

## Postpartum #10

1. Even in a seemingly “easy” birth, why is the need for examination of repairs so important?

The degree of difficulty of the birth may have little effect on the formation of a tear. Hard births may have no tear while easy births may produce a large, deep tear. Tears could be hidden deep within the canal that were produced by a nuchal arm. If the birth was easy and there are no apparent signs of a tear at least the periurethral area, the lower third of the vaginal cavity and the labia must be inspected.

2. What is required when setting up for the exam? What equipment do you need and what positions should be taken?

The mother should be positioned at the edge of the bed with her legs spread and her feet on bed height chairs. The midwife should position her chair directly in between the mother’s legs and ensure she can see the entire perineum. If need be, the mother can be propped up slightly by placing towels under her bottom so the perineum is more visible. The brightest light available should be placed to shine onto the perineum. Equipment includes fresh sterile gloves, aerosol anesthetic, gauze,

3. What should be done concerning bleeding before and during the exam. Be complete in your answer.

If bleeding is blocking the ability to view the perineum blot it off with gauze. If bleeding is substantial, find the source and stop the bleeding, then continue the exam. Determine if the bleeding is from a uterine hemorrhage, lochia, periurethral, cervical, or perineal tear, or a severed blood vessel. If a blood vessel is the cause of bleeding it must be tied closed before suturing can be done as burying a bleeding vessel will result in a hematoma. If bleeding is not coming from the uterus and is seeping from a laceration pressure should be applied with an herbal compress, the inspection and repair should then be completed as quickly as possible. If the herbal compress is not able to stop the bleeding apply an ice cube wrapped in gauze soaked in the herbal solution. Hold this on the wound until the bleeding stops enough to continue the repair.

4. How do you go about distinguishing tissue layers? Be specific. What considerations should be made? How do you know what you are looking at?

The ability to distinguish between the different tissues comes from much practice and observation as well as a general knowledge of the anatomy of the vaginal tissues. Examine the sidewalls of the vagina first. If there is not tear these tissues will appear as mounds of deep blue or reddish-purple soft tissue. If torn, the mucous membrane will be ragged, bumpy and a dark purple color with streaks of light-colored connective tissue. Tears of the vaginal mucosa cause the tissue to curl inward. Torn skin will curl inward and will have light pink edges. Torn muscle will appear as a deep red color. Muscle is more resistant to touch than the other softer tissues. If the anal sphincter is exposed by a tear but is undamaged it will be underneath the perineal skin and will appear as a rounded band that runs side to side and will be a dark pink color. If the anal sphincter is torn it will be stringy, meaty, and rough with any intact fibers still running side to side. If the external anal sphincter is torn the inner sphincter will be visible and is distinguishable as a much lighter whitish pink color.

Consider the extent of the wound and how the mother will be affected if the wound is not properly repaired. Look for deep anterior wounds that reach the urethra or bladder; also look for wounds that penetrate to the posterior cul-de-sac or to the anal sphincter or rectal mucosa.

5. Warning – Long Answer here! Discuss the order of examination for tears. What are you looking for? How do you note your findings? It is here we are looking for the following:

– specifics of a tear and how they are noted

Internal tears are typically configured with two apexes while external tears may have two or more apexes. External tears may have an apex toward the pubic bone (anterior apex), toward the sacrum (posterior apex), near the body (lateral apex) and farthest from the body (medial apex).

Tears of the vaginal floor constitute the horizontal plane of a tear. These tears form a wedge that is deepest at the introitus and shallows until it reaches the internal apex.

Tears may also come in the configuration of an L shape. These tears begin in the floor of the vagina then extend down to the perineum. The deepest point of these tears is the bend of the “L” where the skin of the perineum meets the vaginal mucosa at the corner of the introitus.

Note any places of particular tenderness during the internal exam that may indicate a deep hematoma, also note any large, smooth, purple masses near damaged tissue that may be a forming hematoma.

– typical findings and terminology

Skid marks are the most superficial type of tear. These are usually left to heal on their own. Skin splints or rents are a slightly deeper tear but are still usually able to heal without repair. The apex of the tear is the narrowest point at which the tear ends or begins. Most perineal tears have two apexes one is usually internal extremity and the other at the external extremity.

– how these tears typically happen

One type of tear occurs when there is not enough time for adequate stretching of the perineal skin. This results in a central rupture of the perineum beginning at the midline vaginal wall above the perineal body. The baby now descends through the vaginal tear and causes a bulge to form on the perineum. Then an external tear forms that extends from the introitus down toward the anus. If the tear is oriented in the direction of the rectum a large fistula will form in the rectal wall. A tear in the perineum may also occur that leaves the introitus intact due to the tear placement being adjacent to the introitus.

If proper attention is paid to the perineum during birth and proper protection is applied these tears are not likely to happen.

Tears may occur that are the result of previous suturing pulling the tissues too tight. This results in the tear causing the vaginal cavity to return to the size it originally was prior to previous suturing.

– each section you are examining and within each section what you are looking for

– how you perform the examination in each area

Examine from the top down and the outside inward as tears are most often in the shallow parts of the vagina.

To begin the examination of the labia minora and periurethral area separate the lips and check for tears starting at the clitoral hood and work down. Look for skid marks and skin splints. Labial tears may come in the form of a longitudinal labial tears that appear as a dark red or pink area that is meaty lines, these tears often do not require suturing. Labial tears that may require suturing to heal properly would be tissue that is torn back into a flap, those which run across the width of the labia, those that result in a chunk of tissue that is sagging down, and those that result in a piece of tissue is missing or hanging down away from the rest of the tissue.

Examination of the perineum.

Perineal tears will often have an internal apex on the posterior vaginal wall and an external apex on the perineal skin. Tears in the perineum constitute the vertical plane of a tear. Perineal tears from a wedge that is deepest at the introitus and become shallower as they approach the anus.

Check for the depth of any tears from the skin to the central point of the perineum. Look for raggedness of the edges of the tear and for any skin tags that will require removal when suturing. Check the mouth of the vagina to determine if the edges of the tear lie together or are mismatched. Also check for any signs of iatrogenic skin tags. Be sure to identify the posterior external apex, this requires separating the tissues and following the tear to the visible end. External perineal tears may expose or sever the anal sphincter, if this occurs be sure to follow the tear through the corrugator cutis ani to determine if the tear extends around the sphincter.

To examining the vaginal floor, determine if the tissues are damaged by holding the vagina open. Examine the color and texture of the walls. Using an index finger firmly but gentle swipe down to the posterior midline of the wall and observe when the color and texture changes. A tear will appear as a cleft in the posterior vaginal wall. After locating the tear follow it back toward the cervix until the apex is found. This allows assessment of how deep the tear has penetrated and how long the tear is. Open your fingers to allow for visualization of the tear. Skid marks and lacerations of the vaginal wall near the urethra, these tears are common and most often do not require suturing. Find the internal apex by both feeling and sight. Examine the posterior sulcus groves for tears as you check the internal apex.

On some occasions the vaginal floor will split into two separate layers above the anorectal wall. This is due to the vaginal walls tearing away from the adventitia between it and the anorectal wall.

Severe types of tears that are associated with cesarean birth but may occur vaginally are longitudinal tears to the middle or upper third of the vaginal floor. These tears may or may not also reach the perineum or cervix.

Check behind the perineum for pocket tears, if a tear is present be sure that the sphincter, bladder, and the urethra were not torn.

Examine hymenal ring if any incision was made during birth. Examine how far the incision has extended below the vaginal floor.

Examine the perineal muscles for tears. The muscles most likely to be torn or damaged are the urethrovaginal sphincter muscle, the superficial transverse perineal muscle, the smooth muscle of the banded portion of the perineal muscle, the bulbocavernosus, the winged portions of the

anal sphincter, and the puboperinealis muscle. The depth of the tears in the muscle determines how many rows of stitches will be required to facilitate repair. Finding muscle tears can be done both by inserting fingers to feel for the movement of the muscle and by seeing the movement of the muscle fibers when the mother constricts them.

Check for damage to the vaginal ceiling being sure the anterior wall is visible and there are no tears. Also check for tears in the anterior sulcus grooves. If the anterior wall is not visible insert two fingers deep into the vaginal cavity and press down to make the ceiling visible. These tears are most commonly caused by forceps delivery. If tears are present in the upper vaginal walls the bladder must be checked for tears also. The bladder is checked by catheterizing the mother. If blood is expelled with the urine from the catheter, it is a sign that either the bladder or urethra may have been damaged and a fistula may be present.

When dealing with the cervix there may be instances of swollen cervixes that must be pressed back towards the uterus using ring forceps. Other protruding objects in the vaginal cavity may be a hematoma, fibroid, polyp, or some type of prolapse. Examination of the cervix can be painful for the mother and should not be performed unless a cervical tear is a possible cause of seemingly unexplained bleeding, or by the cervix having descended down to the introitus during birth. Cervical lacerations of less than .5 cm will heal without repair and lacerations of 2 cm are considered to be common. Cervical inspections and repair are especially important for women with prior cervical incompetency. Cervical lacerations may also affect the fornices, the lower uterine segment, the upper third of the vagina, the uterine artery, and the peritoneum. Cervical examination requires using a hand to apply downward pressure to visualize the cervix and use of forceps to move the cervix for examination. The cervix must be felt to determine if muscle has torn behind the cervical mucosa. If a cervical repair is necessary, the forceps can be used to stabilize the cervix while suturing. Serious tears of the cervix include those that result in peritoneal perforation and may be accompanied by retroperitoneal or intraperitoneal hemorrhage, and those that result in complete severance of the cervix. Both of these instances require transfer for repair.

Tears of the anal sphincter are somewhat uncommon. A visual and digital exam can be used to ensure the sphincter has not been damaged. A digital exam must be performed if there is a deep tear in the posterior vaginal wall, or a pocket tear behind the perineal skin to check for tears of the rectal mucosa and the sphincter. Women with a short perineum are more likely to have a tear that reaches the sphincter. To examine the anal sphincter be sure to reread any notes concerning structure that were taken during the pelvic exam in prenatal charts. Assess the distance from the anterior anal margin to the introitus. Note the degree of puckering of the corrugator cutis ani, it should be evenly puckered all around the perimeter. Lack of puckering in the anterior quadrant may indicate a torn external sphincter or a fistula. Further examination is required if puckering is absent or uneven. To assess for damage digitally insert a gloved finger into the vagina and have the mother tighten her sphincter, this should contract the muscle and allow the provider to feel for the intact muscle. If a vaginal tear is deep a digital exam is performed by inserting a finger both at the apex of the tear in the vaginal cavity and in the anal sphincter. Bimanual compression is applied and both fingers are drawn toward the outside of the body. This is done to feel for any spots where the fingers come into contact with each other indicating a tear that has penetrated through the anal sphincter.

6. How is a tear measured? How are degrees of damage assigned? What are these different degrees of damage and what do they mean?

Measuring the tear is done in 3 separate measurements. The 1<sup>st</sup> measurement is the depth of the tear through the center of the perineal body. The 2<sup>nd</sup> measurement is the internal length of the tear from the fourchette to the internal apex of the tear. The 3<sup>rd</sup> measurement is the external length of the tear from the fourchette to the external apex in the perineal skin.

Degrees of tears.

1<sup>st</sup> degree is a tear that involves only the perineal skin and the vaginal epithelium. These tears do not affect any muscles. First degree tears have minor damage, and are shallow at the apexes. 2<sup>nd</sup> degree tears involve the perineal muscle. A complete 2<sup>nd</sup> degree tear penetrates the muscle but does not reach the anal sphincter.

3<sup>rd</sup> degree damage involves one or both of the anal sphincters. 3<sup>rd</sup> degree tears are subdivided into 3 categories: 3a – tear that involves 50% of the external thickness of the anal sphincter, 3b – involves more than 50% of the external sphincter, and 3c involves the external and internal sphincters.

4<sup>th</sup> degree tears involve 3<sup>rd</sup> degree damage as well as damage to the anal mucosa.

7. How do you determine if suturing is required? What are the pros and cons? What are the questions to ask in helping to determine whether suturing is needed? Be specific and thorough in your discussion.

Some midwives believe that leaving 1<sup>st</sup> and 2<sup>nd</sup> degree wounds without suturing provides benefits such as fast healing, not having the pain of being stitched directly after giving birth, less chance of infection, less postpartum pain. There are some major possible long-term effects of choosing not to suture including: poorer cosmetic results, problems with sexual function, weakening of the pelvic floor, pelvic, perineal, or vaginal pain, organ prolapse, and incontinence. Deciding whether to suture is the mother's decision and she has the right to refuse it, however the midwife must provide honest accurate assessment for the mother to be able to make a wise decision. Labial tears are most often left to heal on their own unless the tear is extremely deep, there is a chunk of tissue missing or hanging down, the tear is unsightly and the mother would like sutured for cosmetic reasons, or the bleeding is uncontrollable. Deep, large tears of third or fourth degree must be sutured as the risk of leaving them unrepaired is far too high. Some considerations that will help to make the decision to suture may be: does the mother want to be sutured, is she concerned about the cosmetic result, is the tear 3<sup>rd</sup> or 4<sup>th</sup> degree, the wound has ragged edges and is oddly shaped, and the edges do not come together when her legs are together. More reasons for suturing: the wound is bleeding excessively, the wound is deep or extensive externally and internally, tissue is hanging down from the vulva, there is a pocket tear that may collect bacteria and increase the chance of infection, tissue from a prolapse is hanging through the tear and separating the edges, the woman is in poor health, is malnourished, or has little help for the postpartum period so she will have little time to rest. Some reasons not to suture may be: the wound is small and shallow, the edges lie together without assistance, any periurethral or labial tears are not bleeding and no tissue is dangling, you are sure that the rectal mucosa and anal sphincters are intact, the woman has refused suturing, and the woman has adequate help to allow for 2 to 3 weeks postpartum to stay mostly in bed and to not climb stairs for 4 weeks.