Vaginitis, Atrophic (Urogenital)

DEFINITION	Urogenital atrophy now sometimes referred to as genito-urinary symptoms of menopause (GSM) is the most inevitable consequence of menopause. Women with low estrogen levels experience thinning and decrease in the rugation and elasticity of the vaginal and vulvar epithelium due to estrogen deficiency. Hypoestrogenic causes of vaginal atrophy may include oral contraceptives, Depo-Provera, or other progestin only method use; gonadotropin-releasing hormones (GnRH) agonists used for endometriosis; breastfeeding women; perimenopausal and postmenopausal (natural or surgical) women.
SUBJECTIVE	May include: 1. No symptoms 2. Vulvar pruritus, dyspareunia, or vulvar / vaginal tenderness, or burning 3. Change in vaginal spotting/bleeding 4. Urinary burning, urgency, or frequency 5. Abnormal vaginal discharges or change in discharge, and decrease in libido 6. Use of injectable contraceptives 7. Persistent genital symptoms despite systemic hormone therapy. 8. Post-coital spotting.
OBJECTIVE	May include: 1. External genitalia: Sparse, brittle pubic hair; lax, wrinkled labia majora; thinning and shrinking of labia minora; fusing of labia minora with labia majora; atrophic clitoris; eversion of mucosa of urethral meatus. 2. Vagina: Narrowed, stenotic or tender introitus; smooth, flat, thin rugae; dry, initially pale walls, later with diffuse erythema. Discharge may be odorous, thin, watery, thick, purulent, serosanguineous or bloody, gray, yellow, or green; ecchymosis, petechial hemorrhages may be present; advanced atrophy may result in adhesions or occlusion (kraurosis). 3. Cervix: Small, pale, or erythematous; petechial hemorrhages may be present. Cervix may be flush with vaginal wall. 4. Uterus: Small or nonpalpable. WNL unless coexistent pathology. 5. Adnexa, rectovaginal examination: WNL unless coexistent pathology. 6. Spotty bleeding from mucosa after speculum or digital exam may require use of virginal speculum. Must exclude: 1. Vulvar lesions suspicious for lichen sclerosis, lichen planus, or serious dermatologic condition.
LABORATORY	May include: 1. Pap smear report may note lack of estrogen effect. Cytologic exam (maturation index) reveals increased parabasal and basal cells and decreased squamous epithelial cells. (This test may be useful in women with vaginitis complaints who are using OCPs or are breastfeeding when the diagnosis is uncertain). 2. Wet mount microscopy (10x and 40x power) may be performed. Saline: a. Increased WBCs b. Intermediate/parabasal/basal cells, numerous bacteria identified c. Absence of lactobacilli KOH: a. WNL unless concomitant infection

	b. Assess for amine color, hyphae, spores c. Vaginal pH 5.5-7.0 d. Urinalysis with culture and sensitivities as indicated 3. Vaginitis/cervicitis screening, as appropriate.
ASSESSMENT	Atrophic Vaginitis (Urogenital)
PLAN	May include: 1. Vaginal estrogen creams include one of the following if no contraindications to estrogen therapy: a. Conjugated estrogens (Premarin vaginal cream 0.625 mg/gram) 0.5 - 2 gm vaginally for 21 days, then 7 days off OR twice a week. b. 17 beta estradiol (Estrace vaginal cream (0.01%) 2-4 gm vaginal daily X 1-2 weeks. Maintenance: 1 gm vaginally 2-3 X/week. Reevaluate in one month. 2. Vaginal rings if no contraindications to estrogen therapy: a. 17 beta estradiol (Estring 2/90day ring) Place deeply in upper one-third of vaginal vault for 90 days and then remove. Reevaluate in one month. b. Estradiol acetate (Femring 0.05 or 0.1 mg/day ring) Insert vaginally for 3 months and then remove. c. Vaginal tablets (Vagifem or generic equivalent 10 mcg tablets) Start 1 tablet PV QD for 2 weeks. Reduce to one tablet twice a week. Re-evaluate in one month. 3. Prasterone (Intrarosa) 6.5 mg vaginally insert nightly. 4. Prolonged use of unopposed estrogen therapy has been reported to increase the risk of endometrial hyperplasia in some patients. The lowest dose that controls symptoms should be chosen, and medication should be discontinued as promptly as possible. Assess the need to add progestogen to patient's regimen for those who had not undergone hysterectomy. The need to discontinue or taper therapy should be assessed by the clinician with the client at 3 – 6 month intervals. 5. Use of vaginal supplemental lubricants/jellies (water soluble) prior to intercourse. 6. Apply vaginal moisturizers (i.e.: Replens) three times weekly as needed.
CLIENT EDUCATION	1. Provide client with education handout(s) and may review manufacturer's inserts. 2. Provide education regarding danger signs of estrogen use that require immediate follow up: a. Abnormal vaginal bleeding, (if any abnormal vaginal bleeding, stop estrogen immediately and contact the clinician) b. Symptoms of thrombophlebitis or thromboembolism c. Severe headaches, dizziness, or changes in vision d. Breast lumps e. Jaundice 3. Encourage sexual intercourse as tolerated and appropriate. Advise estrogen creams/suppositories may reduce integrity of latex condoms, diaphragms, and cervical caps. 4. Dilation of vagina may be helpful for atrophy 5. Review safer sex education, as appropriate

	6. Avoid vaginal irritants (i.e.: soaps, lotions, and scented panty liners) 7. Recommend client RTC in one month for evaluation or PRN for problems
CONSULT/ REFER TO PHYSICIAN	1. As necessary to the individual case. 2. Any abnormal vaginal bleeding or other danger signs of estrogen therapy. 3. Any client with persistent or recurrent symptoms which are refractory to therapy who may need therapy with a non-estrogenic component. 4. Any client with vulvar leukoplakia or suspicious vulvar, vaginal, or cervical lesions. 5. Any client with a history of breast cancer who has persistent GSM despite non-pharmacologic treatments.

References:

1. ACOG Releases Clinical Guidelines on Management of Menopausal Symptoms - Practice Guidelines - American Family Physician (aafp.org) 2014.
2. Atrophic Vaginitis (fpnotebook.com) 2021
3. The Use of Vaginal Estrogen in Women With a History of Estrogen-Dependent Breast Cancer | ACOG 2016, Reaffirmed 2020.
4. Managing postmenopausal dyspareunia: An update - Women's Healthcare (npwomenshealthcare.com) 6/26/18