Hyperimmune Thrombocytopenia in Pregnancy Treated by Splenectomy

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Key Words
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Abstract
3 cases of hyperimmune thrombocytopenia in pregnancy are described. Splenectomy was followed by return of the platelet count to normal in all. There was no maternal or fetal death.

Hyperimmune thrombocytopenia (HTP) in pregnancy represents a hazard to both mother and fetus. Prednisone is the treatment of choice but may be ineffective when HTP occurs in pregnancy. Splenectomy offers an early alternative in severe cases.

Case Reports
Case I
A 20-year-old woman who had a previous normal pregnancy presented at 20 weeks gestation with severe epistaxis and purpura after rubella exposure. Haemoglobin was 9.5 g/dl and the platelet count was 4 X 10^9/1. Increased immature megakaryocytes were seen on marrow aspiration. Rubella HAI titre was 320 and subsequently fell to 10. Bleeding continued unresponsive to transfusion of 12 U of platelet concentrate and splenectomy was performed. Bleeding ceased thereafter and the platelet count returned to normal in 10 days. A full-term infant who did not develop thrombocytopenia was later delivered.

Case II
A 37-year-old woman with eight previous pregnancies presented at 36 weeks gestation. Her platelet count was 12 X 10^9/1, haemoglobin 12 g/dl, and she had wide-spread purpura. Antibody screen was negative. A marrow aspirate showed increased immature megakaryocytes. Despite prednisone 60 mg/day her platelets fell to 6 X 10^9/1, accompanied by severe epistaxis over the next 5 days. The splenic pedicle was clamped with peroperative platelet transfusion and a 3,000 g infant was delivered by Caesarian section. A splenectomy was then performed. Cord blood platelets were 11 X 10^8/1. The baby’s count was 95 × 10^9/1, which fell to

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Case III
A 30-year-old woman who had two previous pregnancies presented with purpura of her lower limbs at 20 weeks gestation and a history of rubella exposure. Her platelet count was $66 \times 10^9/l$, and a marrow aspirate showed increased immature megakaryocytes. Therapy with prednisone 80 mg/day was initiated. Her platelet count steadily decreased and she presented 3 weeks later with severe purpura, epistaxis and gingival bleeding, her platelet count being $1 \times 10^9/l$. A splenectomy was performed under platelet cover and her count returned to normal over 2 months. She gave birth to twins at term who had stigmata of congenital rubella.

Discussion
HTP may present or worsen in pregnancy. It is a rare complication and reports are anecdotal. Corticosteroids alone rarely achieve remission [1] and represent a small theoretical hazard to the fetus [2]. As splenectomy has become safer with the availability of platelet transfusions, it has become an early alternative in severe thrombocytopenia. Thrombocytopenia results in a high fetal and neonatal loss although maternal mortality is low [3]. Elective Caesarian section may minimize fetal trauma and in extreme circumstances may be combined with splenectomy as described.

References