Thrombocytopenia in Pregnancy

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Guideline to be followed by (target staff): Staff working in Women's health, haematology and anaesthetics

To be read in conjunction with the following documents: N/A

Are there any eCARE implications? No

CQC Fundamental standards:
Regulation 9 – person centred care
Regulation 10 – dignity and respect
Regulation 11 – Need for consent
Regulation 12 – Safe care and treatment
Regulation 13 – Safeguarding service users from abuse and improper treatment
Regulation 17 – Good governance

Disclaimer –

Since every patient's history is different, and even the most exhaustive sources of information cannot cover every possible eventuality, you should be aware that all information is provided in this document on the basis that the healthcare professionals responsible for patient care will retain full and sole responsibility for decisions relating to patient care; the document is intended to supplement, not substitute for, the expertise and judgment of physicians, pharmacists or other healthcare professionals and should not be taken as an indication of suitability of a particular treatment for a particular individual.

The ultimate responsibility for the use of the guideline, dosage of drugs and correct following of instructions as well as the interpretation of the published material **lies solely with you** as the medical practitioner.

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Definitions

APTT Activated Partial Thromboplastin Time

ANNP Advanced Neonatal Nurse Practitioner

DIC Disseminated Intravascular Coagulation

EDTA Ethylenediaminetetraacetic acid

FBC Full blood count

HELLP Haemolysis, Elevated Liver Enzymes and Low Platelets

HIV Human Immunodeficiency Virus

ITP Immune thrombocytopenic purpura

IM Intramuscular

LFTs Liver Function Tests

LMWH Low molecular weight heparin

MDS Myelodysplasia

MAHA Microangiopathic haemolytic anaemia

MLU Midwife Led Unit

NSAID Non-Steroidal Anti-Inflammatory Drug

NAIT Neonatal alloimmune thrombocytopenia

PT Prothrombin Time

SLE Systemic Lupus Erythematosus

TSH Thyroid stimulating Hormone

TTP/HUS Thrombotic Thrombocytopenia Purpura/Haemolytic Uraemic Syndrome

U+Es Urea and Electrolytes

vWF: CB Von Willebrand Factor Collagen Binding Activity

vWF: Ag Von Willebrand Factor Antigen

vWF: RCo Von Willebrand Factor Ristocetin Co-Factor Activity

Guideline Statement

Thrombocytopenia is a reduction in platelet numbers below the normal range (150 -400 x10*9/L). It is common in pregnancy with a platelet count <150 occurring in 6.6 – 11.6 % of women in the 3rd trimester. Only 1% have a platelet count <100 x10*9/L, (Gernsheimer, James & Stasi, 2013). It is important to recognise and diagnose the cause of thrombocytopenia as it can be associated with life threatening obstetric conditions as well as having implications for the mode of birth and the bleeding risk of mother and neonate.

The aim of this document is to provide best practice guidelines on the investigation of maternity service users with thrombocytopenia and the management of the commonest conditions.

This guideline is applicable to all maternity service users found to be thrombocytopenic with a registered pregnancy at the Milton Keynes University Hospital. It is designed for use by obstetric medical and midwifery staff, obstetric anaesthetists, neonatologists and haematology and laboratory staff.

Executive Summary

If platelet count <150 x 10*9/L, repeat FBC and blood film to confirm thrombocytopenia and exclude EDTA induced platelet clumping by asking for a citrated platelet count in a coagulation (blue) blood bottle. If confirmed perform a full history (including history of menorrhagia, easy bleeding and bruising and any family history) and examination, look whether pre-pregnancy count is normal and consider the following investigations:

Essential	Consider
FBC and blood film APTT/PT/fibrinogen (clotting screen) Citrate platelet count U+Es LFTs TSH	Fibrinogen Reticulocyte count Autoimmune profile (ANA, ds DNA) Antiphospholipid antibodies (anti-cardiolipin and b2-glycoprotein) Von willebrand's screen Immunoglobulin levels Viral screen (Hep C, CMV, EBV)

General Management

- Low platelets can occur for a number of different reasons, however some of these are potentially life threatening and need to be managed quickly and efficiently with obstetric, haematological and anaesthetic input.

- Of particular note
  - suspected pre-eclampsia/HELLP/AFLP should be managed as an obstetric emergency
  - suspected thrombotic thrombocytopenic purpura (TTP) - a haematological emergency that requires urgent plasma exchange
  - significant bruising/bleeding with a platelet count <50 x10*9/L should be discussed with the on-call haematologist immediately
  - suspected DIC a cause must be sought and managed urgently

- Refer maternity service users with a platelet count <100 x10*9/L to the maternal medicine clinic (or Joint Haem Obs clinic once available)
- Refer to high risk anaesthetic clinic to discuss implications for regional anaesthesia
- If possible, stop drugs that impair platelet function (aspirin, NSAIDs, clopidigrel, LMWH)
- LMWH safe with platelets >75 x10*9/L and aspirin with platelet count >50 x10*9/L

Delivery

- As per obstetric indications. Low platelets is not an indication for elective Caesarean.
- Ideally platelet counts assuming no other risk factors for bleeding;
    - Any Vaginal and caesarean section aim platelets >50 x10*9/L
    - For regional anaesthesia >80 x10*9/L
    - MLU/Home delivery >150 x10*9/L

- In a maternity service user with ITP or platelet count <100 x10*9/L avoid ventouse, difficult forceps, fetal scalp monitoring and fetal blood sampling.
- Avoid intramuscular injections if mother's count <50 x 10*9/L.

Neonate

- If maternal platelet count <100 x10*9/L or known ITP obtain cord FBC sample.
- If normal: advise parents to re-present if neonate develops bruising or bleeding
  If low: refer to neonatologist to perform daily counts. The nadir is usually 2-5 days post birth.
- Avoid intramuscular vitamin K until platelets known to be >50 x10*9/L (otherwise give orally).

Causes

Gestational thrombocytopenia and autoimmune thrombocytopenia are the commonest causes. See main document for details.

1.0 Roles and Responsibilities:

Doctors role is to manage the patients per guideline and ensure a clear plan for antenatal care and delivery is documented.

Midwives role is to highlight such patients to a named consultant and follow up Full Blood Count Results.

2.0 Implementation and dissemination of document

The guideline is accessible on the intranet and will be disseminated at relevant meetings.

3.0 Processes and procedures

3.1 Screening for thrombocytopenia

As part of routine antenatal care, a FBC should be requested at booking and 28 weeks. If platelets are < 150 x10*9/L at booking, please speak to a maternal medicine consultant.
If platelets are < 100 x 10*9/L at booking or at 28 weeks refer directly to Maternal medicine clinic or Joint Haem Obs clinic (once available).

Any maternity service users with platelets less than 100 x 10*9/L or history of ITP needs an FBC repeating monthly until 28 weeks. After 28 weeks, fortnightly checks until 36 weeks and then weekly until delivery.

FBC should be performed to check platelet count, if a maternity service user has unexplained bruising or bleeding, a petechial rash, abnormal liver function tests or signs of pre-eclampsia.

Subsequent Actions if Thrombocytopenia Detected

1. ***Confirm result is not secondary to platelet clumping***

Repeat FBC and request a blood film to confirm thrombocytopenia and exclude pseudo-thrombocytopenia (EDTA induced platelet clumping).

• If pseudo-thrombocytopenia is likely, (the haematologist will inform you if this is the case) and in such a case perform platelet count in citrate tube (Blue). State clearly on request for citrate platelet count.

2. ***Full history including*:**

- Bleeding history to estimate duration and severity of thrombocytopenia (eg ask re menorrhagia, bleeding after tooth extraction/ surgery, easy bruising).
- Constitutional symptoms suggestive of underlying lymphoproliferative disorder, SLE or HIV e.g. fever, weight loss, night sweats.
- Risk factors for HIV and hepatitis B or C infection.
- Detailed drug history (including herbal medicines, NSAID and heparin use).
- Recent transfusions to exclude post-transfusion purpura.
- Alcohol history.
- Family history: to exclude non-immune familial low platelet syndromes and type 2B von Willebrand's disease.
- Headaches, visual problems, swelling (pre-eclampsia symptoms).

***Full examination including*:**

- Signs of bleeding e.g. petechiae, mucosal bleeding, purpura.
- Lymphadenopathy / hepatomegaly / splenomegaly which may suggest a lymphoproliferative condition.
- Features of autoimmune disease.
- Signs of infection.
- Signs of pre-eclampsia: oedema, hyperflexia, hypertension +/- proteinuria.

Investigations

- **Repeat FBC**: To confirm thrombocytopenia and exclude associated anaemia or leucopenia.
- **Blood film**: to exclude pseudo-thrombocytopenia (platelet clumps) and look for evidence of MAHA / MDS / marrow infiltration / megaloblastic change.
- **APTT/PT +/- fibrinogen**: to look for DIC. May have normal or prolonged APTT with vWD.
- **HIV, hepatitis B and hepatitis C screening** if not already done.
- **LFTs and U+Es**: to exclude HELLP and renal impairment (MAHA).
- **TSH**: Hypothyroidism common with ITP.
- **Look back**: to see if previous pre-pregnancy count normal.

Consider following investigations – usually after discussion with Maternal Medicine / Joint Haem Obs clinic

- Reticulocyte count: if anaemic.
- Autoimmune profile and anti-phospholipid antibodies (anti-cardiolipin, B2-glycoprotein): if concern systemic autoimmune disorder
- Von Willebrand's screen (vWF: Ag, vWF: CB, vWF: RCo and low dose RIPA): if family history, pre-pregnancy history of bruising/bleeding.
- Immunoglobulin levels: low threshold for requesting to exclude immunodeficiency, especially if recurrent infections.

Tests NOT recommended routinely:

- H.pylori testing – recommended in some guidelines but not routinely available in Milton Keynes.
- Bone marrow aspirate/trephine - unlikely to add useful information.
- Thrombopoetin levels.

3.2 Causes

1. Spurious result e.g., EDTA induced clumping, clotted sample.
2. Physiological dilution e.g., gestational during pregnancy.
3. Reduced production e.g., post viral, congenital, drugs, alcohol, low B12 / folate, myelodysplastic syndrome.
4. Increased destruction e.g., drugs, idiopathic thrombocytopenic purpura (ITP. TTP), auto-immune disease, disseminated intravascular coagulation (DIC), PET / HELLP

	Pregnancy specific	**Pregnancy not specific**
Isolated thrombocytopenia	Gestational thrombocytopenia (60%)	Primary ITP (11%) Drug induced thrombocytopenia Type 2B/platelet type von Willebrand disease Congenital thrombocytopenia
Thrombocytopenia associated with systemic disorder	Severe pre-eclampsia (20%) HELLP syndrome (<1%) AFLP (<1%)	TTP/HUS SLE Antiphospholipid syndrome Viral infections Bone marrow disorders Nutritional deficiency Splenic sequestration (liver diseases, portal vein thrombosis etc) Thyroid disorders

3.3 General Management

Urgent situations

- Maternity service users with suspected TTP should be immediately discussed with the on call haematologist*.
- Maternity service users with significant bruising or bleeding and a platelet count <50 x10*9/L should be discussed with the on call haematologist*.
- Maternity service users with suspected DIC need admission and urgent investigation and treat cause.
- Any patients with pre-eclampsia / HELLP should be managed by the obstetric team.

During routine antenatal care

- Refer to Maternal medicine / Joint Haem Obs clinic if platelet count <100 x10*9/L.
- If platelet count <100 x10*9/L in third trimester refer to anaesthetist to discuss implication for pain relief and anaesthesia.
- Educate the patient about their condition including symptoms and signs of low platelet count, emergency contact numbers and activities to avoid. E.g. sports with risk of injury if moderately to severely low platelet count.
- Consider other risk factors for bleeding such as drugs that impair platelet function (commonly NSAIDs, LMWH, clopidogrel) and alcohol consumption.
- Stop drugs that impair platelet function if possible but note that LMWH is safe with platelet count >75 x10*9/L** and aspirin is safe with platelet count >50 x10*9/L. It may be appropriate to use them on lower platelet counts if the benefit exceeds the risk but this should be discussed with a haematologist.
- Consider stopping aspirin if pre-eclampsia prophylaxis at 36 weeks.
- Frequency of FBC monitoring can be guided by the cause of thrombocytopenia. Some guidance is given in specific conditions below.

**Available via switchboard*
*** Note may be appropriate to use LMWH with lower platelet counts but this should be discussed with a haematologist*

3.4 Delivery

Mode of delivery as per obstetric indications. Any maternity service users on aspirin for pre-eclampsia prophylaxis, stop by 37 weeks, if platelets < 100 x 10*9/L

• Assuming no other risk factors for **all births aim to have platelets >50 x10*9/L**

  - For ANY Caesarean section, if platelets are ≤ 50 x 10*9 - give a pool of platelets at the start of the caesarean section and give IVIg, otherwise the platelets will be destroyed (see ITP section).
  - Epidural/spinal anaesthesia >80 x10*9/L
  - MLU/Home birth >150 x10*9/L (individual birth plans can be discussed).

• A platelet count <30 x10*9/L needs treatment to raise the platelet count **before all births specifically before starting 2nd stage of labour** with a pool of platelets and IVIg.

• In maternity service users with a diagnosis of ITP or platelet count <100 x10*9/L
-> avoid fetal scalp monitoring and fetal blood sampling.
-> avoid ventouse assisted birth

-> avoid a difficult forceps birth.

Any assisted birth should be performed by the most senior obstetrician available

A maternity service user's delivery plan should be clearly documented in the patient's notes and the maternity service user informed of the plan.

3.5 Management of the Neonate

There is a poor correlation between maternal and fetal platelet count.

10% of neonates born to thrombocytopenic mothers have a platelet count <50 x10*9/L. 5% have a platelet count <20 x10*9/L. (Gernsheimer, James & Stasi, 2013, p.42)

Severe thrombocytopenia in an older sibling is a significant risk factor for severe thrombocytopenia in the current pregnancy.

If maternal platelet count is <100 x10*9/L or diagnosis of ITP, obtain cord or peripheral blood sample for platelet count in EDTA tube (either adult purple tube or paediatric red tube).

Avoid heel prick as clots common which leads to pseudo-thrombocytopenia. Label sample with baby's details. ANNP or paediatric team to chase results as appropriate.

If platelet count is normal, advise parents to re-present if baby develops bruising or bleeding. A full examination by one week by general practitioner/paediatric team. No need for further counts.

If platelets low perform daily platelet counts and refer to neonatologist. The nadir is usually 2-5 days post birth.

• Consider cranial ultrasound scan if platelet count <50 x10*9/L at birth.

Avoid intramuscular vitamin K until platelet count known to be >50 x10*9/L but aim to give as soon as possible. Give vitamin K orally if neonatal platelet count <50 x 10*9/L.

3.6 Specific Causes

3.6.1 Gestational Thrombocytopenia

- Diagnosis of exclusion
- Usually occurs in 2nd-3rd trimester
- Platelet count usually between 70 - <150 x10*9/L and, except for thrombocytopenia, normal blood film
- No history of thrombocytopenia outside pregnancy
- No symptoms of bruising/bleeding or pre-eclampsia
- No family history of bruising/bleeding
- No recent medications that may cause thrombocytopenia

- Platelet count normalises within 6 weeks post-partum
- Not associated with neonatal thrombocytopenia

Management

- Explain diagnosis, emphasise usually benign condition but needs monitoring.
- Pathogenesis unclear. Cause hypothesised to be increased platelet consumption within placental circulation, physiological haemodilution and hormonal inhibition of megakaryocytopoiesis.
- Counsel patients on risk of bruising/bleeding and ensure have contact numbers.
- If platelet count <100 x10*9/L discuss implications for epidurals and if less than 150x10*9 discuss implications for MLU/home birth.
- Perform platelet count every month and re-think diagnosis if falls below 70 x10*9/L. If it is 100 at 28 weeks, then repeat every two to four weeks, until 36 weeks.
- Perform FBC on admission for labour or planned delivery.
- Educate maternity service users and **notify GP to perform FBC at the normal 6-8 week** check to ensure resolution. If still low refer to haematology.

3.6.2 Autoimmune thrombocytopenic purpura (ITP)

- Diagnosis of exclusion.
- Consider in a maternity service user with thrombocytopenia in 1st or 2nd trimester or in a maternity service user who had a low platelet count prior to pregnancy.
- Refer to Maternal Medicine / Joint Haem Obs clinic where further investigations can be requested. If previously diagnosed check accuracy of diagnosis and response to previous treatments.
- Ask about outcome of previous pregnancies and neonatal platelet counts.
- If asymptomatic, monitor monthly in 1st and 2nd trimester, fortnightly in 3rd trimester and weekly from 36 weeks.
- Do not usually require treatment if asymptomatic and platelets >50 x10*9/L until 36 weeks.
- Treat if platelets <50 x10*9/L under 36 weeks or significant bruising or bleeding.
- Consider trial of therapy (steroids or IVIg) in early third trimester to ensure have effective means of treatment for delivery.

- 1st line options are the same as for any other adult with ITP. i.e.
    - prednisolone 10-20mg daily titrated to response or 1mg/kg/day
    - IVIg dosed at 1g/kg/day. Repeat within 7 days if necessary

Delivery

Mode of birth should be led by obstetric indications. ITP is not an indication for Elective Caesarean birth. Perform FBC and group and save when woman goes into labour for platelet count.

If only a transient rise in platelet count can be obtained, consider induction of labour. In some patients' steroids do not work and we can only get a brief (1-2 week) improvement in platelet count with IVIg. Therefore, it is useful to have a planned delivery when the platelet count is at its highest.

If a maternity service user with ITP goes into labour with an uncorrected platelet count (<50 x10*9/L) discuss with haematologist on call. Aim to give IVIg at a dose of 1g/kg (unless known to be not effective) and avoid NSAIDs post delivery. If birth imminent or severe haemorrhage also give 1-unit platelet transfusion.

- Aim to avoid fetal scalp monitoring, fetal blood sampling, Ventouse or difficult forceps.

- Advise active management of third stage. If platelet count <50 x 10*9 use intravenous 5 units Oxytocin and consider 40 units oxytocin infusion +/- tranexamic acid.

Neonate

- Take cord blood sample from baby. If normal, no need to repeat but advise parents to represent if any bruising or bleeding and baby needs full examination at a week old by general practitioner/paediatric team. If abnormal, needs daily platelet counts and neonatologist referral. It usually reaches the lowest level 24-48 hours and normalises by 1 week.

- Severe neonatal thrombocytopenia is rare so if present NAIT should be excluded.

- Avoid intramuscular vitamin K until platelet count known to be safe. If <50 x 10*9/L give vitamin K orally.

Postpartum

If platelet count <50 x 10*9/L NSAIDs contraindicated as postpartum analgesia. If platelets >100 x 10*9/L NSAIDs safe. Between these levels NSAIDs may be appropriate in certain circumstances but ideally should be avoided.

- Maternity service users with ITP are at an increased risk of VTE and some form of VTE prophylaxis should be considered. **Standard doses of LMWH can be used if platelet count >75 x 10*9/L**. If below this the risks/benefits of VTE/anticoagulation should be evaluated. Give TED stockings.

3.7 Overview of action if low platelets found

1. **Plts < 100 at booking / 28 weeks / known ITP -** Refer to Mat Med clinic/Joint Haem Ob clinic

2. **Incidental finding of platelets < 100**

Exclude pre-eclampsia, severe infection, DIC – treat these directly
Can have regional anaesthetic and LMWH if plts > 75-80
Any woman with suspected TTP or actively bleeding / in labour with plts < 50 – contact on call Haematology

Otherwise:

Send confirmatory FBC, ensure plts < 100

-> history incl. bleeding post surgery, teeth extraction, menorrhagia, systemic symptoms
-> drug history, alcohol history
-> Family history

Examination
-> petechiae, purpura, lymphadenopathy, splenomegaly

Investigations
-> Blood film
-> clotting screen including fibrinogen
-> renal and liver function tests
-> TFTS (if not done within previous 3 months)
->check Hep B, HIV status.

Within maternal medicine clinic
-> reticulocyte count
-> auto-immune profile +/- antiphospholipid antibodies

Repeat platelets every 4 weeks until 28 weeks.
From 28 weeks to 36 weeks – check platelets every two weeks
Weekly platelet count from 36 weeks to delivery

Low platelets are not an indication per se for Induction of labour or Elective Caesarean section.

3. **In labour**

Known ITP or platelets < 100 – avoid FSE, FBS, difficult assisted vaginal birth
If platelets < 50 – call haematology – will advise on IVIg 1g/kg +/- platelet transfusion
Use TXA 1gram and active third stage with 40 unit oxytocin infusion.

4. **Neonate**

If low platelets – take cord blood for platelet count
Avoid IM vitamin K until platelet count known and > 50.
Paeds to review if low.

4.0 Statement of evidence/references

This guideline has been adapted from the thrombocytopenia in pregnancy guideline written by Sarah Davis in 2011 for Oxford University Hospitals.

American College of Obstetricians & Gynaecologists (2019) ACOG Practice Bulletin No. 207: thrombocytopenia in pregnancy. *Obstetrics & Gynecology* **133** (3): e181-93.

Cines, D.B. and Levine, L.D. (2017) Thrombocytopenia in pregnancy. *Blood* **130** (21), pp.2271-77. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5701522/ (Accessed 6 March 2019)

Davis, S.L. and Murphy, M.F. (2011) *Guidelines for the investigation and initial treatment of autoimmune thrombocytopenic purpura (AITP) in adults*. Oxford University Hospitals NHS Trust Guideline.

Gernsheimer, T., James, A.H. and Stasi, R. (2013) How I treat thrombocytopenia in pregnancy. *Blood* **121**, pp.38-47. Available from: http://www.bloodjournal.org/content/121/1/38?sso-checked=true (Accessed 6 March 2019)

National Institute for Health and Care Excellence (2019) *Intrapartum care for women with existing medical conditions or obstetric complications and their babies.* NICE guideline [NG121]. Available from: https://www.nice.org.uk/guidance/ng121 (Accessed 6 March 2019)

Provan, D., et al. (2010) International consensus report on the investigation and management of primary immune thrombocytopenia. *Blood* **115**, pp.168-86. Available from: http://www.bloodjournal.org/content/115/2/168 (Accessed 6 March 2019)

Rajasekhar, A., et al. on behalf of the American Society of Hematology (2013) *2013 clinical practice guide on thrombocytopenia in pregnancy.* Available from: https://www.hematology.org/Clinicians/Guidelines-Quality/Quick-Reference.aspx (Accessed 6 March 2019)

Royal College of Obstetricians and Gynaecologists (2017) *Management of inherited bleeding disorders in pregnancy.* Green-top guideline No. 71. Available from: https://obgyn.onlinelibrary.wiley.com/doi/epdf/10.1111/1471-0528.14592 (Accessed 6 March 2019)

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5.0 Governance

5.1 Document review history – New document

Version number	Review date	Reviewed by	Changes made
1	March 2022	A Johansen-Bibby, S Davies, F Nizami, E Khan	Created document

5.2 Consultation History

Stakeholders Name/Board	Area of Expertise	Date Sent	Date Received	Comments	Endorsed Yes/No
Consultants O&G	Maternity	14/02/2019		See individual comments	
Midwives	Maternity	14/02/2019		See individual comments	
Julie Cooper	Maternity	14/02/2019	26/02/2019	Comments received	Yes
Jayne Plant	Library	14/02/2019	07/03/2019	Comments received	
O&G Junior Doctors	Midwifery	14/02/2019		Nil comments received	
NNU staff	Neonates	14/02/2019		Nil comments received	
Dr. Gawlowski	Neonates	14/02/2019		Nil comments received	
Dr. Misra	Neonates	14/02/2019		Nil comments received	
Miss Thampi	Maternity	14/02/2019	23/02/2019	Comments received	Yes
Denise Campbell	Paediatric	14/02/2019		Comments received	N/A
Bernadetta Sawarzynska-ryszka	Anaesthetics	14/02/2019	15/02/2019	Comments received	
Women's Health Guideline group	Maternity		12/12/2019	Comments received	Yes

5.3 Audit and monitoring

Audit/Monitoring Criteria	Tool	Audit Lead	Frequency of Audit	Responsible Committee/Board
Case Review		Author	3 yearly	Women's Health CIG

5.4 Equality Impact Assessment

As part of its development, this Guideline and its impact on equality has been reviewed. The purpose of the assessment is to minimise and if possible remove any disproportionate impact on the grounds of race, gender, disability, age, sexual orientation, religion or belief, pregnancy and maternity, gender reassignment or marriage and civil partnership. No detriment was identified. Equality Impact assessments will show any future actions required to overcome any identified barriers or discriminatory practice.

Equality Impact Assessment			
Division	Women's and Children's Health	Department	Maternity
Person completing the EqIA	Erum Khan	Contact No.	
Others involved:		Date of assessment:	12/12/2021
Existing policy/service	No	New policy/service	Yes

Will patients, carers, the public or staff be affected by the policy/service?	Yes
If staff, how many/which groups will be affected?	Maternity staff

Protected characteristic	Any impact?	Comments
Age	NO	Positive impact as the policy aims to recognise diversity, promote inclusion and fair treatment for patients and staff
Disability	NO	
Gender reassignment	NO	
Marriage and civil partnership	NO	
Pregnancy and maternity	YES	
Race	NO	
Religion or belief	NO	
Sex	NO	
Sexual orientation	NO	

What consultation method(s) have you carried out?
Via email, and the guideline review group meeting
How are the changes/amendments to the policies/services communicated?
Via email
What future actions need to be taken to overcome any barriers or discrimination?

What?	Who will lead this?	Date of completion	Resources needed
Review date of EqIA	Mar 2025		

Appendix 1: Checklist for ITP patients

Antenatal:	Date	Signature
1. Haematologist referral		
2. Anaesthetist referral		
3. Paeds alert		
4. Monthly FBC till 28 weeks		
5. Fortnightly FBC from 28-36 weeks		
6. Weekly FBC from 36 weeks		
Intrapartum:		
1. FBC and G & S in Labour		
2. Inform anaesthetist consultant of admission		
3. Inform haematologist consultant if platelet count <50		
4. Inform obstetric consultant		
5. No FBS, FSE or Ventouse or difficult instrumental		
6. No regional if platelets <80		
7. No NSAIDS to mum if platelets less than 50. Try and avoid if between 50-100		
Postnatal:		
1. Cord FBC from baby for platelets level		
2. IM vitamin K if platelets >50, oral if <50		
3. Parents to check baby for bruising		