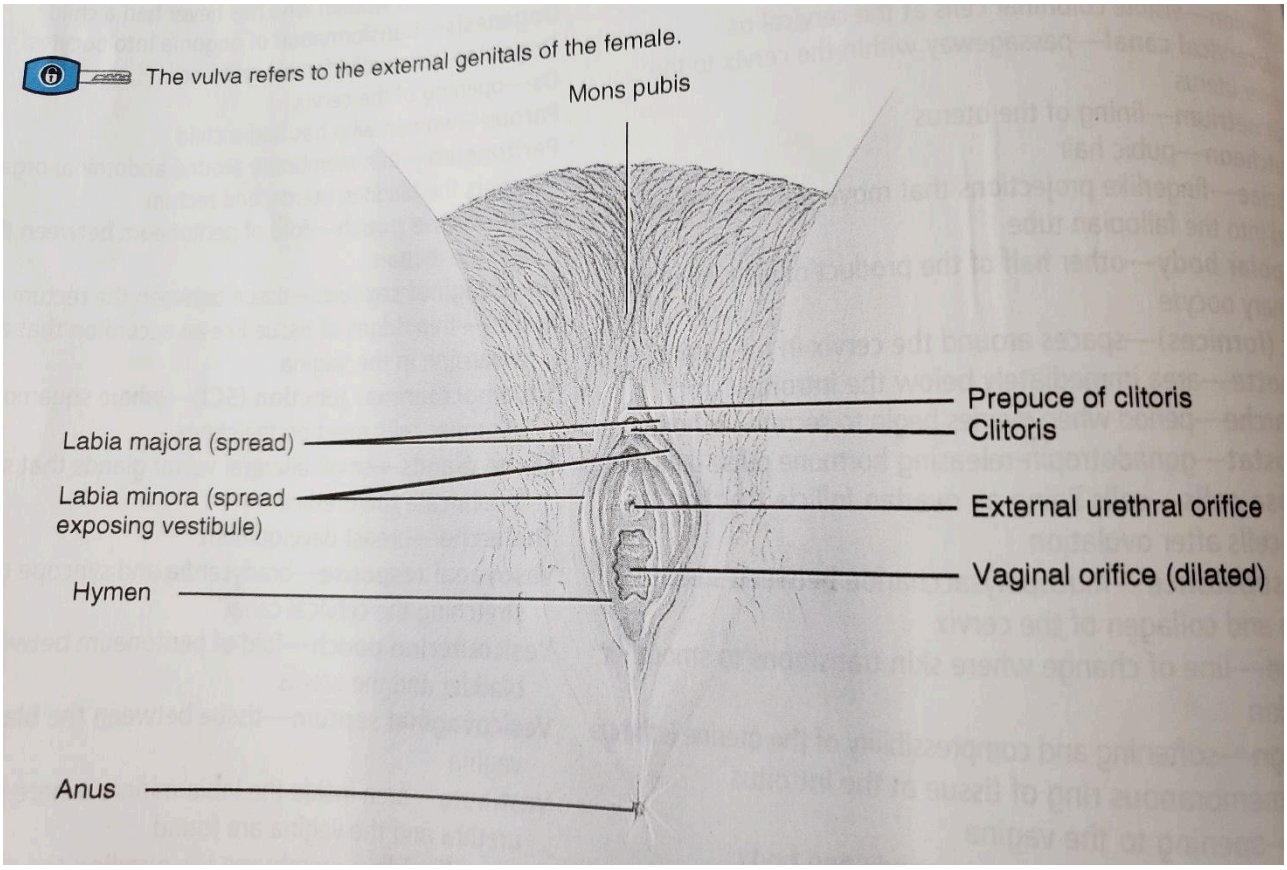
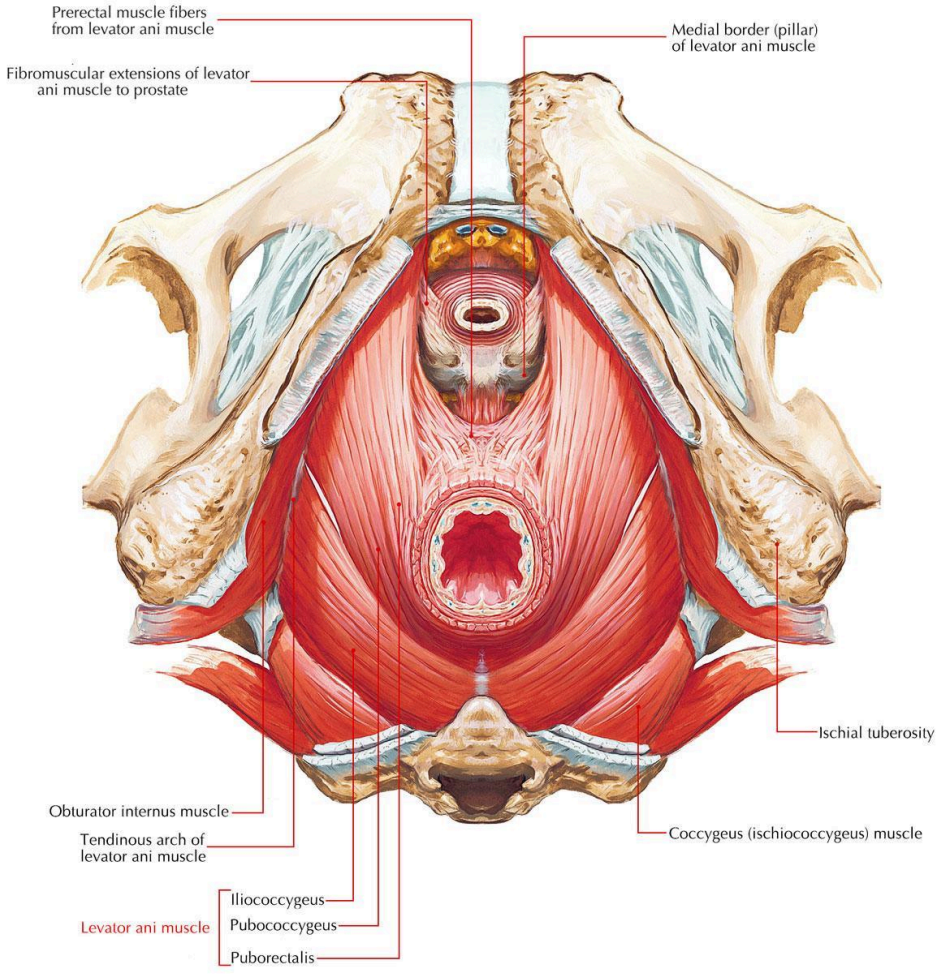
E.1 Foundational Anatomy

Pelvic Anatomy and External Genitalia



1. mons pubis or mons veneris: rounded mound of fatty tissue over the pubic symphysis, minimal risk
2. labia majora: Outer folds of tissue on either side of vagina covered in pubic hair, minimal risk
3. labia minora: Inner folds of tissue between labia majora, some risk of tearing during 2nd stage
4. fourchette: area immediately below the introitus, high risk of tearing, area where episiotomy is often performed
5. clitoral hood: covering over the clitoris at the upper fold of the labia minora, minimal risk
6. frenulum of the clitoris: lower fold at the top of labia minora, some risk
7. vestibule of the vulva: area inside the labia minora where openings for vagina and urethra are found, high risk of tearing
8. clitoral glans: erogenous organ with erectile tissue, minimal risk
9. urethral meatus: opening of the urethra, minimal risk
10. introitus: opening to the vagina, some risk of tearing
11. perineum: area between the vagina and the anus, high risk of tearing, episiotomy often performed here
12. subcuticular tissue: tissue beneath the skin, some risk

The Levator Ani Muscle Complex and Related Structures:



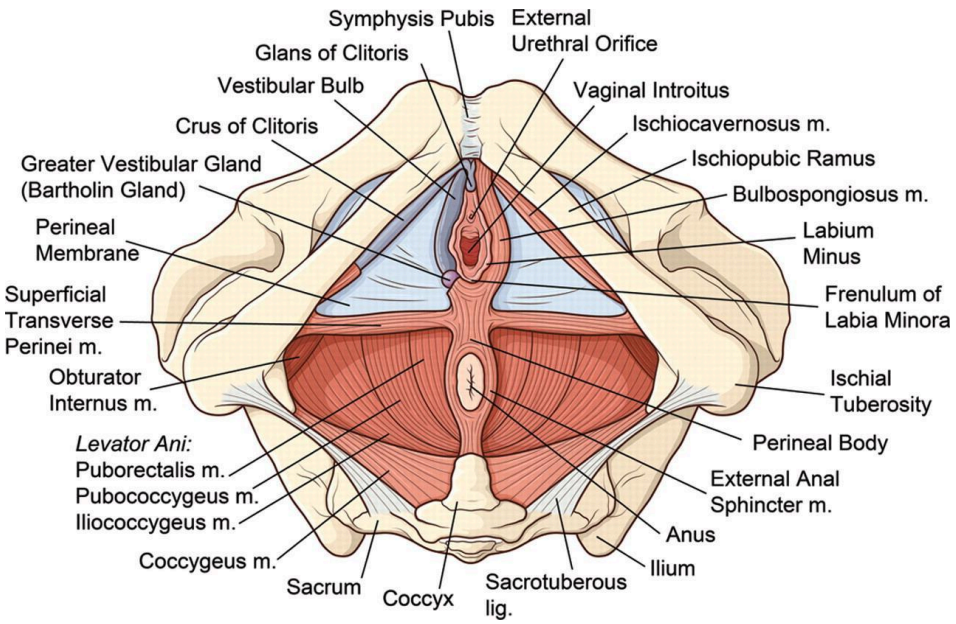
1. Levator Ani: group of muscles that wrap around the rectum in a U shape from the pubis toward coccyx and back toward pubis, includes Iliococcygeus, Pubococcygeus, and Puborectalis, this forms a diaphragm that supports pelvic and abdominal organs, some risk of injury especially if episiotomy performed
2. Pubococcygeus/pubovisceral: muscle extending from one side of pubis to coccyx and back to other side of pubis, some risk of trauma
3. Iliococcygeus: muscle extending from one side of ilium to coccyx and back to other side of ilium, some risk of trauma
4. Ischiococcygeus: muscle extending from both ischial spines and fans out to coccyx and sacrum, some risk of trauma

The Anal Triangle and Related Structures:

1. The internal anal sphincter (tissue layers): inner layer of circular, smooth muscle fibers and superficial layer of longitudinal muscle fibers, some risk

2. Winged external anal sphincter (description and function): deepest portion of the external sphincter, U-shaped, wings reach upward and blend with bulbocavernosus muscle, leaves a natural gap in the ring to allow for stretching and even tearing during birth, some risk of trauma
3. Anal/rectal columns: ridges inside the anal canal, when enlarged can become hemorrhoids if they prolapse outside the anus, some risk of trauma

Urogenital Triangle and Related Structures:



1. Vagina (dimension, tissue layers depth and characteristics): about 6-8cm anteriorly and 7-10cm on the posterior wall, elongates during intercourse and stretches wide during birth, very elastic, highly lubricated, some risk of trauma and tearing
2. Rectovaginal space: area between the rectum and the vagina, high risk of injury
3. Cervix: lower portion of the uterus, must dilate for birth, some risk of injury
4. Sulcus grooves/ lateral vaginal fornix: the space to either side of the cervix in the vagina, some risk of injury
5. Hymen: membranous ring of tissue at the introitus, high risk of injury
6. Perineal membrane connective tissue complex (general posterior location): attached at the pubic rami, and perineal body, sits inferior to bladder and uterus, supports perineal body and vaginal walls, some risk of injury, risk greatly increases with episiotomy
7. Bartholin glands: pea sized vulvar glands on either side of the vagina that secrete lubricant, minimal risk
8. Superficial transverse perineal muscle: muscle that attaches laterally from one side of the pelvis to the other in the center of the perineum, divides the anal triangle from the urogenital triangle

9. Bulbocavernosus muscles: pair of superficial muscles that extend from clitoral body back posteriorly on either side of the midline superficial to transverse perineal muscle to perineal body, some risk of trauma
10. Perineal body (size & tissue consistency; decussation, functions): 4cm three-dimensional pyramid shaped mass, fibromuscular and vascular tissue, in the perineum area where several muscles converge, anchors pelvic muscles, fibers are crisscrossed allowing for stability and all-way stretch, some risk of trauma