

TARGET	All NHSL.
AUDIENCE	
PATIENT GROUP	Women's Services Directorate.

Clinical Guidelines Summary

Pregnant women with coexisting medical conditions may benefit from anaesthetic assessment. Early referral allows further investigation, appropriate multidisciplinary discussion and the formulation of an agreed anaesthetic management plan during pregnancy and labour. This guideline will describe the indications and method of referral to the high risk anaesthesia clinic.

Anaesthetic referral prior to 36 weeks gestation is preferable.

Guideline Body

This guideline supersedes the following.

This is a consensus document and has been reviewed by the maternity anaesthetic team prior to review by the maternity clinical effectiveness team.

Some pregnant women have medical conditions which can affect their anaesthetic management during pregnancy and labour. Women with coexisting conditions may benefit from anaesthetic assessment and a discussion with an Anaesthetist prior to admission for delivery. Early referral allows further investigation, appropriate multidisciplinary discussion and the formulation of an agreed anaesthetic management plan.

All women referred to High Risk Antenatal Anaesthetic Clinic may be offered ultrasound scan of lumbar back for assessment of Spinal and Epidural Anaesthesia. There are limited diagnostic options of ultrasound of lumbar back area and MRI or CT scans must be completed when indicated.

Anaesthetic referral prior to 36 weeks gestation is preferable.

Ideally women who would benefit from an anaesthetic review will be identified at their booking visit. A letter of referral (Currently "routine" referrals can be done via Badger (NEW), paper e-mail and ext 6747 if urgent) should be sent to the Anaesthetic Department Secretary at Wishaw.

Details of the Estimated Date of Delivery, the name of responsible Obstetric Consultant, responsible Midwife and a detailed description of the nature of the Medical/Obstetric/Anaesthetic problems should be included.

The patient will be seen by a Consultant Obstetric Anaesthetist at an appropriate gestation, this will depend on the reason for referral.

Anaesthetic Review will be offered after other appropriate specialist visit e.g. Cardiologist, Haematologist, Neurosurgeon, is completed and the necessary investigation results available (e.g. CT scan, X-ray, ECG, ECHO).

Some women who develop conditions during their pregnancy, but after the booking visit, will also benefit from an anaesthetic review. These women should be referred as soon as identified. Referrals should be as detailed as possible.

For all midwife referrals, this should be documented in Badger (NEW)

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Anaesthetic referral at or after 36 weeks gestation:

If it becomes apparent at, or after, 36 weeks gestation that a woman would benefit from an anaesthetic assessment do not refer to the anaesthetic clinic. The on-call Consultant Obstetric Anaesthetist in Wishaw Maternity, Monday to Friday, 0900-1700 on page 131 may speak and review the Patient. Still Anaesthetic Secretary at University Hospital Wishaw may offer clinic appointment as short notice;

however, there are limited date and time options of the visit. A plan for anaesthetic review can then be made.

Anaesthetic referral on admission to hospital:

For some women it may not become apparent that they would benefit from an anaesthetic referral until they are admitted for delivery. Do not wait until an epidural or other anaesthetic intervention is required but contact the Obstetric Anaesthetist (page 134) on admission.

Postnatal Anaesthetic Referral

The referral should be sent to the Anaesthetic Secretary at University Hospital Wishaw.

1/. Anaesthetic complication of Regional Anaesthesia (Epidural, Spinal, Combined Spinal Epidural): Post Dural Puncture Headache, brain/spine haemorrhage, severe paresthesia and signs of severe nerve damage or new severe back pain following regional anaesthesia.

Women with one of the above complications must be seen in the clinic within 2 weeks to 3 months in post-natal period for Anaesthetic Review.

- 2/. Women with Post Dural Puncture Headache <u>followed by Blood Patch Procedure</u> must be seen in the clinic within 3 months after the Blood Patch Procedure is completed. The referral will be made by community Midwife or via GP.
- 3/. Women who wish to have multidisciplinary meeting and speak with Obstetric Anaesthetist, after complicated and traumatic labour, during which anaesthetic complications were part of.

Women with **severe needle phobia** (the most appropriate referral would be via their GP for psychological review and therapy) and women with need of **taking**

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Enoxaparin with Aspirin will NOT be seen in High-Risk Obstetric Anaesthetic Clinic, unless other medical conditions associated, listed below (1-11 paragraphs).

Indications for Antenatal Anaesthetic Referral.

Indications for the referral include:

1. Anticipated anaesthesia related problems:

- History of difficult / failed intubation.
- Anticipated difficult airways, previous oral or facial surgery affecting mouth opening or neck movement, oral, neck, facial swelling (including enlarged thyroid), limited neck movement or mouth opening.
- · Anaphylaxis.
- · Suxamethonium apnoea.
- · Malignant Hyperthermia.
- · Porphyria.
- Previous traumatic anaesthetic experience.
- · Complications after neuraxial blockade (Spinal/Epidural), including previous failed Spinal or Epidural.
- Spine problems, e.g. congenital abnormalities, previous back operations, trauma, scoliosis, spina bifida etc.
- · Severe needle phobia (the most appropriate referral would be via their GP for psychological therapy).
- · Women who refuse blood transfusion
- · Known neuro-muscular condition which may be affected by anaesthesia (spondylosis).

2. Cardiac disease including:

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Cardiology diagnosis should have been made before referral to an anaesthetist. Where patients have a past medical history of cardiac disease, documentation should be available in the maternity notes and the patient's cardiologist should have been made aware of the pregnancy.

- Congenital heart disease, surgically corrected or uncorrected, structural heart defects.
- · Acquired heart disease: valvular lesions, ischemic heart disease (angina, previous myocardial infarction: STEMI or Non STEMI).
- · Cardiomyopathy.
- · Heart Arrhythmias: congenital or acquired (e.g. supra ventricular tachycardia, complete AV-block, Prolonged Q-T Syndrome, WPW Syndrome).
- · Diseases of the aorta (e.g. Marfan's Syndrome).

3. Haematological problems including:

- · History of thromboembolism before or during pregnancy.
- · Hypercoagulability with anticoagulation therapy during pregnancy (e.g. Protein S/C/ATIII deficiency).
- Congenital Coagulopathies (e.g. von Willebrand disease).
- Thrombocytopenic Coagulopathies.
- Haemoglobinopathy (e.g. Thalassaemia, Sickle-Cell disease).
- Woman with Stable and Constant Thrombocytopenia (low Platelets level at the similar level observed for the last 4 months, prior to the anaesthetic referral, checked every 2 weeks) observed during her pregnancy may be referred after 36 gestation for anaesthetic review

4. Respiratory disease causing impairment of daily activities:

· Severe obstructive/ restrictive lung disease (e.g. severe asthma, pulmonary fibrosis, COPD) which require special care during pregnancy and childbirth, causing impairment of daily activities.

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any active treatment or chemotherapy, which combined with high concentrated
Oxygen, may be dangerous or cause internal organs complications.

5. Neurological disease including:

- · Conditions which may interfere with neuraxial (Spinal/Epidural) anaesthesia and analgesia.
- · Neuromuscular disease which may affect breathing (Myasthenia gravis, muscular dystrophy, myotonic dystrophy).
- Other intracranial pathologies (e.g. AV-malformations, Neoplasm/Tumours) surgically corrected or not.
- · Previous history of stroke or intracranial bleeding.
- Multiply sclerosis.
- Benign intracranial hypertension.
- Hydrocephalus.
- · Persisting neurological symptoms after previous delivery.

6. BMI

Any woman with high BMI at booking, BMI 45 or more, should be referred.

7. Renal Disease:

- Impaired renal function/ regular dialysis
- · Renal Transplant

8. Endocrinological Disorders:

- · Acromegaly, Addison's disease and similar disorders
- Poorly controlled or uncontrolled Diabetes mellitus
- Phaeochromocytoma

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9. Autoimmune Disorders:

- · Systemic Lupus erythematosus
- Systemic Sclerosis (Scleroderma)
- · Myasthenia gravis
- Myotonic dystrophy

10. Postnatal complications of Regional Anaesthesia:

Women with Post Dural Puncture Headache, brain/spine haemorrhage, severe paresthesia and signs of severe nerve damage, new severe back pain other than previous pain prior to Regional Anaesthesia procedure must be seen in the clinic within 2 weeks to 3 months in post-natal period for anaesthetic review.

Women with post puncture headache followed by blood patch procedure must be seen in the clinic within 3 months after the blood patch procedure is completed.

11. Special circumstances:

pandemic/epidemic situation and national advice for isolation at home, severe immunodeficiency disorders, other special and extraordinary personal circumstances.

Patient may be advised to agree for Anaesthetic consultation/review/conversation over the phone, videoconference device/tool to avoid unnecessary exposure or infection risk.

These Patients will be identified by our Anaesthetic Team, ask for permission to follow the safe link and watch prepared short film/presentation regarding essential Obstetric Anaesthesia/Analgesia explanations.

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References/Evidence

Centre for Maternal and Child Enquiries (CMACE). Saving Mother's Lives: reviewing maternal deaths to make motherhood safer: 2006-08.

The Eight Report on Confidential Enquiries into Maternal Deaths in the United Kingdom. BJOG 2011;118(Suppl. 1):1-203 2. Lewis, G (ed) 2007.

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Appendices

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Appendices

1. Governance information for Guidance document

Lead Author(s):	Dr Maciej Dalidowski
Endorsing Body:	Maternity Clinical Effectiveness Team
Version Number:	1
Approval date	October 2023 (New format June 2024)
Review Date:	October 2026
Responsible Person (if different from lead author)	Dr Hamish McKay, Maternity Anaesthetic Lead.

CONSULTATION AND DISTRIBUTION RECORD		
Contributing Author / Authors	Maciej Dalidowski.	
Consultation Process / Stakeholders:	Maternity Anaestetists Group NHS Lanarkshire, Clinical Director Anaesthetics Wishaw Hospital, Maternity Anaesthetic Lead. Obstericians Group NHS Lanarkshire. Midwives NHS Lanarkshire Primary and Secondary Care Group.	

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Distribution	

CHANGE RECORD					
Date	Lead Author	Change	Version No.		
		e.g. Review, revise and update of policy in line with contemporary professional structures and practice	1		
			2		
			3		
			4		
			5		

2. You can include additional appendices with complimentary information that doesn't fit into the main text of your guideline, but is crucial and supports its understanding.

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e.g. supporting documents for implementation of guideline, patient information, specific monitoring requirements for secondary and primary care clinicians, dosing regimen/considerations according to weight and/or creatinine clearance

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