3" sec. Clotting time 11'—10", clot formed firm and elastic. Clot retraction after 1 hour good. Evidence of clot lysis after 4 hours, nil. Platelet count 1,15,000. Prothrombin time 12". Serum prothrombin time 13". Partial prothrombin time 18.5". Fibrinogen estimation, 310.5 mg. No evidence of circulating anticoagulants. The results indicated a P.T.A. deficiency.

Operation under general anaesthesia. Abdomen was opened through a low midline incision. Abdomen was full of blood and clots. Several omental adhesions with the left ovary which contained a ruptured cyst were seen. The bands were divided and the corpus luteum cyst was excised along with a part of the ovary. Haemostasis was secured and abdomen closed paying special attention to haemostasis. Four units of blood, hydrocortisone, calcium gluconate 1% 20 c.cs. istravenously, vit. C 500 Mgs, Premarin were given. The post-operative period seemed to be very smooth and uneventful. However, when an attempt was made to remove the sutures on the tenth day, a large haematoma was seen all along the wound and brisk haemorrhage started from the point from where sutures were removed. This was controlled with great difficulty and it was only after the patient was given three blood transfusions that it stopped.

Subsequent to this, the patient was given a fresh blood transfusion every 3rd day till the wound was almost healed. The patient was given in all eleven blood transfusions and discharged on 15-1-71, a month after admission.

During this period she was also given

C.V.P.** capsules 1 Lyndiol** 2.5 tablets

*C. V. P. = Vit. C, Rutin, citras flavinoids.

**Lyndial = Ethinyl oestradiol.

one per day and anabolic hormones. She was advised to continue hematinics and Lyndiol 2.5 mgm for at least 3 months to prevent bleeding episodes due to ovulation in the immediate future.

This patient was readmitted after two months under the Orthopaedic Surgeon for haemoarthrosis of the left knee joint. She was again treated with several blood transfusions, aspiration and plastering. The movements of the joint are very restricted and she is at present undergoing physiotherapy for the same.

Discussion

Intraperitoneal haemorrhage due to ruptured graafian follicle is known even in the absence of coagulation defects. Three other cases were recorded in this institution. Cases of P.T.A. deficiency, who suffer from menorrhagia, postpartum haemorrhage, etc. are also recorded. But records of cases of intraperitoneal haemorrhage, specially recurrent, in a patient with coagulation defects are not available in the literature.

The hazards attendant in ovulation occuring throughout the child bearing period constitutes a positive risk for these unfortunate patients.

Diagnosis is obvious if the condition is kept in mind.

The problems in therapy are availability of blood in sufficient amounts, preferably fresh, and delayed wound healing in case blood transfusions are not given in the post operative period to prevent hae-

matomata and troublesome bleeding. As bank blood and fresh plasma also contain the P.T.A. factor, the problem is not very difficult.

Administration of oral contraceptives over prolonged periods is recommended with to prevent ovulation and increase the coagulability of the blood.

Child bearing is also attended with the hazards of postpartum haemorrhage which can also be controlled by blood transfusions.

Summary

- (1) Two cases of intra-peritoneal haemorrhage due to ruptured graafian follicle in patients with coagulations defects are described.
- (2) Diagnosis usually does not present any difficulty.
- (3) Management consists of adequate blood transfusions, preferably fresh plasma transfusions and prompt surgery.
- (4) Post-operative period must be followed up with repeated blood transfusions to ensure wound healing.
- (5) Ovulation may be prevented for prolonged periods with oral contraceptives.

References

- De Grudey, G. C.: Clinical Hematology in Clinical Practice, ed. 2, reprint, England 1966, Blackwell scientific Publication, page 602.
- Marcus S. L. and Marcus C. C.: Advances in Obst. & Gynec. ed. 1, Baltimore, U.S.A. 1967, Williams and Wilkins Co, page 163.