Idiopathic thrombocytopenic purpura during pregnancy

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SUMMARY

Idiopathic thrombocytopenic purpura is a very rare disease, especially during pregnancy. It is characterised by low platelet count and predominantly muco-cutaneous bleeding. There are many forms to monitor and treat these patients. Here, we present a case of a pregnant woman, with idiopathic thrombocytopenic purpura, who was submitted to treatment only when the platelet count was below 10 000/ μ l, with human intravenous immunoglobulin. During the evolution of pregnancy, caesarean delivery and puerperium were favourable.

BACKGROUND

Idiopathic thrombocytopenic purpura, also known as immune thrombocytopenic purpura, is an acquired disease of unknown cause, usually benign, characterised by thrombocytopenia.

Data from international epidemiological studies in adults provide an estimated incidence of 1.6–2.7 cases/100 000 individuals/year.¹ A part of this number will include women in their reproductive age, and therefore, pregnancy.

Despite the unknown aetiology, some autoantibodies usually IgG, were recognised, and directed to antigens in platelets membrane.

Idiopathic thrombocytopenic purpura is predominantly associated with haemorrhagic symptoms, such as: petechiae, ecchymosis, mucosal bleeding (gingival, nasal, urinary and digestive tract), menorrhagia, which correlates with platelet count (more common and clinically significant when they are <20 000/ μ l, but mainly when they are less than 10 000/ μ l).

The description of this case is very important because of its rarity in pregnant women and because there are a large variety of monitoring and treatment options.

OUTCOME AND FOLLOW-UP

For 35 years, Gravida 2 Para 1, was monitored by haematology since the diagnosis of idiopathic thrombocytopenic purpura in her first pregnancy (the newborn had thrombocytopenia at birth). She was referred to obstetrics consultation at 6 weeks of gestation. During her first trimester of pregnancy, the platelet count ranged between 10 000 and 20 000/ μ l, without haemorrhagic symptoms. At this point, we opted for expectant management and clinical surveillance.

At 25 weeks of gestation, the pregnant woman presented less than 10 000/ μ l platelets, with no bleeding history. We could treat her with corticosteroids, human intravenous immunoglobulin, immunosuppressants (such as mycophenolate mofetil or azathioprine), thrombopoietin receptor agonists or less commonly used platelet transfusion or splenectomy. We opted for human intravenous immunoglobulin—1 g/kg/day for 2 days. After treatment for 1 week with intravenous immunoglobulin (IVIg), she presented 315 000/ μ l platelets.

At 31 weeks of gestation, platelet count returned again to values ranging between 10 000 and 20 000/ μ l. An elective caesarean was planned at 38 weeks (mainly because of the risk of thrombocytopenia in the newborn). IVIg was once again administered—1 g/kg/day for 2 days—1 week before surgery. On the day of caesarean the pregnant woman had a platelet count of 215 000/ μ l. The delivery occurred without any complications. The newborn was a healthy girl, with 2800 g, Apgar score 09 and 10, on the first and fifth minute of life respectively and with thrombocytopenia. Human IVIg was administered for 2 days to the newborn too, with good response. Puerperium was uneventful.

DISCUSSION

Studies state that patients with platelet count above 50 000/ μ l do not need treatment, and those with platelets ranging between 20 000 and 50 000/ μ l should be evaluated case by case.²

In pregnant women, we think that corticosteroids or human intravenous immunoglobulin are the first-line of treatment. As pregnancy is a physiological prothrombotic state and chronic use of corticosteroids or repeated doses of immunoglobulin expose patients to adverse effects of these drugs, with impairment in their quality of life,³ in this particular case, when the platelet count ranged between 10 000 and 20 000/ μ l and as there were no haemorrhagic symptoms, we opted to treat only if the platelets were less than 10 000/ μ l, if any sign of bleeding appeared or as prophylaxis before surgery. We have preferred the use of human intravenous immunoglobulin because, first, as she was monitored by haematology of our hospital, it was already known as a good response to this kind of treatment and second, as she was pregnant, the other methods, particularly therapy with immunosuppressants, would not be the best alternative.

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Learning points

- ▶ Human intravenous immunoglobulin is a good and safe choice to treat pregnant women with idiopathic thrombocytopenic purpura.
- ▶ Do not forget that the administration of human intravenous immunoglobulin may cause certain side effects such as: fever, chills, flushing, headache and myalgias.
- ▶ To avoid these side effects, intravenous immunoglobulin (IVIg) administration should be very slow, and considered previously give antihistamine plus/and/or a corticosteroid (eg, 50 mg oral hydroxyzine plus 100 mg intravenous hydrocortisone, 20 min prior to IVIg initiation).
- ▶ Do not forget that the newborn might be affected by thrombocytopenia even when the mother's platelet count is within normal limits.

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Patient consent Obtained.

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