OBSTETRICS AND GYNAECOLOGY
CLINICAL PRACTICE GUIDELINE

Placenta accreta spectrum

Scope (Staff):	WNHS Obstetrics and Gynaecology Directorate staff
Scope (Area):	Obstetrics and Gynaecology Directorate clinical areas at KEMH

This document should be read in conjunction with this Disclaimer

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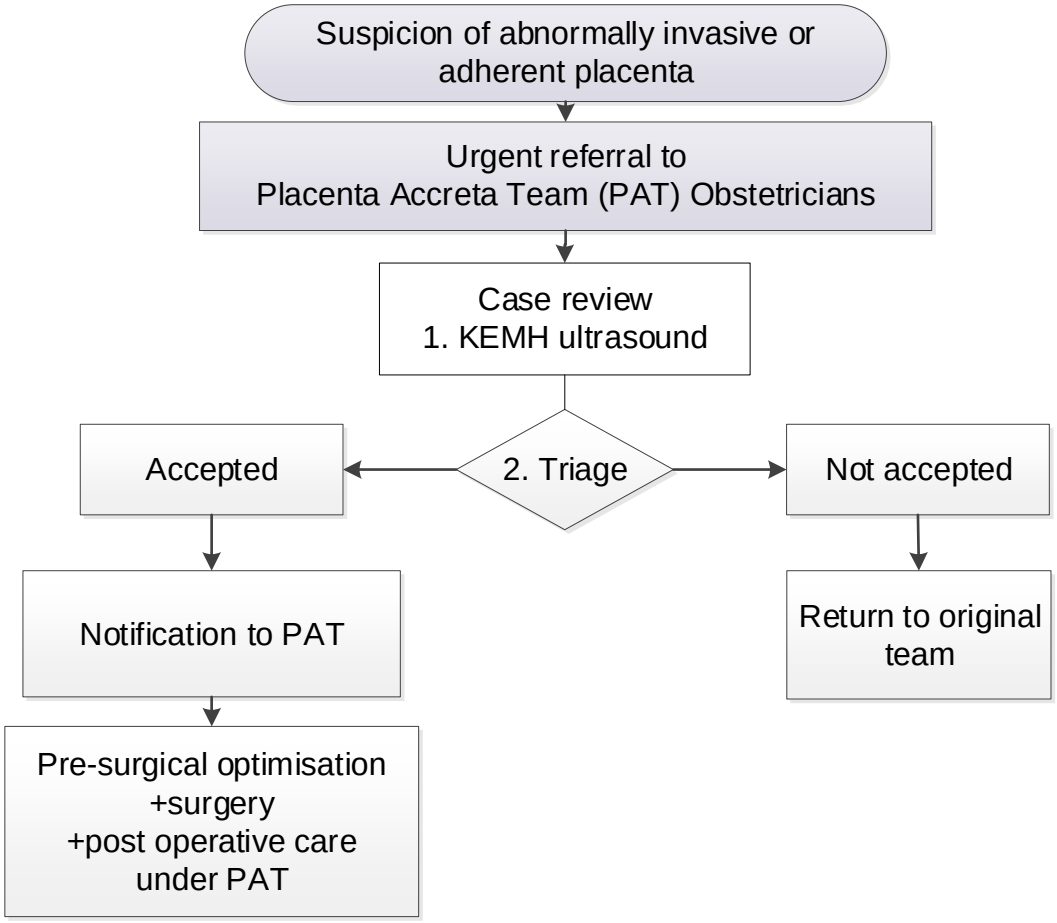
Placenta Accreta Spectrum flowchart



Placenta accreta spectrum

1. Background

Placenta Accreta Spectrum (PAS) is associated with significant maternal and neonatal morbidity and mortality. Morbid adherence of the placenta to the uterine wall is a potentially life-threatening obstetric complication that frequently leads to caesarean hysterectomy, surgical complications and blood transfusion. Along with the growing caesarean birth rate and rising maternal age, the incidence of placenta accreta has increased significantly.[1] Recent cohort studies have shown that women managed by multidisciplinary team (MDT) care were less likely to require large-volume blood transfusion, intensive care unit admission, and reoperation within 7 days of delivery compared with management by standard obstetric care without a specific protocol. The aim of the guidelines is to provide clinicians at King Edward Memorial Hospital (KEMH) with a management plan for women who are diagnosed with a suspected invasive and / or adherent placenta. KEMH aims to match the

requirement of Centers of Excellence for PAS disorders as defined by FIGO Consensus Guidelines on Placenta Accreta Spectrum 2018 (external website) (Note: Full access available for WNHS staff via WNHS library).

2. Clinical definitions

PAS can either be accreta (abnormal adherence with a possibility of placental separation at birth) or increta / percreta (abnormal invasion into and beyond the myometrium, unlikely to separate spontaneously at birth).

The diagnosis is suspected via ultrasound or placenta MRI, confirmed clinically at delivery by the surgeons and by histopathology in case of hysterectomy.

Practically, a placenta can have adherent, normal and invasive portions at the same time in different locations, hence the denomination of PAS and the need for appropriate surgical expertise to provide optimal treatment options at the time of the surgery.

The histopathological classification is always retrospective on patients who required hysterectomies.

3. Risk factors

The most common risks factors are:

- Previous Caesarean births
- Current placenta praevia
- Previous placenta accreta
- Previous myomectomy
- Previous endometrial ablation

For further details see FIGO consensus guidelines on PAS disorders: Epidemiology (external website; WNHS staff access via WNHS library): 'Table 3: Primary and secondary uterine pathologies reported to be associated with PAS disorders'.[2]

4. Diagnosis

Prenatal diagnosis is associated with reduced maternal morbidity in terms of:

- Reduction of peri-partum blood loss and the need for blood transfusion[3, 4]
- Planned delivery in an appropriate setting[5, 6]
- Reduced emergency hysterectomies[7]

Abnormally invasive placentation may be clinically suspected when there is a placenta praevia in a woman with a history of caesarean section or other uterine surgery[1, 8]. The diagnosis is usually established by ultrasonography and occasionally supplemented by magnetic resonance imaging (MRI); MRI has not shown superiority over transvaginal ultrasound.[1]

Prenatal diagnosis

The most common detection signs are:

- Placental lacunae
- Loss of hypoechoic space
- Abnormalities of uterus–bladder interface
- Color Doppler abnormalities
- and MRI signs (e.g. uterine bulging, tenting of the bladder)

See also: Table 1 ‘Summary estimates of sensitivity and specificity of different ultrasound and MRI signs for the detection of PAS disorders’ in FIGO consensus guidelines on PAS disorders: Prenatal diagnosis and screening (external website; WNHS staff access via WNHS library).[2]

5. Procedure and management

In general, features of placenta percreta would warrant referral to the PAT, optimisation, and elective preterm surgical delivery..Deferral of delivery beyond 36+6 weeks is not recommended. Antenatal corticosteroids should be administered prior to delivery at all gestations less than 34 weeks and considered prior to elective caesarean delivery up to 36+6 weeks.

Referral to the PAT

The internal referrals to PAT are via email, pager, phone call or hospital paper-based referral letter. The external referrals are via the Ambulatory Clinic Manager to PAT. The Red and the Blue Team are members of the PAT.

The PAT membership includes:

- Consultants obstetricians, urogynaecologists, gynae oncologist, urologist, vascular surgeon, MFM, sonologist, anaesthetist, haematologist, radiologist, pathologist, neonatologist and psychiatrist
- Head of Department, Obstetrics
- Patient Blood Management- Clinical Nurse Consultant (CNC)
- Anaesthetics- CNC
- Adult Special Care Unit (ASCU)- Clinical Midwifery Manager (CMM) / ASCU Clinical Nurse Midwife Specialist
- Perioperative Services- Clinical Nurse Manager (CNM)
- Clinical midwives with interest in PAS
- Perioperative accreta nursing team
- Specialist O&G trainees with interest in placenta accreta

Optimisation

Includes:

- KEMH ultrasound consultation with a senior sonologist.
- Multidisciplinary management plan (Appendix 1) completed by the lead Obstetrician and printed in a MR250 form for filling in the notes
- Communication to the PAT and any other required staff by the lead Obstetrician
- Information support to patient and relatives (KEMH data, leaflets, videos)
- Hb and iron optimisation
- Steroids administration planning
- Referrals to high risk anaesthesia, neonates and psychologists as required
- Details (skin and uterine incisions, tubes), consent and date (usually before 37 weeks of gestational age) of surgery by the lead consultant
- Discussion regarding women relocating close to the hospital and when/how to call for help
- Discussions of management options (hysterectomy, conservative, placental removal attempt, partial uterine resection, urology, vascular, interventional radiology)
- Blood (X match 4 units) and cell salvage availability
- Planning of the surgical team composition on the day of surgery, location (including organisation of transfer –Appendix 2 and Appendix 3) and theatre scheduling are the responsibility of the Lead Consultant.

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6. Governance and research

As a relatively new service, the PAT will perform clinical care audit against RCOG / RANZCOG and FIGO guidelines, patient satisfaction survey, staff satisfaction survey, morbidity and mortality meetings and MDT meetings.

The PAT will develop resources for women and relatives and develop a KEMH weblink. National and International presentations and publications will be encouraged.

References

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Related WNHS policies, procedures and guidelines

Transfusion Medicine (available to WA Health employees through HealthPoint)

Useful resources (including related forms)

- See Appendix I below for Multidisciplinary team management plan
- SCGH Major Procedure Booking Form
- FIGO Consensus Guidelines on Placenta Accreta Spectrum Disorders. 2018 [external webpage] (Note: Full access available for WNHS staff via WNHS library).

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Version history

Version number	Date	Summary
1	July 2014	First version. Titled 'Placenta Accreta'
2	Mar 2018	• Title changed to 'Placenta: Abnormally Invasive' • Terminology changed: 'placenta accreta' and 'adherent placenta' now referred to as 'abnormally invasive placenta', in keeping with the currently preferred terminology • Flowchart added (page 2)- see chart for new process • Urgent referrals to the dedicated Abnormally Invasive Placenta Team (Blue team) for management when suspicion / features of abnormally invasive placenta / placenta accreta, should include a verbal discussion with the Consultant Obstetrician followed by a written referral • Additional medical imaging may be considered to assist with surgical planning • Patient proximity to the primary hospital should be considered during the third trimester due to the risk of catastrophic haemorrhage • Document a plan according to the format in Appendix 1 (MDT Management Plan) and recorded on the MR250 (Inpatient Progress Notes) in the patient's file • Unbooked patients with suspected abnormally invasive placenta who require emergency management should be managed by the obstetric team on duty
3	Nov 2018	• Reworked whole guideline and title changed from to 'Placenta Accreta Spectrum' • Updated appendix I: 'Multidisciplinary team management plan' and added two appendices: 'Major Surgical Case Pathway' and 'Obstetric Consultant Essential Planning Elements'.
4	Feb 2023	• MRI has not shown superiority over transvaginal ultrasound • Updated PAT membership to include option for ASCU CNMS

This document can be made available in alternative formats on request for a person with a disability.

www.nmhs.health.wa.gov.au

Appendices

Appendix 1: Multidisciplinary team management plan

Placenta Accreta Spectrum

Multidisciplinary Team Management Plan

Name:		**UMRN:**	
DOB:	**Weight:**	**BMI:**	**Age:**
Lead Consultant Obstetrician:			

G: P:	**EDD:**	**Planned delivery date:**	**GA at birth:**

Document expected placental invasion	Accreta / Increta / Percreta Bladder involvement etc.
Planned surgical approach	Hysterectomy / Attempt placental removal by gentle CCT / Leave placenta in situ/ uterine resection and repair Urology: Cystoscopy / Ureteric stents/catheters / Abdominal incision: Midline / Pfannenstiel Expected complications: e.g. adhesions etc. Specific staff required: urogynae, vascular surgeon, urologist, gynaeoncologist
Consents to blood products and cell salvage?	Yes / No
Emergency management	Call the following clinicians via switchboard in the event of out of hours delivery or advice:
Previous CS/ uterine surgery/abdominal surgery	
Document episodes of APH to date	Document date and volume
Antenatal corticosteroids given or planned?	date
Discussion regarding fertility	Document date

Imaging findings *Upload to PACS*			
Optimise Hb	Hb (date):	Ferritin (date):	Iron infusion (date):
	Blood group and antibody screen:		Blood transfusion (date):
	Crossmatch ____ units pre-operatively		

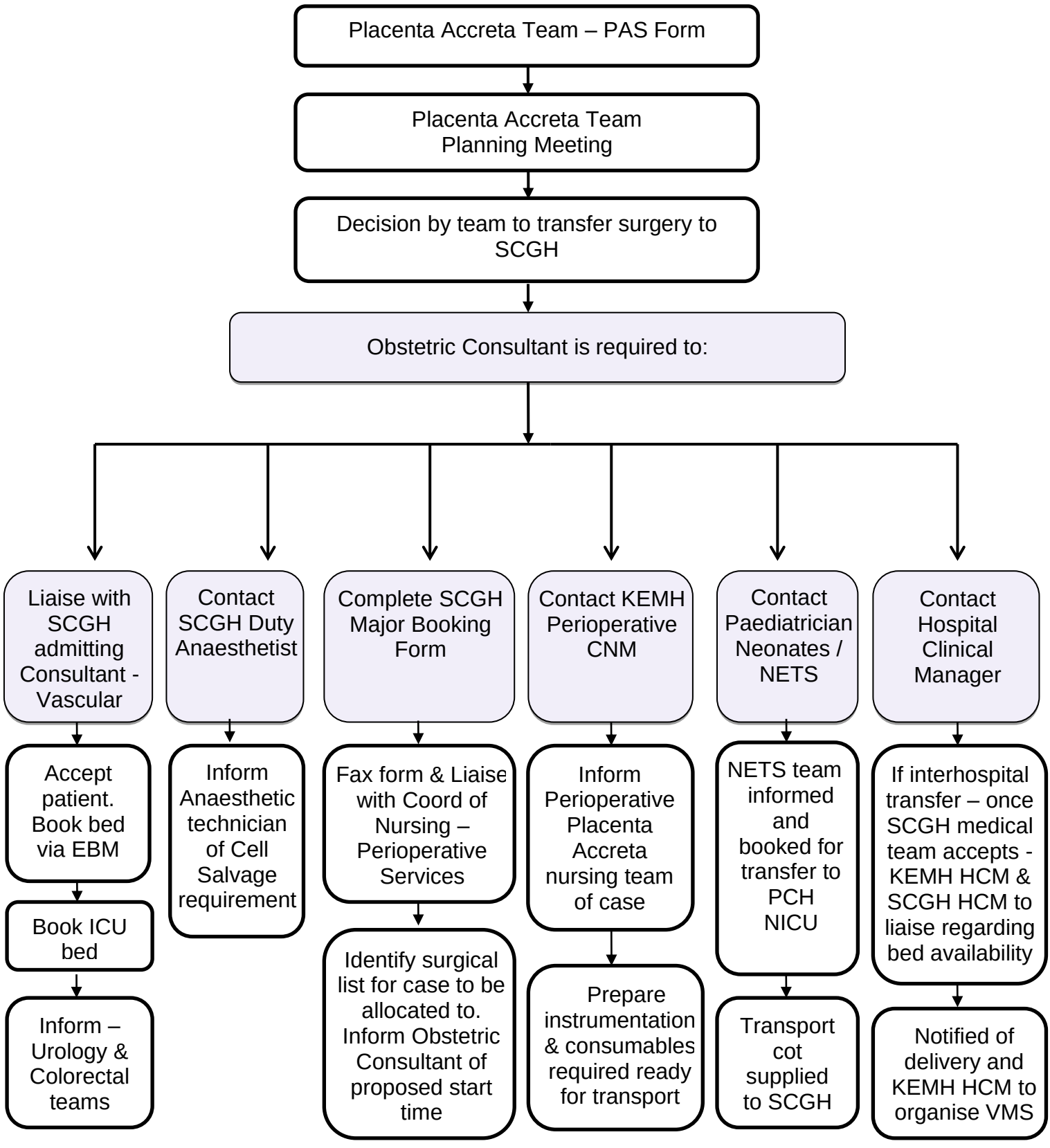
Notifications	PAT
Consent	Date:

Form completed by: **Date:**
Print to MR250 (Integrated Progress Notes) and filed in patient record for this pregnancy
Document that plan has been made on MR004 (Obstetric Special Instructions)

Appendix 2: Referral pathway to QEII

Placenta Accreta Team

Major Surgical Case Pathway



Appendix 3: PAT – Obstetric Consultant essential planning elements

Essential elements tick box			Tick
Logistics:	Patient	Transfer to SCGH discussed	
	KEMH HCM	Informed of transfer Plan for post op VMS	
	KEMH CNM Periop	Periop Accreta Nursing team Instruments and consumables packed	
	SCGH HCM	Informed of transfer EBM request by Dr	
	SCGH Periop SRN	**SCGH Major booking form** Session allocation	
Surgical:	Obstetrics	Liaise with SCGH admitting Dr – Vascular Contact SCGH DA to inform of pending case	
	Vascular	Liaise with SCGH Periop SRN re requirements	
	Colorectal	Liaise with Vascular	
	Urology	Liaise with Vascular Plan for stents Book II	
Anaesthetics:	Duty Anaesthetist / Accreta specialist ?	Accept patient Book ICU bed Book cell salvage	
Paediatrics:	Paediatrician	Liaise with Obstetrician	
	NETS	Transfer cot available at SCGH	

The SCGH Major Procedure Booking Form is located on the Perioperative: Operating Theatre hub page [HealthPoint intranet only]