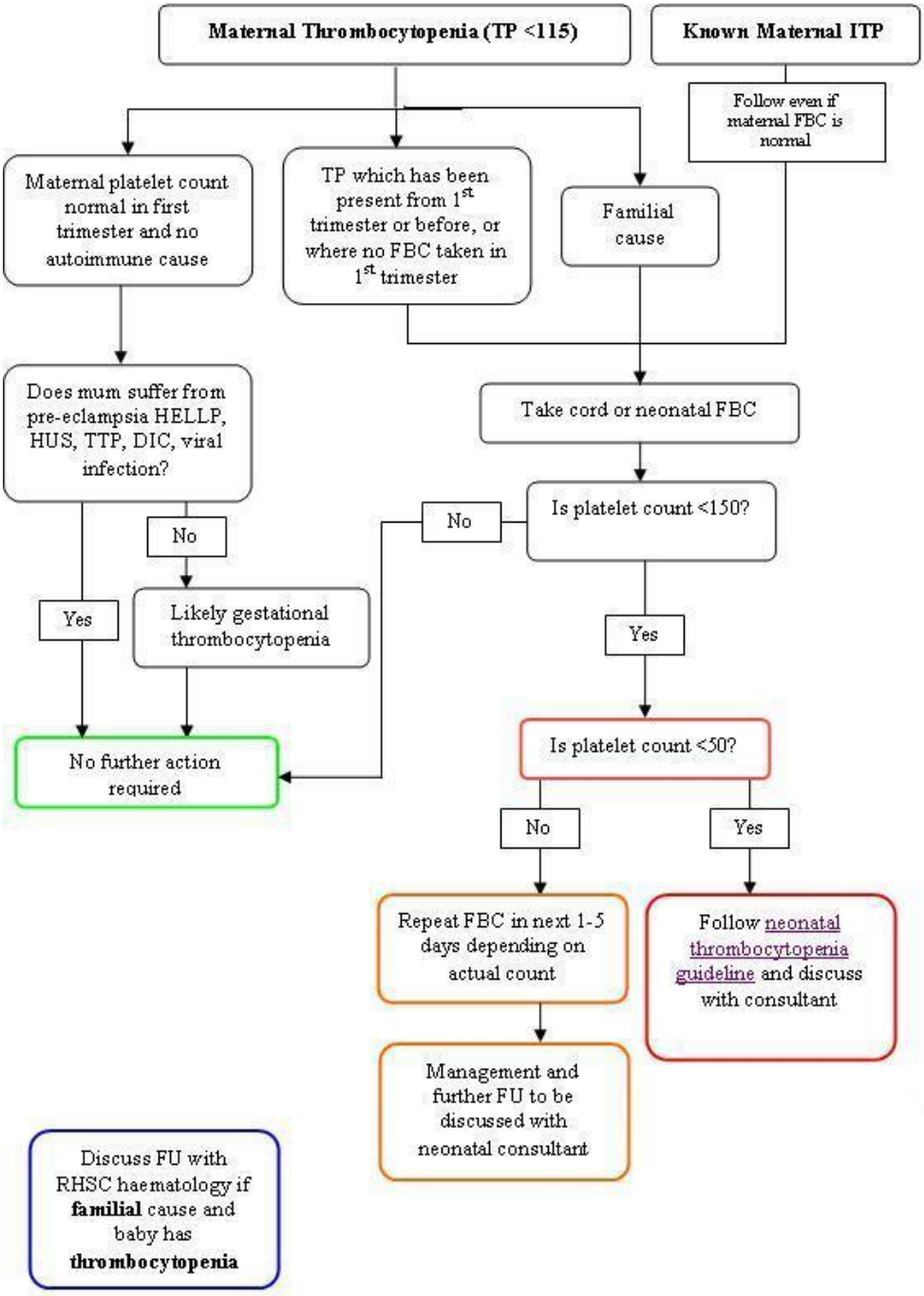
Maternal Thrombocytopenia

It is important to differentiate possible immune thrombocytopenia from other causes of thrombocytopenia in the mother which can either be dilutional/gestational or secondary to a non-immune cause such as DIC, HUS, HELLP etc as the management for the baby is different after birth.

Remember that in one of the most serious neonatal platelet problems, alloimune thrombocytopenia, the maternal platelet count will be normal.

Please use this flowchart for where maternal thrombocytopenia has been documented:



Gestational Thrombocytopenia

Gestational thrombocytopenia occurs in 7% of pregnancies and has no consequences for the mother or fetus. The platelet count tends to fall late in pregnancy and can be as low as $80x10^9$/l. Gestational thrombocytopenia is supported **by a normal count in early pregnancy, the absence of autoimmune disease and where other causes have been excluded**. If a diagnosis of gestational thrombocytopenia is made no further action is required in the neonate. However if there is any doubt as to the pathology of the thrombocytopenia then subsequent management should occur as detailed on the flowchart.

Thrombocytopenia due to other causes

Uncertain causes of thrombocytopenia

- Infants of mothers with maternal thrombocytopenia $<115x10^9$/l, **where gestational thrombocytopenia cannot be excluded and where thrombocytopenia is present in the first and second trimesters** are more likely to have an underlying immune process, or rarely, a platelet production defect prior to pregnancy. Babies should be monitored for thrombocytopenia at birth and sometimes *in utero*.

Familial causes of thrombocytopenia

- Genetic conditions causing thrombocytopenia may be inherited by the fetus and platelet counts should be monitored as below and discussed with RHSC Haematology Consultants should neonatal thrombocytopenia be observed.

Rare causes: Haemolytic Uraemic Syndrome, drug related, viral infection, DIC, Thrombotic Thrombocytopenic Purpura

- Infants of these mothers do not require monitoring of their platelet count unless clinically indicated.

Maternal Idiopathic Thrombocytopenic Purpura (0.1-1/1000 pregnancies)

- Maternal ITP can cause neonatal thrombocytopenia by the transplacental passage of antiplatelet antibodies although the incidence is low[1]. The maternal platelet count however may be normal but the neonate can still be affected. This is particularly the case if there has been previous splenectomy in the mother. Therefore any neonates of mothers with known ITP regardless of their platelet count should be monitored as above.

References:

1. Letsky EA. Greaves M. Guidelines on the investigation and management of thrombocytopaenia in pregnancy and neonatal alloimmune thrombocytopaenia. Maternal and Neonatal Haemostasis Working Party of the Haemostasis and Thrombosis Task Force of the British Society for Haematology. British Journal of Haematology. 95(1):21-6, 1996 Oct