THERAPEUTIC PROCEDURES

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OBJECTIVES

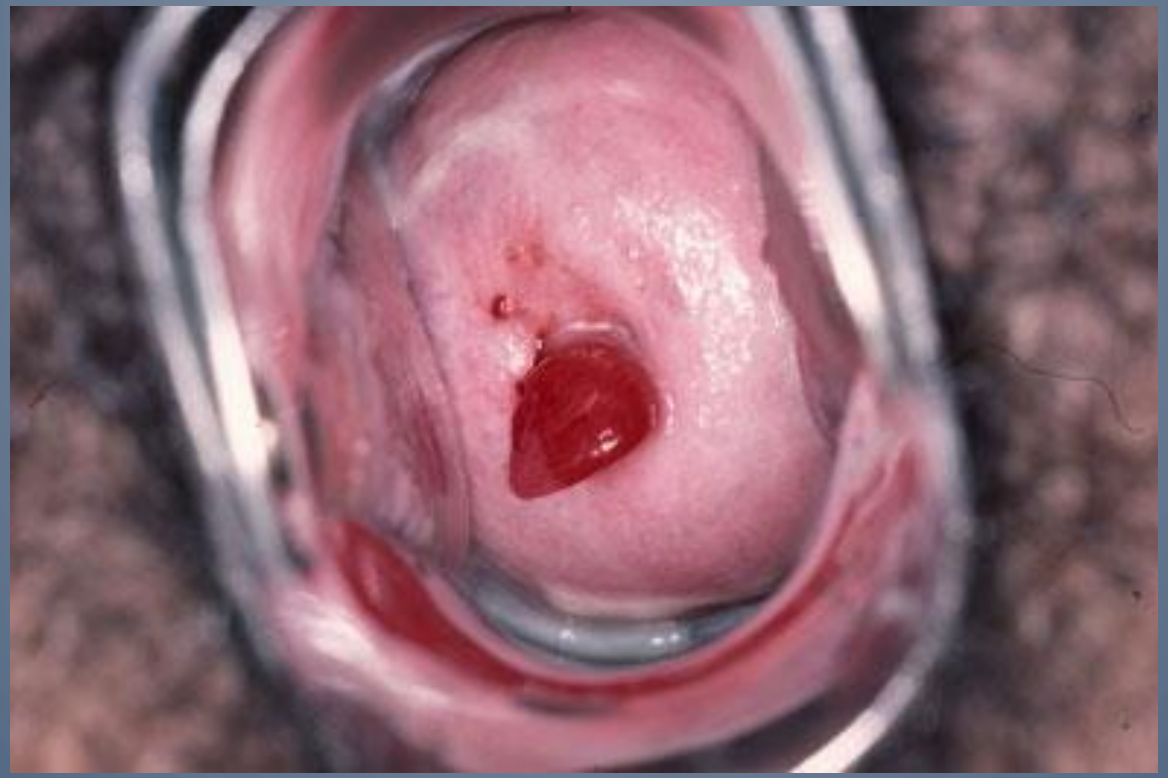
- Identify procedure to be performed including indication, and alternatives
- Screen client for appropriateness/candidate for procedure
- Explain procedure to client including complications, benefits, obtain informed consent
- Properly perform procedure as indicated using simulated models, utilize infection prevention practices to minimize the risk of post-procedure infections and prolonged bleeding
- Provide post-procedure counseling on care and follow-up, including any wound care

OFFICE GYN PROCEDURES

- Endocervical Polypectomy
- Endometrial Biopsy
- Vulvar Biopsy
- Bartholin's I&D

ENDOCERVICAL POLYPECTOMY

- Indications
  - Remove pedunculated growth from cervix
  - Rule out malignancy of tissue (less than 5% are malignant)
  - Remove for symptomatic bleeding, large size (>3cm) or atypical appearance
- Diagnosis: Cervical Polyp N84.1, CPT Endocervical Polypectomy 58999
- Procedure:
  - Consent, urine pregnancy (contraindicated during pregnancy)
  - Speculum to visualize polyp
  - Cleanse cervix, locate base with cotton swab
  - Secure ring forceps as closely to the base as possible and twist in clockwise direction (Tischler for large base)
  - Control bleeding-silver nitrate or Monsel's solution



ENDOCERVICAL POLYPECTOMY

- Complications
  - Excessive bleeding
- Post-procedure follow up
  - Nothing in vagina x3-5 days
  - Notify provider for pelvic pain not relieved with NSAID, malodorous vaginal discharge, continuous bright red vaginal bleeding or fever

ENDOMETRIAL BIOPSY

- Rarely performed before age 40 because 95% of cancer occur in women older than 40
- Indications (diagnostic not therapeutic)
  - Postmenopausal bleeding
  - AUB
  - Endometrial hyperplasia
  - Infertility, anonvulation
  - Unopposed estrogen therapy (intact uterus)
- Diagnosis-Postmenopausal Bleeding-N95.0, CPT Endometrial Biopsy without cervical dilation 58100
- Contraindications
  - Pregnancy, Infection, Uterine abnormalities

ENDOMETRIAL BIOPSY

- Reproductive age women: day 22-23 after LMP (avoid during menses)
- NSAIDs (Ibuprofen 600-800mg) 30-60min prior to procedure
- Procedure
  - Consent, urine pregnancy
  - Bimanual exam (position and size of uterus)
  - Speculum, clean cervix with antiseptic
  - Not necessary to sound uterus
  - NO LUBRICANT
  - No need for sterile gloves but keep instruments sterile
  - If infection suspected, do wet mount and reschedule biopsy
  - Use rectal swab to clean cervix and vagina, swab with betadine
  - Use tenaculum for retroflexion or anteflexion (cough)

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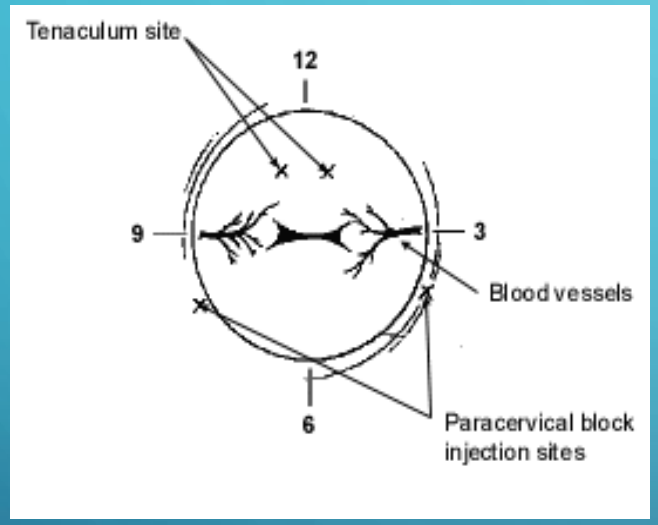
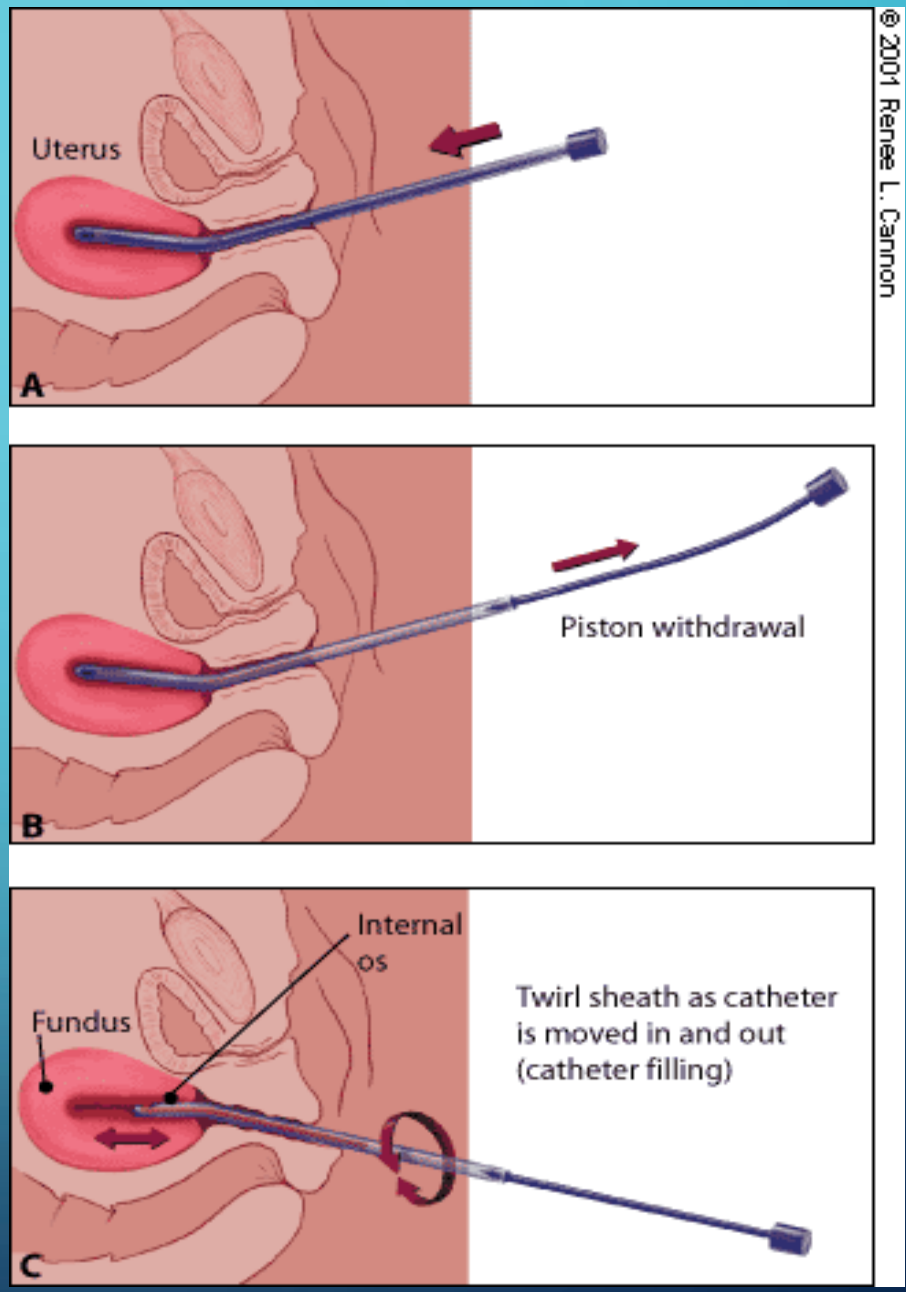
https://www.youtube.com/watch?v=EGMDDcMYZJw





ENDOMETRIAL BIOPSY

- Complications
  - Uterine perforation, excessive bleeding, missed pathology, vasovagal response
- Post-procedure treatment
  - Observe for vasovagal response/fainting immediately after procedure (remain recumbent position for at least 10 minutes)
  - Most common symptoms post procedure-Cramping/bleeding, pelvic pain
  - Uterine cramping lasting longer than 48hrs or not resolved with NSAIDs, a malodorous vaginal discharge, heavy vaginal bleeding or fever needs reassessment
  - Pelvic rest not necessary
  - Results average 7-10 days

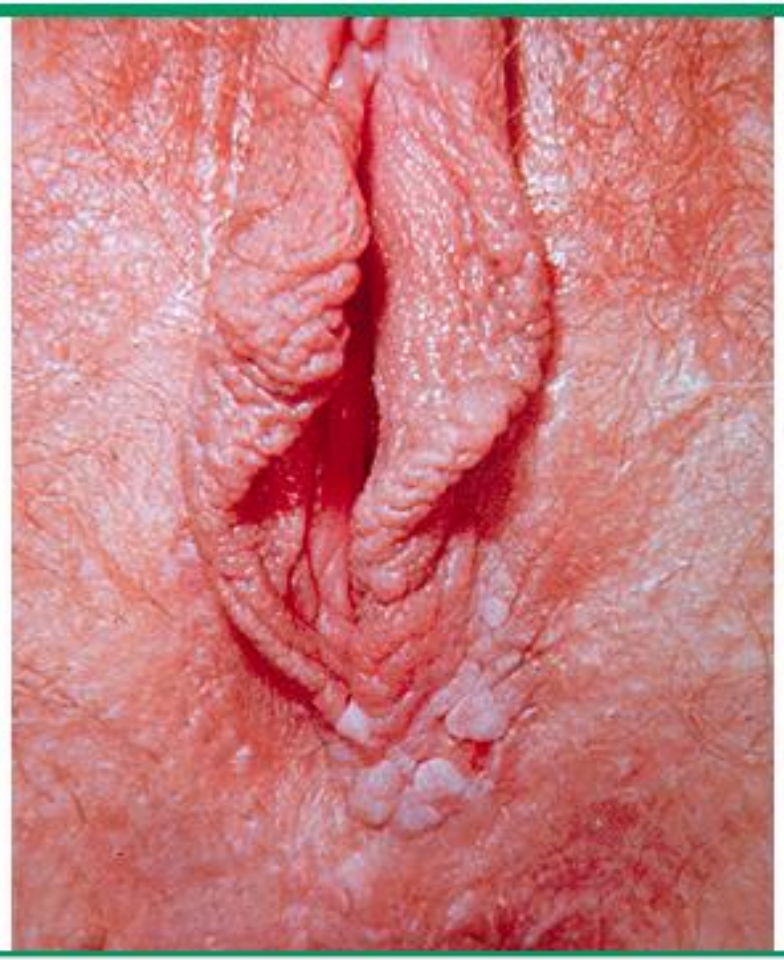
VULVAR/PERINEAL BIOPSY

- Differentiate benign from malignant conditions or to establish the diagnosis and proper treatment of acute or chronic vulvar conditions
- Diagnosis-Vulvar pruritus L29.2, CPT Vulvar Biopsy-56605
- Indications:
  - Persistent pain or itching, lesions that do not resolve with traditional treatment or are chronic
  - Lesions with thickened skin or color changes
  - Raised, red or pigmented lesions
  - Genital warts especially if not responding to conventional treatment
  - Chronic dermatoses (lichen)
  - Lesions suspicious for neoplasia
  - Lesions with equivocal changes that cannot be reliably diagnosed by visual inspection
- Contraindications-suspected melanoma (needs referral to dermatology), current infection

Morphologic definitions for mucocutaneous vulvar lesions

Morphology	Definition
Macule	Small (<1 cm) area of color change; no elevation and nonpalpable.
Patch	Large (>1 cm) area of color change; no elevation and nonpalpable.
Papule	Small (<1 cm) palpable lesion.
Nodule	Large (>1 cm) palpable lesion; usually dome shaped; margins may be distinct (sharp) or slope shouldered.
Plaque	Large (>1 cm) flat-topped and palpable lesion.
Vesicle	Small (<1 cm) fluid-filled blister; clear fluid.
Bulla	Large (>1 cm) fluid-filled blister; clear fluid.
Pustule	Small or large pus-filled blister; white or yellow fluid.
Cyst	Small or large nodule with epithelial-lined central cavity containing solid, semisolid, or fluid-filled material.
Erosion	Shallow defect limited to epidermis; the base of the defect may be red or covered by yellow crust. Erosions heal without scarring.
Ulcer	Deep defect into or through the dermis; the base may be red or covered by yellow, blue, or black crust. Ulcers heal with scarring.
Fissure	Thin (<2 mm wide), linear erosion into or through the epidermis.
Scale	Grey or silver keratin proteins on the tissue surface that become white when moist; usually feels rough on palpation.
Crust	Yellow, granular material overlying erosions; develops due to solidification of plasma proteins when the water component of plasma evaporates; crusts overlying ulcers may be blue or black due to heme pigment.
Excoriation	Linear or angular erosions due to scratching.
Lichenification	Red or skin-colored plaques with exaggerated skin markings due to chronic rubbing; excoriations are usually also present. The surface may be white when moist.
Eczema	Erythematous, poorly marginated patches and plaques that demonstrate lichenification and/or evidence of epithelial disruption such as erosions or crust.

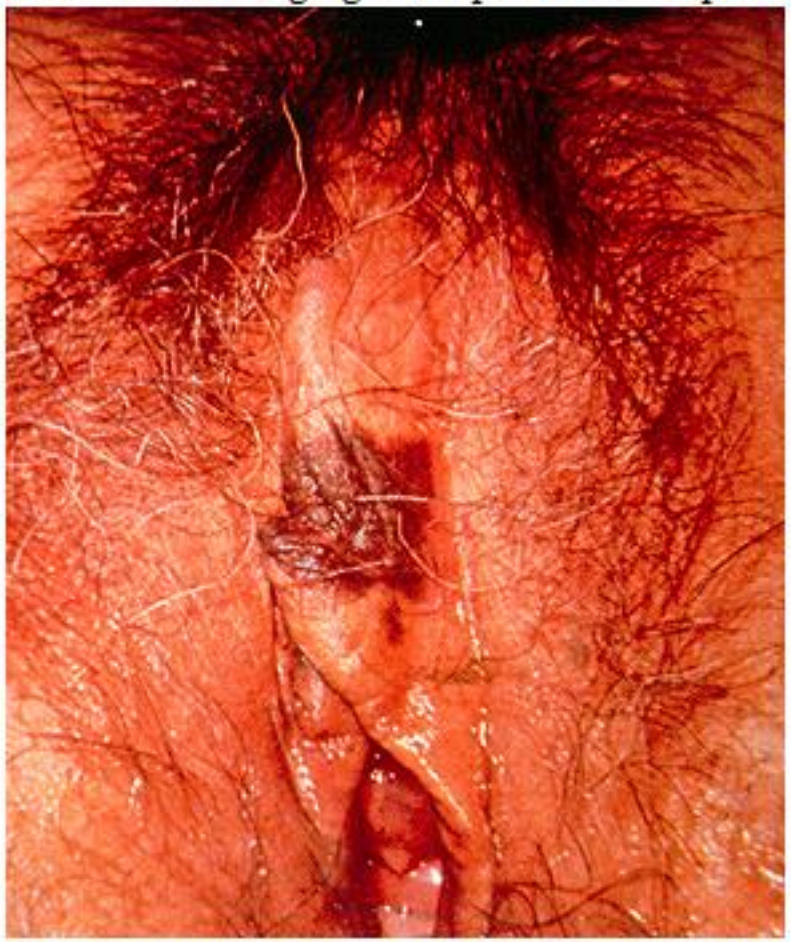
White plaques of vulvar high-grade squamous intraepithelial lesions (HSIL)



Raised whitish plaques as a manifestation of high-grade squamous intraepithelial lesions of the vulva (HSIL).

Courtesy of Christine Holschneider, MD.

Brown macular high-grade squamous intraepithelial lesion (HSIL) of vulva



High-grade squamous intraepithelial lesion (HSIL) manifesting as a brown macular lesion of the vulva.
Courtesy of Christine Holschneider, MD.

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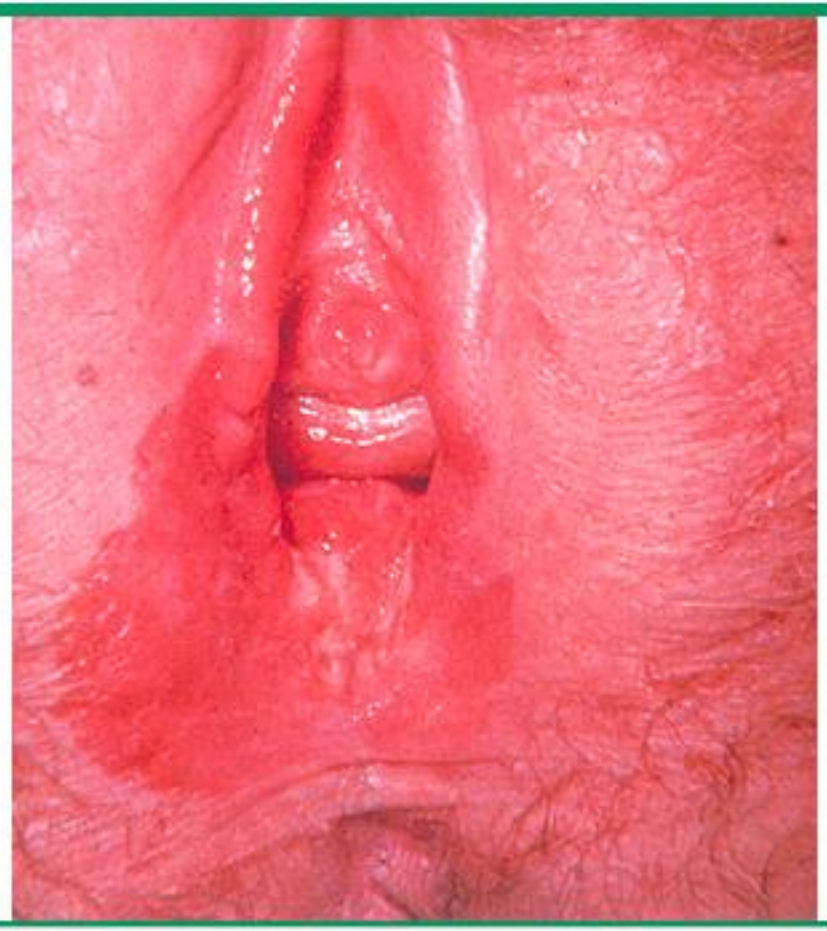
Red macular high-grade squamous intraepithelial lesion (HSIL) of vulva



Red macular lesion as a manifestation of a high-grade squamous intraepithelial lesion (HSIL) of the vulva.

Courtesy of Christine Holschneider, MD.

VULVAR BIOPSY

- Procedure
  - Consent, identify area with greatest observed changes in texture and color
  - Prepare area (cleanse and clip)
  - Inject tissue with 1-2% lidocaine
  - Shave biopsy-if lesion is confined to epidermis (not for suspected melanoma)
  - Excisional biopsy-#15 blade and use forceps to obtain a segment of tissue
  - Punch biopsy-(3-6mm Keyes) hold skin tight with non-dominant hand, direct punch through skin and turn in clockwise fashion until the tissue releases, lift sample with pick ups and use scissors to clip tissue
  - Control bleeding with Monsel's or silver nitrate
  - Place sample in formalin
  - Use petroleum jelly or antibiotic ointment in place of dressing

DIFFERENTIAL DIAGNOSIS

Erosions and Ulcers	Erythematous Papules and Plaques	Depigmentation
Aphtosis	Candidiasis	Severe atrophy
Atrophic vaginitis	Condyloma acuminate	Congenital hypopigmentation
Basal Cell Carcinoma	Crohn's disease	Halo nevus
Bechet's Disease	Eczema	Vitiligo
Chancroid	Erythema multiforme	
Chemotherapy induced reaction	Folliculitis/epidermoid cyst	
Contact dermatitis	Hemangiomas	
Herpes simplex/zoster	Intertrigo	
Impetigo	Lichen planus/sclerosis/simplex	
Melanoma	Molluscum	
Stevens-Johnson Syndrome	Nevi	
Syphilis	Paget's disease	
Tuberculosis	Phemphigus	
	Pityriasis versicolor	
	Psoriasis	
	Scabies	
	Seborrheic dermatitis	
	Squamous cell carcinoma	
	Syphilis	
	Vulvar intraepithelial neoplasia	
	Vulvodynia/vestibulitis	

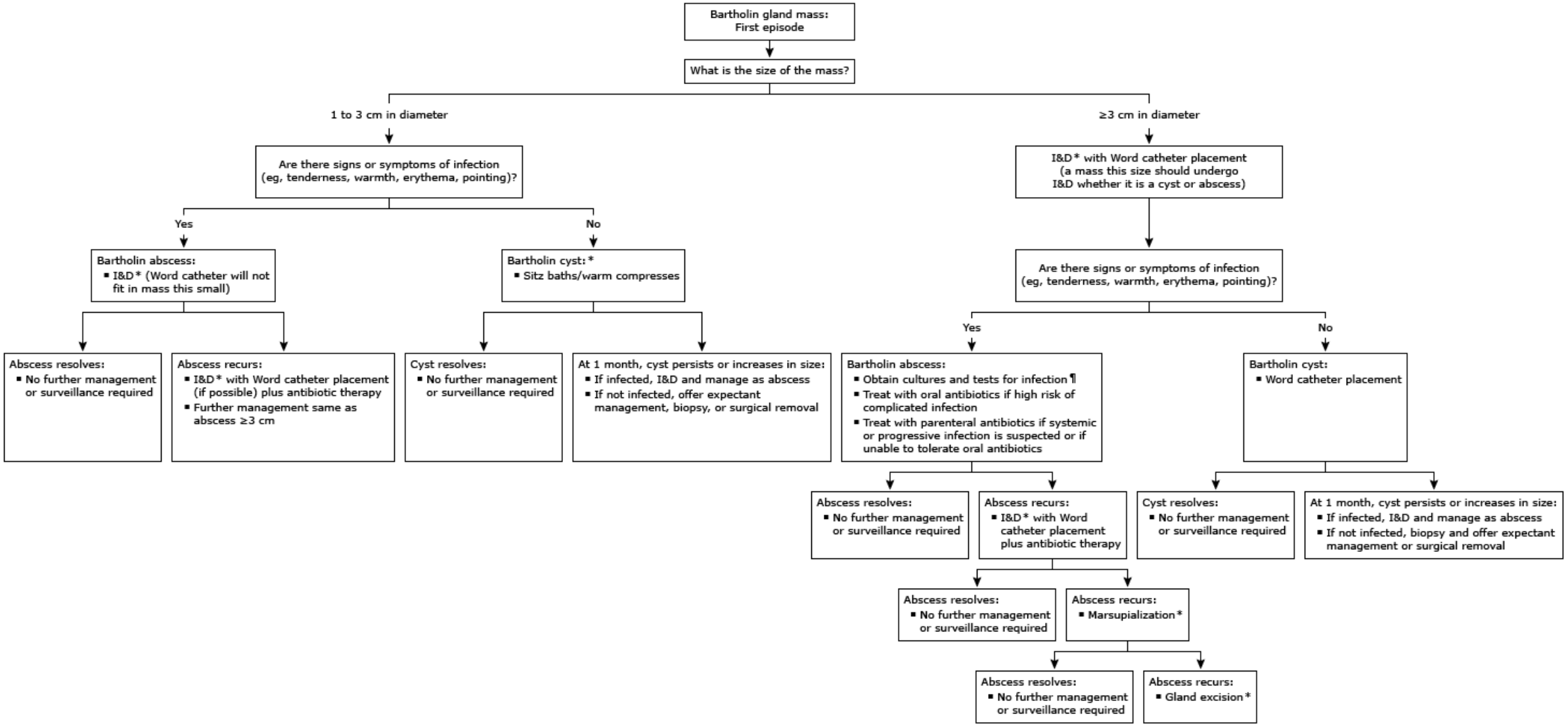
VULVAR BIOPSY

- Complications
  - Infection, bleeding, hematoma, ecchymosis, hyperpigmentation, pain, scarring, recurrence
- Post-procedure care
  - Post-procedure-bleeding at site is normal and pain is minimal
  - Wash area twice daily with soap and water
  - Apply antibiotic ointment after each cleaning
  - Sitz baths and ice packs as needed
  - Acetaminophen and ibuprofen for pain
  - Notify provider for unrelieved pain, redness, swelling, malodorous or bloody drainage from biopsy site, fever
  - Avoid intercourse for 3-5d or until pain/swelling resolves

BARTHOLIN'S CYST/ABSCESS I&D

- Glands at 4 and 8 O'clock
- Cyst vs Abscess
- Unilateral, 1-3cm avg
- Commonly occur in sexually active young women, increase with age until menopause
- Routine culture not recommended-only if signs of infection present
- Previously considered to be associated with STIs but usually NOT sexually transmitted
- Diagnosis-Bartholin's abscess N75.0, CPT I&D with Word Catheter placement 56420 (incision only 56740)
- Home care before I&D-Sit in warm bath several times daily (warm compresses)

Bartholin abscess management algorithm



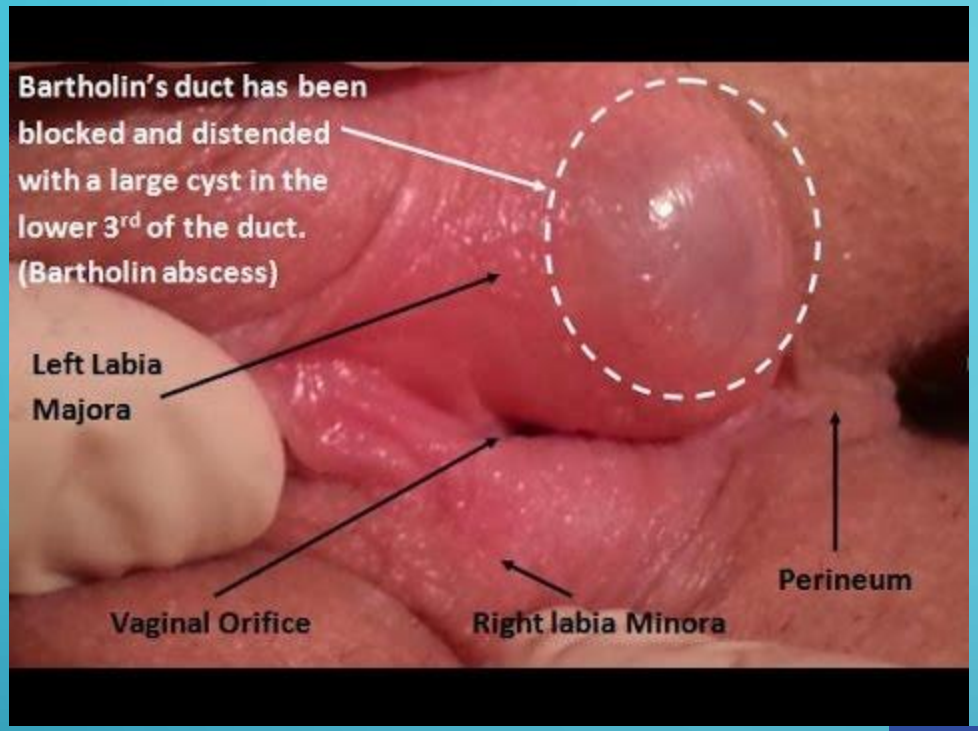
I&D: incision and drainage.

* If there is mass that has a solid component, patient is postmenopausal, or mass is unresponsive or worsening despite treatment, perform biopsy. Biopsy should be performed at the time of I&D, marsupializaton, or gland excision (or perform biopsy alone if other procedures are not planned).

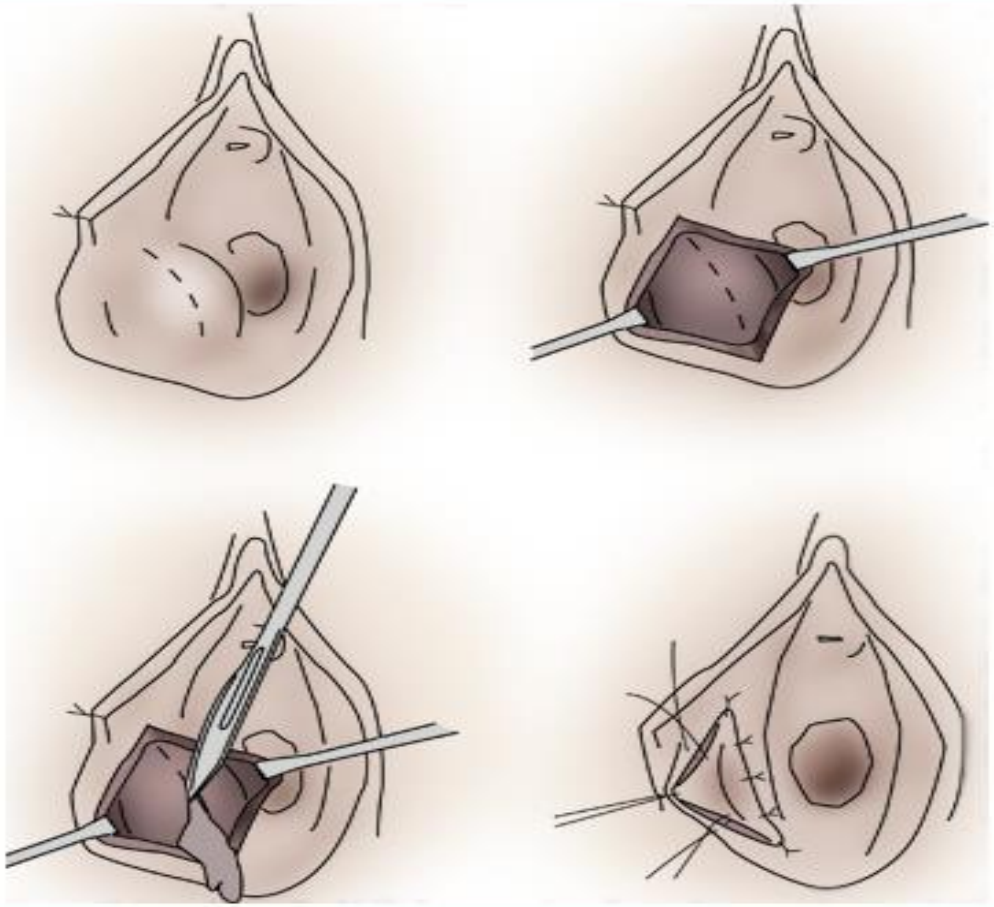
¶ Antibiotic therapy should provide adequate coverage for staphylococcal (including methicillin-resistant *Staphylococcus aureus*) and streptococcal species and enteric gram-negative aerobes, specifically *Escherichia coli*. If positive for gonorrhea or chlamydia, include appropriate pathogen-directed antibiotics.

I&D

- Procedure
  - Consent, Clean area
  - Contraindicated with latex allergy
  - Create a wheal with lidocaine (1-2%)
  - Incise vaginal wall with a 5mm incision (#11 blade), should be deep enough to allow for flow of exudate (1.5cm)
  - Grasp walls of cyst with hemostat to hold open, use 2nd hemostat and move around to break up loculations
  - Allow to drain and irrigate
  - Word catheter (test balloon with saline)-insert into gland and inflate bulb with 2-3ml of saline Catheter placement (can use 8ft Peds catheter or packing)
  - Inflate so it will not fall out, tuck stem into vagina
  - Marsupialization Surgical repair (refer for procedure)-recurrent cyst/abscess


Bartholin's duct has been blocked and distended with a large cyst in the lower 3rd of the duct. (Bartholin abscess)
Left Labia Majora
Perineum
Vaginal Orifice
Right labia Minora

Marsupialization of Bartholin gland cyst or abscess



A vertical oval incision is made over the center of the cyst/abscess where it protrudes at the vestibule and outside the hymenal ring. The cyst cavity can be irrigated with saline solution, and loculations can be broken up with a hemostat, as needed. The cyst wall is then everted and sutured onto the edge of the vestibular mucosa with interrupted 2-0 absorbable suture.

I&D

- Follow up/Patient education
  - Educate on wound care
  - NSAIDs and sitz baths for pain mgmt.
  - Small amount of drainage and bleeding normal, advise to wear pad
  - Pelvic rest for 4-6wks (no intercourse)
  - Return for expulsion of catheter, pain not resolved by NSAIDs, increased swelling, malodorous vaginal discharge, heavy bleeding and fever
  - For Abscess-Pt should return for recheck twice during week of procedure and weekly until removal of catheter; Return in 4 weeks for catheter removal, packing should be changed at each visit (if utilized)
  - Antibiotic treatment-for abscess only and only for women with risk factors (cellulitis, pregnant, at risk or positive MRSA, signs of systemic infection), indications of a more severe infection or recurrent abscesses
    - Trimethoprim Sulfamethoxazole 160/800mg BID x7d (first line); Amoxicillin Clavulanate 875/125mg BID plus Clindamycin 300mg QID x7d (alternate)
  - Refer to surgeon if cyst recurs or catheter does not resolve the abscess-marsupialization or gland removal

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