

“A STITCH IN TIME: THE B-LYNCH, HAYMAN, AND PEREIRA UTERINE COMPRESSION SUTURES”

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Pearls to enhance the B-Lynch suture

I find it helpful when placing a B-Lynch suture to stitch the top of the suspenders through the myometrium in the fundus to anchor the stitch. It prevents rabbit ear loops with involution and keeps the stitch from slipping over the shoulders as it is tied. I have not had any problem with increased bleeding, and this step doesn't take much additional time.

While I am getting ready to place compression sutures, I place a sterile Penrose tourniquet (1 inch works best) that circumscribes the uterus below my uterine incision; I tie it tightly. This tourniquet stems blood flow greatly, doesn't get in the way of my B-Lynch placement, and can be applied in 20 or 30 seconds—even over the bladder, if necessary. In fact, this strategy is my first move for obstetric hemorrhage while I am getting organized, calling for blood, having a second IV line started, and so on. It probably does slow the infusion of tocolytics into the uterus—except for direct injection—as it constricts the uterine artery blood flow (whole point of the maneuver), but I believe the benefits exceed any downside.

After my B-Lynch suture is placed, the tourniquet is cut, and I confirm hemostasis. Although this strategy is not strictly B-Lynch in nature, I find it to be a useful pearl when in a bind.

Thomas Pinckert, MD
Rockville, Maryland

How we secure the suture to prevent looping and slipping

At our center, the B-Lynch and Hayman sutures are part of a protocol to



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arrest bleeding that is not responsive to uterotonic agents, but we have introduced a small modification. Instead of simply looping the suture over the uterine fundus, we take a small subserosal bite over it before bringing it down and tying it up. This helps in two ways:

- The theoretical risk of “rabbit-ear” looping of the suture is reduced (the thread is pulled down with the involuting uterus)
- The risk of the suture prematurely slipping off the shoulders (cornua) is diminished, both intraoperatively and postoperatively.

Dr. Ajay S. Dhawle
Wardha, Maharashtra, India

A question about suture materials

Dr. Barbieri provided a great concise review of uterine compression sutures. The one question I have concerns the choice of suture material. Dr. Barbieri compared chromic suture with Monocryl, but Monocryl has a very similar breakdown time to chromic suture, has greater tensile strength, and is 36 inches long. Was Dr. Barbieri perhaps meaning to compare #1 chromic suture on a

CTX needle with Vicryl? I would then understand his point.

Dominick LoBraico, DO
West Long Branch, New Jersey

>> Dr. Barbieri responds

Tips are much appreciated

I agree with Dr. Pinckert and Dr. Dhawle that taking a small subserosal bite over the fundus before bringing the suture down and tying it up is a great way to prevent the rabbit ear loops of suture that occur when the uterus involutes postpartum. This approach has been described in the literature.¹

Dr. Pinckert recommends the placement of a uterine tourniquet to help slow bleeding while the B-Lynch suture is placed in order to reduce blood loss. I enthusiastically agree with his recommendation. Modern obstetric texts seldom mention the uterine tourniquet as an important technique to reduce blood loss when postpartum hemorrhage occurs at cesarean delivery. Interestingly, in the 1870's, although cesarean delivery was rarely performed, many obstetricians routinely placed a “prophylactic” uterine tourniquet around the lower uterine segment during a cesarean delivery, but did not tie it down. If a postpartum hemorrhage occurred following delivery, the tourniquet was tied down to control excess blood loss.

I agree with Dr. LoBraico that almost all large-caliber nonpermanent sutures of sufficient length are suitable for performing a B-Lynch suture. I also agree that the longer the suture, the better. And yes, I was intending to compare chromic suture with Vicryl.

Reference

1. Marasinghe JP, Condous G. Uterine compression sutures for post-partum bleeding with atony; modification of the B-Lynch suture. *Aust N Z J Obstet Gynaecol.* 2009;49(1):67-70.