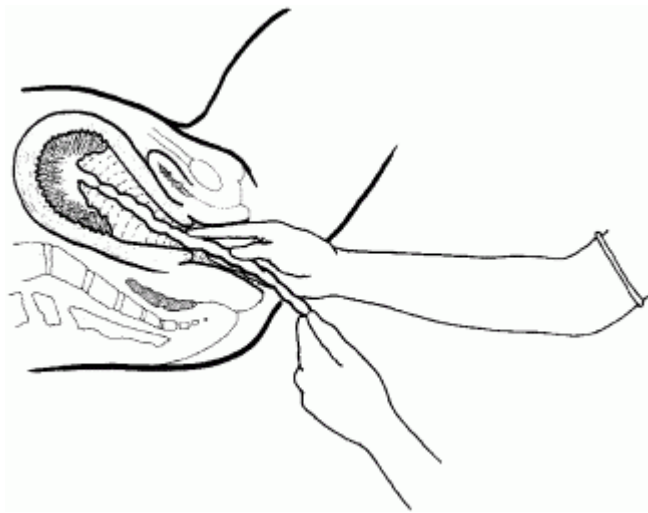


## MANUAL REMOVAL OF PLACENTA

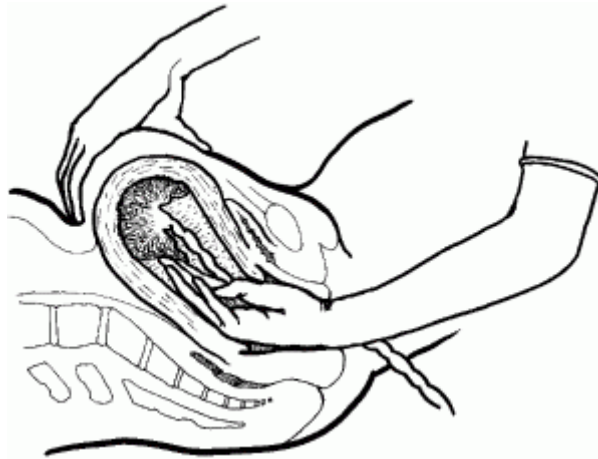
- Review for indications.
- Review general care principles ([page C-17](#)) and start an IV infusion ([page C-21](#)).
- Provide emotional support and encouragement. Give pethidine and diazepam IV slowly (do not mix in the same syringe) or use ketamine ([page P-13](#)).
- Give a single dose of prophylactic antibiotics ([page C-35](#)):
  - ampicillin 2 g IV PLUS metronidazole 500 mg IV;
  - OR cefazolin 1 g IV PLUS metronidazole 500 mg IV.
- Hold the umbilical cord with a clamp. Pull the cord gently until it is parallel to the floor.
- Wearing high-level disinfected gloves, insert a hand into the vagina and up into the uterus ([Fig P-42](#)).

**FIGURE P-42**      **Introducing one hand into the vagina along cord**



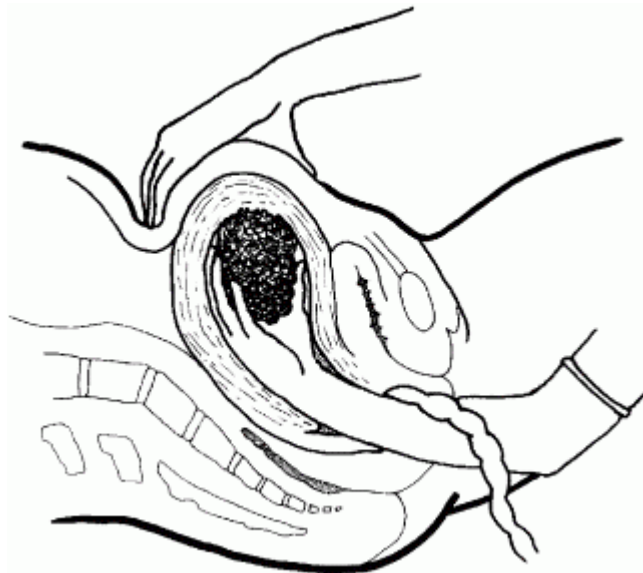
- Let go of the cord and move the hand up over the abdomen in order to support the fundus of the uterus and to provide counter-traction during removal to prevent inversion of the uterus ([Fig P-43](#), [page P-78](#)).
- Note:** If **uterine inversion occurs**, reposition the uterus ([page P-91](#)).
- Move the fingers of the hand laterally until the edge of the placenta is located.
  - If the **cord has been detached previously**, insert a hand into the uterine cavity. Explore the entire cavity until a line of cleavage is identified between the placenta and the uterine wall.

**FIGURE P-43**      **Supporting the fundus while detaching the placenta**



- Detach the placenta from the implantation site by keeping the fingers tightly together and using the edge of the hand to gradually make a space between the placenta and the uterine wall.
- Proceed slowly all around the placental bed until the whole placenta is detached from the uterine wall.
- If the **placenta does not separate from the uterine surface** by gentle lateral movement of the fingertips at the line of cleavage, suspect placenta accreta and proceed to laparotomy and possible subtotal hysterectomy ([page P-103](#)).
- Hold the placenta and slowly withdraw the hand from the uterus, bringing the placenta with it ([Fig P-44](#)).
- With the other hand, continue to provide counter-traction to the fundus by pushing it in the opposite direction of the hand that is being withdrawn.

**FIGURE P-44**      **Withdrawing the hand from the uterus**



- Palpate the inside of the uterine cavity to ensure that all placental tissue has been removed.
- Give oxytocin 20 units in 1 L IV fluids (normal saline or Ringer's lactate) at 60 drops per minute.
- Have an assistant massage the fundus of the uterus to encourage a tonic uterine contraction.
- If there is **continued heavy bleeding**, give ergometrine 0.2 mg IM or prostaglandins ([Table S-8](#), [page S-28](#)).

- Examine the uterine surface of the placenta to ensure that it is complete. If any **placental lobe or tissue is missing**, explore the uterine cavity to remove it.
- Examine the woman carefully and repair any tears to the cervix (**page P-81**) or vagina (**page P-83**), or repair episiotomy (**page P-73**).

### **PROBLEMS**

- If the **placenta is retained due to a constriction ring** or if **hours or days have passed since delivery**, it may not be possible to get the entire hand into the uterus. Extract the placenta in fragments using two fingers, ovum forceps or a wide curette.

### **POST-PROCEDURE CARE**

- Observe the woman closely until the effect of IV sedation has worn off.
- Monitor the vital signs (pulse, blood pressure, respiration) every 30 minutes for the next 6 hours or until stable.
- Palpate the uterine fundus to ensure that the uterus remains contracted.
- Check for excessive lochia.
- Continue infusion of IV fluids.
- Transfuse as necessary (**page C-23**).

*World Health Organization (2000). Managing Complications in Pregnancy and Childbirth A Guide for Midwives and Doctors, Department of Reproductive Health and Research, World Health Organization.*

[http://www.reproline.jhu.edu/english/2mnh/2mcpc/3\\_Procedures/P-077.html](http://www.reproline.jhu.edu/english/2mnh/2mcpc/3_Procedures/P-077.html)