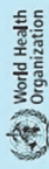


Observe factors related to bleeding and determine cause

Care pathways for Postpartum haemorrhage and retained placenta

World Health Organization



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 dosages

Oxytocin – treatment of choice

- 20–40 IU in 1 litre of intravenous fluid at 60 drops per minute, and 10 IU intramuscularly
- **Continue** oxytocin infusion (20 IU in 1 litre of intravenous fluid at 40 drops per minute) until haemorrhage stops

Uterine atony: uterus soft and relaxed

- Treat for uterine atony**
- Uterine massage
 - Uterotonic drugs:
 - Oxytocin
 - Ergometrine
 - Prostaglandins
 - Misoprostol
 - Prostaglandin F_{2α}

If bleeding continues

- Nonsurgical uterine compression:
 - Bimanual uterine compression
 - Balloon or condom tamponade
- Tranexamic acid

If bleeding continues

- Compression sutures
- Artery ligation (uterine, hypogastric)
- Uterine artery embolization

If bleeding continues

- Hysterectomy
- If intra-abdominal bleeding occurs after hysterectomy, consider abdominal packing

Placenta not delivered

- Treat for whole retained placenta**
- Oxytocin
 - Controlled cord traction
 - Intraumbilical 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 reverse inversion (use general anaesthesia or wait for effect of any uterotonic to wear off)

If treatment not successful

- Laparotomy to correct inversion

If laparotomy correction not successful

- Hysterectomy

Clotting disorder: bleeding in the absence of above conditions

- Treat for clotting disorder**
- Treat as necessary with blood products

Ergometrine – if oxytocin is unavailable or bleeding continues despite continues despite oxytocin and ergometrine

- 0.2 mg intramuscularly or intravenously (slowly), or Syntometrine® 1 ml
- **After 15 minutes**, repeat ergometrine 0.2 mg intramuscularly

Prostaglandins – if oxytocin or ergometrine are unavailable or bleeding continues despite oxytocin and ergometrine

- **If required**, administer 0.2 mg intramuscularly or intravenously (slowly) every 4 hours
- **Do not exceed 1 mg** (or five 0.2 mg doses)

Misoprostol: 200–800 µg sublingually

- 0.25 mg intramuscularly
- **Do not exceed 800 µg** intramuscularly
- **Repeat as needed every 15 minutes** 0.25 mg intramuscularly
- **Do not exceed 2 mg** (or eight 0.25 mg doses)

Tranexamic acid

- 1 g intravenously (taking 1 minute to administer)
- **If bleeding continues**, repeat 1 g after 30 minutes