**Canberra Hospital and Health Services**

**Clinical Guideline**

**Antepartum Haemorrhage (APH) including placenta praevia, placental abruption and vasa praevia**

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| Introduction |

This document has been written to provide guidelines for the care of women experiencing Antepartum Haemorrhage.

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| Scope |

This document applies to:

* Medical Officers
* Midwives and nurses who are working within their scope of practice (*Refer to Midwifery and Nursing Continuing Competence Policy)*
* Student midwives and nurses working under direct supervision.

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| Background |

**Incidence of Antepartum haemorrhage (APH)**

Antepartum haemorrhage (APH) is defined as any bleeding from the genital tract after the 20th week of pregnancy and before the onset of labour.

Antepartum haemorrhage complicates 2-5% of all pregnancies. It is associated with increased rates of perinatal morbidity and mortality.

**Classification of Antepartum haemorrhage**

**Placenta Praevia** (30% of APH) is bleeding from a placenta located in the lower uterine segment.

**Placental abruption** (25% of APH) is bleeding from a normally situated placenta, with placental separation from the myometrial wall.

**Vasa Praevia**: (1 in 600 births) umbilical blood vessels traverse the fetal membranes of the lower uterine segment, unsupported by the umbilical cord or the placenta. Bleeding from these vessels is almost always associated with rupture of the fetal membranes.

**Cervical and lower genital tract bleeding** (45% of APH) includes:

Cervical lesions such as an ectropion, dysplasia, cervicitis, polyps or carcinoma.

Cervical bleeding in pregnancy may occur spontaneously, or follow sexual intercourse, a clinical examination or Pap smear.

APH may be broadly divided into two groups:

* Major haemorrhage
* APH where immediate resuscitative measures are not required.

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| Key Objectives |

Evidence based care will be provided to women experiencing Antepartum Haemorrhage

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| Section 1 – Major Haemorrhage |

**Basic Life Support**

* If required, establish an airway and administer oxygen therapy or assist ventilation as per Basic Life Support (BLS) policy.
* Intravenous access/fluids
* Advice should be sought from a haematologist regarding appropriate blood component therapy, refer to Massive Transfusion Policy.

**If maternal haemodynamic state can only be improved by delivery, this should be considered, irrespective of gestational age.**

**Emergency management**

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| Major APH Emergency Management   * Observations as per Maternity MEWS * History-EDB, pregnancy history, recent trauma, note blood group, rhesus and antibody screen, ultrasound reports, amount of blood loss * Basic life support (BLS) as per BLS policy * IV access and fluid replacement –insert 2 large bore cannulas and administer colloid or crystalloid fluid * Take blood for FBC, group and cross match, coagulation profile, Kleihauer. Arterial blood gas in severe cases * **Administer Blood and Blood products where clinically appropriate and refer to the Critical Bleeding Massive Transfusion SOP** * Restore blood loss quickly to maintain haematocrit at 30% and urine output at 30mls/hr or more and assess specific gravity, as per Massive Transfusion Policy * Palpation-for fetal presentation and lie, assess uterine activity, pain and tenderness * Gentle speculum examination (by medical staff member only) – to observe amount and source of bleeding * CTG and ultrasound scan-to assess fetal well-being and placental localisation * Consider birth-to improve maternal haemodynamics |

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| **Medication-if time permits:**   * corticsteroids for fetal lung maternity, * MgSO4 for fetal neuro-protection if <30 weeks gestation and immediate birth is likely. * Anti D if woman rhesus negative * Analgesia if required |

**Management**

Assess the woman and initiate emergency treatment as required:

Record the woman’s medical and obstetric history including:

* Blood loss, its frequency when it commenced
* Pain, is it related to the bleeding.

Amount, colour and consistency of the blood:

* Woman's activity at the time of the bleed, e.g. injury or intercourse
* Uterine condition is it larger, harder or more painful than before the bleeding
* Contractions before or after the bleeding.
* EDB and accurate estimation of gestation
* Predisposing factors e.g.:
* hypertension
* renal disease
* pre eclampsia
* trauma
* blood dyscrasia

Monitor and record the following observations including:

* Blood loss
* BP, pulse, respirations, temperature (frequency depends on severity of condition and Maternity MEWS score), oxygen saturation (when clinically indicated)
* Signs of shock, e.g., pallor, clammy, thready rapid pulse, deteriorating level of consciousness
* Contractions, frequency, duration and intensity. Note if abdominal pain related or unrelated to contractions
* Uterine tenderness, rigidity or hypertonia
* Fundal height and girth measurement and observe for change

Monitor and record fetal observations including:

* Fetal movements and if present, are they normal, reduced or excessive, if not present, when the last movement was felt
* Fetal heart rate with sonicaid
* CTG if fetal heart sounds present
* Obstetric ultrasound if fetal heart sounds difficult to record or not heard

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| ALERT If maternal condition appears uncompromised it may be advisable to attend to the fetal observations and commence CTG before attending to maternal observations |

* Commence IV therapy using 2x16 gauge cannulas
* Blood collected for:
* FBC
* Group and screen, Cross match (repeat every 72 hours)
* full coagulation profile - if DIC is a concern including
* Fibrin degradation products
* APPT
* UEC, LFTs
* IDC if severe haemorrhage
* Maintain an accurate fluid balance chart including:
* blood loss in the output
* report urinary output if less than 30mls hourly
* **Do not perform vaginal examinations**
* Gentle speculum examination by medical staff member may be performed to exclude cervical bleeding
* Prepare the woman for an ultrasound
* Woman to remain on bed rest until bleeding settles

Care depends on:

* the gestation of the pregnancy
* the amount of bleeding and
* the woman’s condition

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| **ALERT**  Resuscitation of the woman is the most important consideration |

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| Section 2 – Placenta Praevia |

If the woman is diagnosed with placenta praevia:

* Prepare for caesarean section under GA if bleeding is excessive or if the placenta praevia is a major grade
* Prepared for a vaginal examination if minor grade placenta praevia, with view to caesarean section if heavy bleeding occurs
* Have a vaginal birth if she is in labour and has no bleeding and the placenta cannot be felt on vaginal examination.
* Admit the woman if she has no bleeding until giving birth by elective or emergency caesarean section. Note: if the bleeding settles and the woman is a resident of the ACT or Queanbeyan she may be discharged. Advise her to return to Delivery Suite if she has further bleeding. If the woman has repeated bleeding she may be hospitalised until the baby’s birth.
* Prepare the woman for discharge from the Antenatal/Gynaecology ward when bleeding has settled and observations of the woman and fetus are within normal limits including:
* Advise the woman to return to Delivery Suite if she has more bleeding
* Arrange follow up appointments with the Antenatal Clinic or Canberra Midwifery Program (CMP) or her obstetrician
* If woman plans to birth at CHW&C check Birthing Outcome System (BOS) and update with admission

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| Section 3 – Placental abruption |

Where the woman is diagnosed with placental abruption:

* Where mild to moderate abruption and the woman is in labour, a vaginal birth may be attempted.
* Where moderate/severe abruption, prepare the woman for caesarean section as per Standing Operating Procedure (SOP): Preoperative Care.
* Contact the Centre for Newborn Care and refer the woman to a neonatologist
* Where severe abruption and a fetal death in utero:
* Prepare the woman for a vaginal birth

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| **ALERT**  Women with Rh negative blood may require Rh (D) immunoglobulin (anti-D). |

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| Section 4 – Vasa praevia |

### Risk factors

Placenta praevia,

low-lying placenta, and

bilobate or succenturiate placenta.

### Clinical Presentation

### Vasa praevia will rarely present with an “antepartum” haemorrhage.  Detection is more likely on vaginal examination with palpation of fetal vessel, vaginal bleeding at amniotomy or sudden severe abnormalities of the fetal heart rate in labour.

There is typically an initial tachycardia as the fetus first becomes hypovolaemic, followed by a sustained bradycardia and fetal demise if delivery by caesarean section is not immediate

**Management**

Antenatal diagnosis and prompt neonatal resuscitation have shown to improve outcomes and the safest form of delivery is caesarean section, prior to the onset of labour.

In the event of vaginal bleeding with a known vasa praevia, urgent caesarean section is recommended. Performing a CTG or listening to the fetal heart rate may be the quickest way, to infer the diagnosis and institute appropriate management.

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| Implementation |

This guideline will be:

* discussed at Maternity inservice education;
* discussed at Maternity multidisciplinary education;
* placed on notice boards in tea rooms; and
* distributed to maternity staff via email.

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| Evaluation |

**Outcome Measure**

* Haemorrhage is resolved and woman is stabilised - normal haemostasis is attained.
* Observation, assessment and interventions have been documented in the clinical records.

Method

* Outcomes will be measured by audit
* Reports from Birthing Outcome Systems (BOS) by BOS coordinator, 6 monthly.

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| Related Policies, Procedures, Guidelines and Legislation |

**Standards**

SOP Maternity MEWS

BLS Policy,

Massive Transfusion Policy,

Preoperative Preparation,

Admission of Women to Birthing

National Safety and Quality Health Service Standards – Standard 1,2,9,7.

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| Definition of Terms |

**Antepartum haemorrhage (APH):** significantbleeding from the genital tract after the 20th week of pregnancy and before the onset of labour.

**Placental abruption/placenta abruption:** bleeding from a normally situated placenta, with placental separation from the myometrial wall.

**Placenta Praevia:** bleeding from a placenta located in the lower uterine segment.

**Vasa Praevia**: umbilical blood vessels traverse the fetal membranes of the lower uterine segment, unsupported by the umbilical cord or the placenta. Bleeding from these vessels is almost always associated with rupture of the fetal membranes.

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| Search Terms |

Antepartum haemorrhage

APH

Placenta praevia

Placental abruption

Placenta abruption

Antenatal haemorrhage

Bleeding in pregnancy

Low lying placenta

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| Consultation |

This document has been sent out to all members of the multidisciplinary members of the Maternity Quality committee. Feedback received has been summarised below.

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| **Name/position/Division of person(s) consulted** | **Feedback Received**  **Yes/No** | **Feedback incorporated**  **Yes/No** | **Comment** |
| Professor of Midwifery | yes |  | No changes |
| CMM CATCH | yes | yes | **Lots of feedback re: grammar and rewording certain sentence structure which was accepted** |
| Director O&G | yes |  | **No Changes** |
| Maternity Level 3-4 Meeting |  |  | **Happy with document, to go to** Maternity Quality & Safety Meeting for endorsement |
| Maternity Quality & Safety Meeting |  |  | **Endorsed** |
| Daniel Wood | Yes |  | **Lots of feedback re: grammar and rewording certain sentence structure which was accepted.** |
| Alison Moore | Yes | Yes | **Lots of feedback re: grammar and rewording certain sentence structure which was accepted.** |
| Maria Burgess | yes | yes | **On page 3 in the Emergency Management box**  **Can we reword “Blood transfusion if bleeding is severe” to Administer Blood and Blood products where clinically appropriate and refer to the Critical Bleeding Massive Transfusion SOP** |
| Standard 7 Group | Yes | yes | On page 3 in the **Emergency Management box** please remove  “Correct coagulation deficit if present. If Disseminated Intravascular Coagulation (DIC) treat with cryo-precipitate or fresh frozen plasma to replace fibrinogen and a platelet transfusion if platelets are low” |

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