Postpartum Hemorrhage: Abdominal Wall and Perineum

Model can be applied to any commercial pelvis. May be reused multiple times until laparotomy performed.
PPH Uterus with Abdominal Perineal overlay

PPH uterus Overlay and Sim blood

Abdominal wall & perineum

Simulation blood applied externally
Bimanual massage: Abdominal wall must be soft and flexible

- Most commercial pelvises have a plastic abdominal wall
- Palpation of the fundus is impaired. We suggest removing it.
- The Pfannenstiel Model by Kelly Best and Brent Seibel can be used to create all layers of the abdominal wall—or
- Simply use a foam pad for subcutaneous tissue, covered by a separately applied “SKIN” which we use for the Abdominal Wall & Perineum (all one piece)
- This material can be purchased at any fabric store. May be referred to as nylon knit “swimsuit” fabric. Several skin tone colors are available
Fascia (optional)

- If your simulation involves a laparotomy, also use a firm white canvas fabric for the fascia.
- “Special suede” white fabric is ideal.
- Secure 4 corners to sides of model with tape or straps as discussed later.
- Use of fascia helps protect uterus from being cut inadvertently.
Skin = Nylon knit fabric “swimsuit” fabric

- For a small hemipelvis, a simple 20x20-inch square of material is sufficient
- For a full body model, 28 x 32 inches is a good size
Abdominal wall & perineum: small hemipelvis

- Cut two Xs in the area of the legs
- Midway between the legs, the vaginal opening can be made with
  - a simple vertical cut, which represents the introitus and small 2nd degree laceration postpartum
  - an asterisk shape cut, which works well if you are adding a cylindrical vagina (as per flower pot vaginal hysterectomy model)
Placement on pelvis
Any type of foam placed under skin gives the abdomen some shape.

Option to place perineum over cloth or secure lower edge of sheet under pelvis with strap (see next slide).
Full body model with legs

- A flexible backpacking strap; can act as a “twistum”
- Any cord like string may be used
- Cut two holes as shown
- Fold strap and insert as shown
- Now straighten the strap and place under model’s buttocks
• The straightened strap is not visible if placed far enough back under model’s buttocks.
Securing sides of abdomen

• Straighten and secure on sides; by cutting a hole near edge of fabric, put end through, fold back
• If colors show, cover with pink tape
• Place two other straps in back of model’s torso (mid & upper abdomen)
• Secure in same manner
Create vaginal opening

• With all material pulled taut both vertically and horizontally
• Identify midline location to make vaginal opening
• Cut vertically with scissors
Option: Make urethra visible

- If you are using the neoprene winebag PPH uterus model
- It is possible to shift the fabric so that the urethra is visible
- If desired, it is easy to secure this with one or two stitches of a clear suture
Final model setup

- We have found that trying to have Sim blood flow from inside the vagina or uterus is unnecessary and creates clean up problems.
- We’ve applied blood staining the “introitus” and the under-buttocks pads. We add a few clots in vagina.
- Our Sim blood flows directly into the Quantified blood loss container from a rigid tubing taped under the edge of the stained pad.
Questions?

Kim Harney, MD

kharney@stanford.edu