### Care Pathways for Postpartum Haemorrhage and Retained Placenta

#### Make Initial Assessment and Start Basic Treatment
- **Call for help**
- **Assess airway, breathing, and circulation (ABC)**
- **Provide supplementary oxygen**
- **Obtain an intravenous line**
- **Start fluid replacement with intravenous crystalloid fluid**
- **Monitor blood pressure, pulse and respiration**
- **Catheterize bladder and monitor urinary output**
- **Assess need for blood transfusion**
- **Order laboratory tests:**
  - complete blood count
  - coagulation screen
  - blood grouping and cross

#### Temporizing and Transfer Interventions
- **Be ready at all times to transfer to a higher-level facility if the patient is not responding to the treatment or a treatment cannot be administered at your facility.**
- **Start intravenous oxytocin infusion and consider:**
  - uterine massage;
  - bimanual uterine compression;
  - external aortic compression; and
  - balloon or condom tamponade.
- **Transfer with ongoing intravenous uterotonic infusion. Accompanying attendant should rub the woman's abdomen continuously and, if necessary, apply mechanical compression.**

#### Drugs and Doses

<table>
<thead>
<tr>
<th>Drug</th>
<th>Route of Administration</th>
<th>Dose/Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oxytocin</td>
<td>Intravenous</td>
<td>20-40 IU in 1 litre of intravenous fluid at 60 drops per minute, and 10 IU intramuscularly</td>
</tr>
<tr>
<td>ergometrine</td>
<td>Intramuscularly or intravenously (slowly), or Syntometrine® 1 ml</td>
<td></td>
</tr>
<tr>
<td>Prostaglandins</td>
<td>Intramuscularly or intravenously (slowly) every 4 hours</td>
<td>If required, administer 0.2 mg intramuscularly or intravenously (slowly) every 4 hours</td>
</tr>
<tr>
<td>Misoprostol</td>
<td>Oral or rectal</td>
<td>200-800 μg sublingually</td>
</tr>
<tr>
<td>Prostaglandin F2α</td>
<td>Intramuscularly</td>
<td></td>
</tr>
<tr>
<td>tranexamic acid</td>
<td>Intravenously</td>
<td>1 g intravenously (taking 1 minute to administer)</td>
</tr>
</tbody>
</table>

#### Uterine Atony: Uterus Soft and Relaxed
- **Treat for uterine atony**
  - Uterine massage
  - Uterotonic drugs:
    - Oxytocin
    - Ergometrine
    - Prostaglandins
    - Mopropstol
    - Prostaglandin F2α
  - If bleeding continues
    - Nonsurgical uterine compression:
      - Bimanual uterine compression
      - Balloon or condom tamponade
      - Tranexamic acid

#### Placenta Not Delivered
- **Treat for whole retained placenta**
  - Oxytocin
  - Controlled cord traction
  - Intravascular vein injection (if no bleeding)
- **If whole placenta still retained**
  - Manual removal with prophylactic antibiotics

#### Placenta Delivered Incomplete
- **Treat for retained placenta fragments**
  - Oxytocin
  - Manual exploration to remove fragments
  - Gentle curettage or aspiration
- **If bleeding continues**
  - Manage as uterine atony

#### Lower Genital Tract Trauma: Excessive Bleeding or Shock Contracted Uterus
- **Treat for lower genital tract trauma**
  - Repair of tears
  - Evacuation and repair of haematoma
- **If bleeding continues**
  - Tranexamic acid

#### Uterine Rupture or Dehiscence: Excessive Bleeding or Shock
- **Treat for uterine rupture or dehiscence**
  - Laparotomy for primary repair of uterus
  - Hysterectomy if repair fails
- **If bleeding continues**
  - Tranexamic acid

#### Uterine Inversion: Uterine Fundus Not Felt Abdominally or Visible in Vagina
- **Treat for uterine inversion**
  - Immediate manual replacement
  - Hydrostatic correction
  - Manual reversal inversion (use general anaesthesia or wait for effect of any uterotonic to wear off)
- **If treatment not successful**
  - Laparotomy to correct inversion
  - Hysterectomy

#### Clotting Disorder: Bleeding in the Absence of Above Conditions
- **Treat for clotting disorder**
  - Treat as necessary with blood products

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