8. IgG therapy during pregnancy

Every country and institution may have different regulations regarding immunoglobulin therapy administration. Please follow your local and national guidelines.

This chapter deals with pregnancy in immunodeficiency rather than in patients receiving immunomodulation therapy.

Immunoglobulin therapy has been safely used in pregnant women with antibody deficiencies. In these cases, the replacement is not only necessary for the mother but also for the foetus. **It is imperative for both mother and child that the immunoglobulin treatment is not stopped by anyone other than the initiating clinician** (1, 2).

IgG is the only isotype that crosses the placenta during pregnancy, and serum IgG levels in the first few months of life largely represent maternal IgG (3). This is gradually replaced by the infant's intrinsic IgG and by 6 to 9 months of age the IgG is nearly entirely the infant's (4).

Patients newly diagnosed with immunodeficiency during pregnancy should be started on immunoglobulin therapy as soon as possible. However, this decision should be made in partnership with the patient.

NOTE: Patients on subcutaneous IgG therapy infusing into their abdomen need to change infusion site as pregnancy progresses (i.e. into the thigh). In fact, the subcutaneous tissue on the abdomen becomes very thigh and "narrow" at end of a pregnancy.

NOTE: *f*SCIG can be given to pregnant women and breast-feeding mothers: clinical experience suggests no harmful effects on the course of pregnancy, on the foetus, or the neonate. Nevertheless, caution should be applied and *f*SCIG prescribed only if clearly indicated (5).

The dose during pregnancy should be increased as the mother gains weight. The dose should be kept at ≥100 mg/kg/week (6-9). If there are local or national recommendations regarding the dosing during pregnancy, please follow them.

IgG trough levels should be checked more often during pregnancy and breastfeeding to make sure that they remain adequate, and the patient must be informed about the importance of these measures, because the increase in blood volume can cause inadequate IgG trough levels, which may lead to an increased infection rate (10). The measuring should be done regularly from the second trimester.

If the maternal immunoglobulin therapy is adequate, it has been shown that the new-borns have normal IgG and IgG subclass levels at birth (1).

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