Postpartum Hemorrhage Uterus

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Postpartum Hemorrhage Simulations

- For the obstetrician who must continually perform intrauterine bimanual massage while directing the team’s interventions, realism is enhanced by a model with the natural haptics of **intrauterine cavity, dilated cervix, vagina** and **urethra**
- Atonic uterine cavity, 10cm dilated cervix
- This model allows urethral catheterization (no urine flow)
- Accommodates the **Bakri Balloon** nicely
- Can have retained POCs and allow curettage, repair of cervical or vag lacs
- Be used for **B Lynch** suture
- Can be placed in any commercially available pelvis

Having your OB participant direct the team in the simulation without having their hands constantly tied up doing intrauterine bimanual massage is just not realistic. It’s an appropriate distraction and they shouldn’t be able to point, gesture or grab instruments.
PPH uterus created from a durable neoprene wine bag: all uteri are still in use over 8 years of simulations.
Image of uterus in model
PPH Uterus
Abdominal-Perin
Overlay
Sim blood applied externally
Single neoprene wine bag
$15 + shipping

http://www.builtny.com/one-bottle-tote/M-1B.html?dwvar_M-1B_color=FL
Turn bag inside out
Cut one handle in the middle
Fold the end inward, so “fundus” is at level of handle opening (see next slide)
The fundus protrudes past lower edge of handle.
Measure 4 cm from the folded edge. Fold down handles to this point.
Fold both handles downward
Now you have the fundus and interiorly, the cervix. Next step is to secure these folds.
Dilated Cervix is visible. Vagina will be made by bringing the red edges together along the 3 o’clock and 9 o’clock lines.
Secure the folds with nonabsorbable suture
Begin to close the lateral vaginal wall
Continue downward about 5 cm
Tie off securely as there will be heavy traction at this point during bimanual massage
Lateral view: Fundus, cervical fold, vagina
Create loops on cut ends to secure model in pelvis with heavy non absorbable suture
Place duct tape over knot, fold over tape to make a flap of about 6 cm
The flaps will secure the posterior vaginal wall against the pelvic model
Lift the anterior handle to create the urethral orifice
Place a stitch allowing a generous diameter. Friction makes it harder to catheterize.
Urethral orifice

- It is not necessary to create a full urethra
- Having the orifice present makes it possible to go through the motions of placing a catheter
- A Foley may be placed and the balloon blown up 2-3 cc to hold it in place. If you orient your participants to this aspect of the model prior to the scenario, they will not be bothered by the presence of the balloon in the vagina
If using Noelle, place protective “bladder” to prevent leakage of Sim blood into her cavity
Place a cut in the intact handle above the urethra. It also helps to place a stitch between the handle and the top of the urethra (blue arrow)
Place a Velcro strap in the cut opening
Place uterus into pelvis. Some mobility of vagina and urethra is fine, but ensure the lower edge of the vagina is flush with lower edge of the pelvis.
Secure posterior flaps with duct tape
Now the Abdominal wall/Perineum sheet can now be placed (see separate presentation).
We found that it is far more advantageous to have Sim blood running directly into the QBL Drape, though we place 100-200cc of blood in the vagina and on drapes for verisimilitude. If you orient your participants that the flow is directly into the collection drape, that urges them to look there periodically throughout the scenario.
B Lynch, O'Leary, Hayman sutures may be done
B Lynch option

• If you want your participants to be able to do a Bakri and then a Blynch if it fails, you have 2 options:
  o Place the B Lynch in this uterus even though the exterior contours (the fold from the cervix) interfere with proper placement of the suture, or
  o Place a second uterus (no modifications, just the winebag) stacked on top of this uterus also affixed to the pubis with velcro straps.

• When doing bimanual massage through foam abdominal wall, they will not notice the second uterus. They should, as always, empty the Bakri before placing the B Lynch suture.
Questions?

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