IDIOPATHIC THROMBOCYTOPENIC PURPURA WITH PLACENTA PRAEVIA

(A Case Report)

by

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Introduction

Thrombocytopenia is the most common acquired platelet disorder. It is well recognised that chronic thrombocytopenic purpura occurs more frequently in females than in males. Hence the obstetrician occasionally has to face a pregnant patient with idiopathic thrombocytopenic purpura (ITP) and should be aware of its management.

CASE HISTORY

A 30 year old patient; gravida IV, para III; was admitted with 8 months amenorrhoea and painless bleeding per vaginum since 3 days. She was a known case of ITP which was detected 6 months earlier. Steroid therapy (Prednisone 40 mg/day) was given. The same was discontinued two months later.

Investigation which lead to diagnosis: Hemoglobin, 11 mg.%, clotting time 6 mins., bleeding time 8 mins., platelet count 80,000/cms., peripheral smear, platelets not adequate, bone marrow magakaryocytosis.

On admission, the patient's general condition was fair. pulse was 90/minute, blood pressure was 100/70 mm of Hg., pallor +, there was no oedema feet or albuminuria. The cardiovascular and respiratory systems were normal.

Abdominal examination revealed a pregnancy of 32 weeks gestation. The lie was longitudinal, the presentation was cephalic and the presenting part was floating. The foetal heart sounds were 130/minute, and regular.

Vaginal examination was not done.

Investigation at this stage revealed: Hemoglobin 9 gm%, ESR 40 mm/hr., clotting time 4 mins., bleeding time 2 mins., prothrombin time 18/21 secs., platelet count 100,000/cms., fibrinogen 450 mgm.%, bone marrow not done, clot reaction test not done.

As the bleeding was minimal, a decision was taken to manage the patient conservatively. However, the next day after admission the patient had another bout of bleeding to the extent of 200 ml. The pulse rose to 110/minute, the blood pressure fell to 90/60 mm of Hg. Resuscitative measures were started and a decision was taken to do a vaginal examination using a 'double' set up (Hellman and Pitchard 1971). Vaginal examination revealed a cervix which was one finger dilated and a marginal type II placenta. The membranes were intact and the pelvis was adequate. Hence artificial rupture of the membranes was done and 500

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ml of 5% glucose with 2.5 units of pitocin was started. The subsequent labour was closely monitored, using foetal heart monitor. The patient had an uneventful vaginal delivery two hours later. A female child weighing 1960 gms was delivered with an Apgar score of 8 at 1 minute and 10 at 5 minutes. Prophylactic Methyl Ergometrine 0.2 mgm intramuscular was usel. There was no post-partum haemorrhage. The placenta and baby were normal. The patient had an uneventful stay of 10 days in the hospital during which an abdominal sterilisation using Madlener's technique was done, under general anaesthesia, without undue bleeding.

Post-partum investigations were: Mother: Hemoglobin 10.4 gm%, clotting time 6 mins., bleeding time 3 mins., platelet count 100,000/cms. Child: Hemoglobin 16 gm.%, clotting time 7 mins., bleeding time 3 mins., peripheral smear, platelets adesuate.

Discussion

ITP with pregnancy has the following important considerations:

1. There is a two-fold increase in the incidence of spontaneous abortions (Robson and Davidson, 1950).

2. There is an increase in the incidence of intra-partum and post-partum bleeding as a result of thrombocytopenia (Wintrobe *et al*, 1974).

3. Thrombocytopenia and perinatal haemorrhage occur in majority of the infants born to such mothers (Robson and Davidson 1950; Wintrobe *et al*, 1974).

4. Corticosteroids and splenectomy may be hazardous to both the mother and child during pregnancy (Heys, 1966).

Heys (1966) has reported one case of placenta praevia in association with ITP. In that case, labour was managed by lower segment caesarean section and a still born baby weighing 4,600 gms was delivered. There was no post-partum haemorrhage and the post-operative period was uneventful. The present case was managed conservatively with good results.

Management of the pregnant patient with ITP during labour is quite controversial. Sander (1965) has advocated vaginal delivery as the procedure of choice. In Epstein *et al* (1950) opinion caesarean section is extremely hazardous but has been performed for the appropriate obstetric indications.

Murray and Harris (1976) state that many of the infant deaths are related to birth trauma, specially intracranial haemorrhage. Thus, they feel that infant born to mothers with ITP, whether symptomatic or in remission at the time of delivery, should not to be subjected to the trauma of vaginal delivery.

When thrombocytopenia is still present at the time of delivery, post-partum haemorrhage is slightly more common than in uncomplicated pregnancy and appears to originate mainly from operative incision and lacerations, rather than from the atonic uterus. The overall maternal mortality in pregnancy complicating ITP is very low. However, mortality in untreated patients in whom ITP antedates pregnancy is reported to range from 7 to 11 per cent (Hellman and Pritchard 1971; Robson and Davidson, 1950; Taneer, 1960).

There is considerable evidence indicating an immunologic basis for ITP. Antiplatelet antibodies can clearly traverse the placenta resulting in transient but potentially significant thrombocytopenia in the infants. About 50 per cent of children born to women with chronic ITP are themselves thrombocytopenic at birth (Pitkins, 1979). Platelet count returns to normality as the reponsible antibody disappears from the circulation. This normally occurs with 1 to 4 weeks, but rarely as many as 4 months may be required (Oski and Naimase, 1972).

Prenatal administration of cortico-