# Management of Asymptomatic Neonates at Risk of Thrombocytopenia

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| **Key Document code:** | WAHT-KD-015 | |
| **Key Documents Owner:** | Dr Vivianna Weckemann | Consultant Paediatrician |
| **Approved by:** | Paediatric Quality Improvement Meeting | |
| **Date of Approval:** | 2nd August 2019 | |
| **Date of Review:**<br>**This is the most current version and should be used until a revised document is in place** | 2nd August 2022 | |

**Key Amendments**

| Date | Amendments | Approved by |
|---|---|---|
| | | |

## Introduction

This guideline is intended for use in managing well, asymptomatic newborn babies born to mothers with gestational thrombocytopenia or maternal immune thrombocytopenia (ITP).

It was developed as it was noted there is an increasing number of mothers with low platelets during pregnancy and clarification was needed on how infants born to these mothers should be managed to ensure a consistent approach.

It is important to screen these babies appropriately as a small proportion of babies born to thrombocytopenic mothers will have very low platelets, which rarely leads to significant bleeding in the neonate. These infants need to be identified, observed and treated appropriately to minimise bleeding risks.

## Details of Guideline

## Background

Thrombocytopenia is defined as a platelet count of < 150 × $10^9$/L and is commonly seen during pregnancy; affecting around 5% of expectant mothers [1].
70-80% of cases of maternal thrombocytopenia are due to gestational thrombocytopenia which is generally a benign condition for both mother and baby [2]. A diagnosis of gestational thrombocytopenia is one of exclusion and should have only been made for the mother if:

- Platelet count- greater than 70x$10^9$/L but less than 150 x$10^9$/L
- No history of thrombocytopenia outside pregnancy or 6 weeks post-partum
- No history of bleeding/bruising
- No family history of thrombocytopenia/bleeding/bruising
- Normal blood film
- No recent drugs that may cause thrombocytopenia
- No other cause suspected for the thrombocytopenia
- No evidence of pre-eclampsia [1]

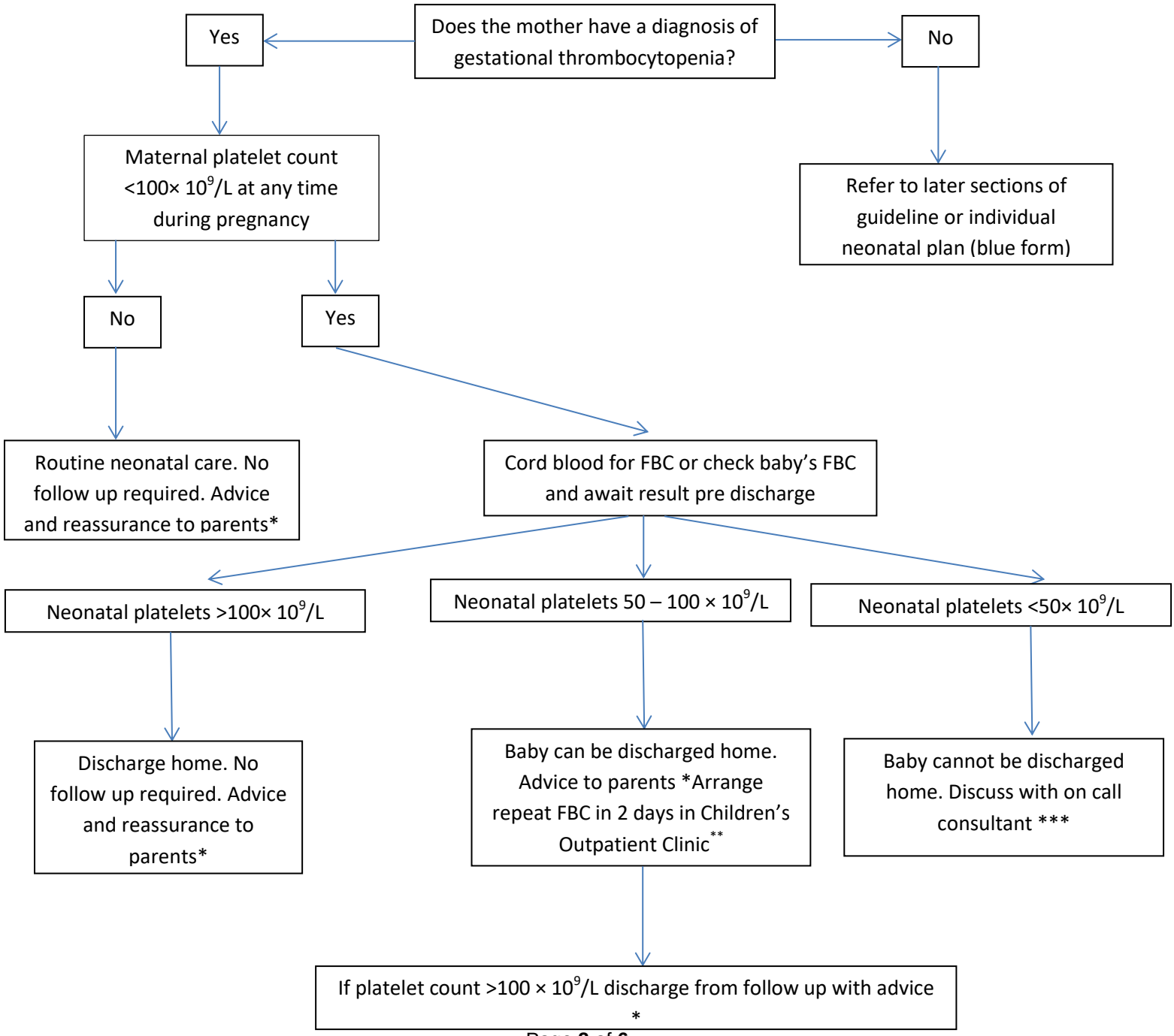
Immune thrombocytopenia (ITP) is the second most common cause of isolated maternal thrombocytopenia accounting for around 3% [2]. Primary ITP is caused by autoimmune destruction of platelets [3]. Placental transfer of maternal antibodies can result in neonatal thrombocytopenia. A rise in neonatal platelet count is usually seen by day 7 however it can take weeks or months to improve[2].

There are many other causes of maternal thrombocytopenia (Please refer to WHAT – OBS – 110 for list of alternative diagnoses) which are of varying significance to mother and baby.

Where maternal thrombocytopenia has been identified a neonatal blue form should have been completed which offers advice on the post natal management of the baby.

**Please note all subsequent guidelines relate to asymptomatic neonates. If the baby has bleeding symptoms discussion with the on call consultant is needed**

## Management of Asymptomatic Infants Born to Mothers with Gestational Thrombocytopenia:

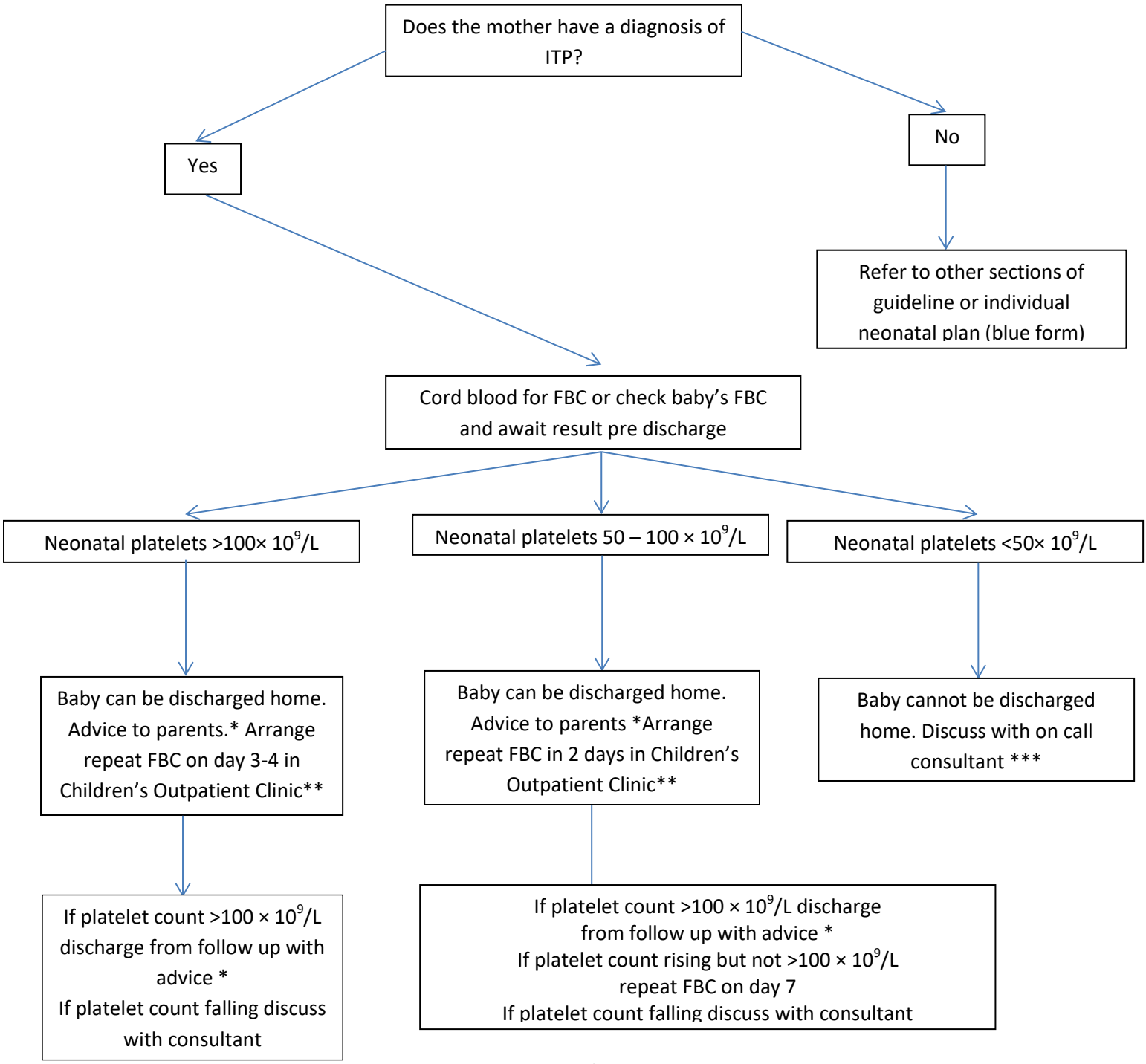


* For all babies discharged home parents should be advised to seek medical advice if baby develops bruising, bleeding, petechiae or becomes unwell

** Clinic nurses to liaise with consultant re blood results and plan for further repeats if necessary

*** If platelet count is <50× $10^9$/L discussion with the on call consultant is needed regarding CUSS and further management. Diagnosis of maternal gestational thrombocytopenia should be reviewed.

## Management of Asymptomatic Infants Born to Mothers with Immune Thrombocytopenia (ITP):



* For all babies discharged home parents should be advised to seek medical advice if baby develops bruising, bleeding, petechiae or becomes unwell

** Clinic nurses to liaise with consultant re blood results and plan for further repeats if necessary
*** If platelet count is <50× $10^9$/L discussion with the on call consultant is needed regarding CUSS and further management (including possible treatment with IVIG).

## References

1. WAHT-OBS-110. Worcester Hospital Guideline for the investigation of thrombocytopenia in pregnancy and the management of gestational thrombocytopenia. Cited 26.8.13
2. Gernsheimer T, James A and Stasi R. How I treat thrombocytopenia in pregnancy. Blood, 2013; 121(1):38-47
3. Neunert C, Lim W, Crowther M et al. The American Society of Haematology 2011 evidence based guideline for immune thrombocytopenia. Blood 2011; 117 (16): 4190-4207
4. Staffordshire, Shropshire and Black country newborn network guidelines. Cited at http://www.networks.nhs.uk/nhs-networks/staffordshire-shropshire-and-black-country-newborn/documents/Thrombocytopenia%202011-13.pdf on 15/9/13

## Monitoring Tool

This should include realistic goals, timeframes and measurable outcomes.

How will monitoring be carried out?

Who will monitor compliance with the guideline?

| Page/ Section of Key Document | Key control: | Checks to be carried out to confirm compliance with the policy: | How often the check will be carried out: | Responsible for carrying out the check: | Results of check reported to: *(Responsible for also ensuring actions are developed to address any areas of non-compliance)* | Frequency of reporting: |
|---|---|---|---|---|---|---|
| | **WHAT?** | **HOW?** | **WHEN?** | **WHO?** | **WHERE?** | **WHEN?** |
| | Babies of mothers with thrombocytopenia have FBC (cord blood or sample from baby)on day 1 | Spot checks and/or audit | as occurs | Acute paediatricians | Directorate Clinical Governance Group | two yearly |
| | Babies with platelets <100 have a clear plan for re-checking FBC | Spot checks and/or audit | as occurs | Acute paediatricians | Directorate Clinical Governance Group | Two yearly |

## Contribution List

**Key individuals involved in developing the document**

| Name | Designation |
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