**Aneurin Bevan University Health Board**

# Beta Thalassemia and Pregnancy guideline

*N.B. Staff should be discouraged from printing this document. This is to avoid the risk of out of date printed versions of the document. The Intranet should be referred to for the current version of the document.*

Status: Issue 3 approved
Approved by: Clinical Effectiveness forum
Owner: Maternity Services

Review by date: 21/July/2023
Policy Number: ABHB/F&T/0730

**Contents:**

## Introduction

This document should act as guidelines for the management of women within the maternity services who have the blood disorder beta thalassemia The opinion expressed in this guidelines are evidence and reflects professional opinion. They are designed to support safe and effective practice.

## Aims

- To provide support to clinical decision making
- To provide support for evidence based management

## Scope

- The guideline applies to all clinicians working within the maternity services.

## Roles and Responsibilities

- The Clinical effectiveness forum will ensure that the guideline is available on the intranet and make staff aware of the guideline
- Maternity staff are expected to follow the guideline in accordance with clinical requirements

## Training

- Staff are expected to access appropriate training where provided
- Training needs will be identified through appraisal and clinical supervision

## Standards for Health Services Wales

This guideline cross references to:
Standard 7: Safe & clinically Effective Care
Standard 8: Care Planning &

## Audit

This guideline will be audited via the risk management reporting system

## References

Management of Beta Thalassaemia in Pregnancy (March 2014) RCOG Green Top Guideline No 66

**Guidance**

**Preconception care**

Partner screening

Haemoglobinopathy status of partner, If positive – counselling as per National screening Guidelines

Counselling - Ideally provided by the haematologist under whose care the patient is. If not known to the tertiary services, refer to Dr Bashi in UHW

- Detailed counselling regarding ☐risks to mother (Cardiomyopathy, new endocrinopathies due to ☐ iron overload) and to baby (IUGR)
- Evaluate the transfusion requirements, chelation therapy and assess body iron burden
- Optimise body iron overload by aggressive chelation therapy in the preconception period

Assess and manage end organ damage

- **Pancreas** – Check for diabetes. If diabetic, aim for good glycaemic control with serum fructosamine levels < 300nmol/l (HbA1C not reliable)
- **Thyroid** – Thyroid function tests
- **Heart** – ECG/Echocardiogram/T2 Cardiac MRI to assess cardiac iron overload
- **Liver** – Ferriscan/Liver T2 to assess hepatic iron overload, Liver/gall bladder/spleen USS
- **Bones** – Bone density scan to check osteoporosis, optimise Vit D levels
- **Check antibody titres as risk of alloimmunity**

Medications

- Folic acid 5mg
- Penicillin prophylaxis if splenectomised (Erythromycin if allergic)
- Iron chelators and Bisphosphonates should be ideally stopped 3/12 before conception

Vaccinations Recommended

- Hepatitis B

If splenectomised

- H Influenza B
- Conjugated Meningococcal C
- Pneumococcal

**Antenatal care** – multidisciplinary team – Obstetrician, Haematologist, Midwife, Anaesthetist and other specialities as required

***In liaison with tertiary referral centre. If not already under a haematologist, refer to Dr Bashi at UHW***

<u>Booking appointment</u>

- Review of preconception care, Offer MRI liver/heart if not done in the last year
- Assess extent of pre existing end organ damage and refer to specialists accordingly
- Offer partner testing if not already done
- BP, Urinalysis at each consultation
- MSU for culture sensitivity monthly
- 5mg Folic acid, review medications and antibiotic prophylaxis
- Prophylactic LMWH during antenatal admissions
- Anaesthetic assessment in 3rd trimester

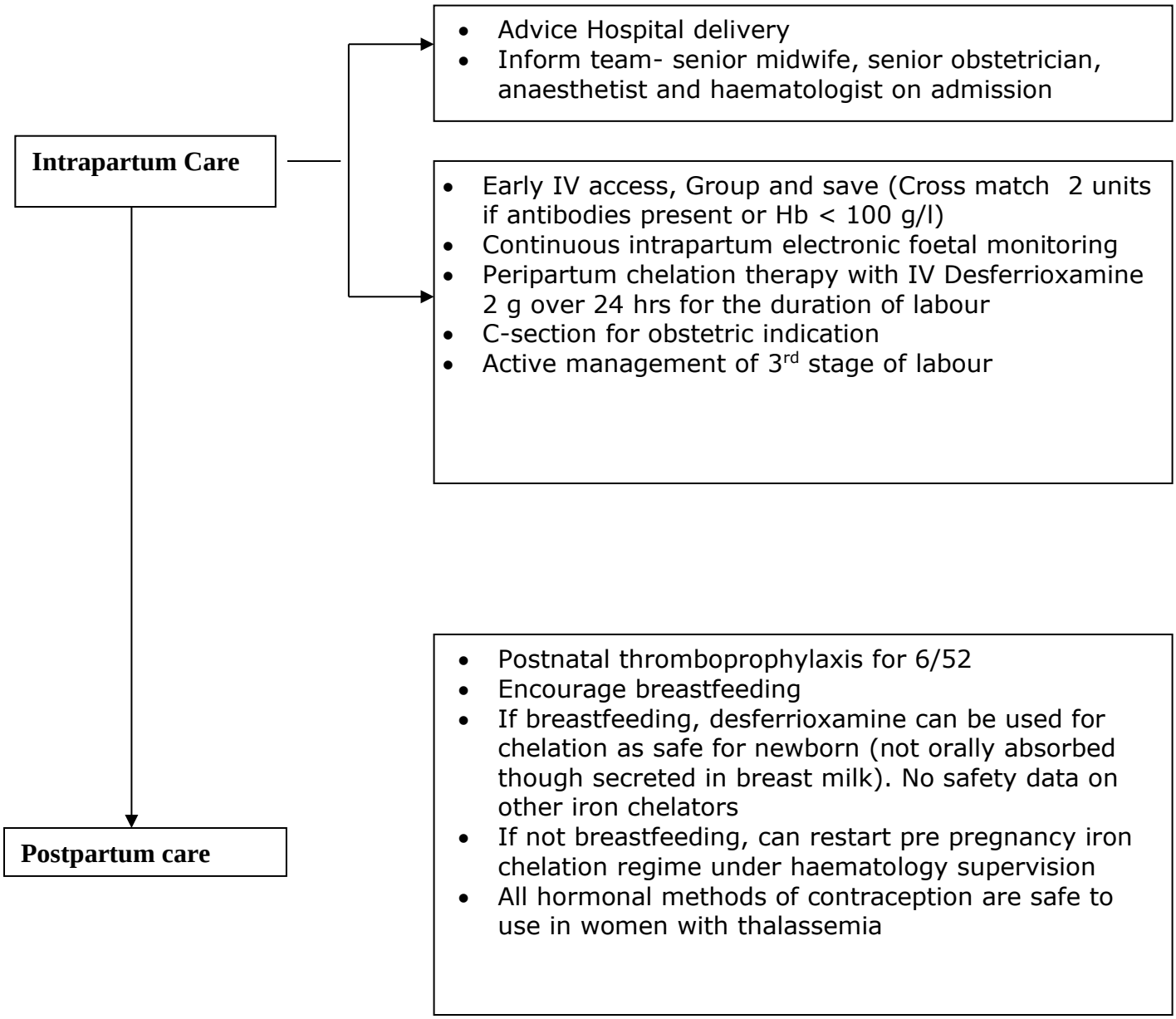
<u>Ultrasound scanning</u>

- Early viability scan at 7-9 weeks gestation
- Routine first trimester scan (11-14 weeks gestation)
- Detailed anomaly scan at 20 weeks of gestation

Serial foetal biometry scans (growth scans) every 4 weeks from 24 weeks of gestation

- Regular blood transfusions in T major and aim for pre transfusion Hb of 100 g/l, in T intermedia, blood transfusions if anemia or IUGR
- If risk of cardiac decompensation or evidence of hepatic iron overload chelation with desferrioxamine from 20 weeks, under haematology guidance
- Regular Cardiology review if cardiac iron overload

- Discuss delivery plan at 28/40 after cardiology review
- At 36/40, discuss and formulate the timing/mode and management of delivery
- Offer IOL at 38/40 if diabetic
- If otherwise uncomplicated, offer IOL according to departmental protocol


Intrapartum Care
Advice Hospital delivery
Inform team- senior midwife, senior obstetrician, anaesthetist and haematologist on admission
Early IV access, Group and save (Cross match 2 units if antibodies present or Hb < 100 g/l)
Continuous intrapartum electronic foetal monitoring
Peripartum chelation therapy with IV Desferrioxamine 2 g over 24 hrs for the duration of labour
C-section for obstetric indication
Active management of 3rd stage of labour
Postpartum care
Postnatal thromboprophylaxis for 6/52
Encourage breastfeeding
If breastfeeding, desferrioxamine can be used for chelation as safe for newborn (not orally absorbed though secreted in breast milk). No safety data on other iron chelators
If not breastfeeding, can restart pre pregnancy iron chelation regime under haematology supervision
All hormonal methods of contraception are safe to use in women with thalassemia