### Vaginitis, Atrophic (Urogenital)

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<th>DEFINITION</th>
<th>Urogenital atrophy 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 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.</th>
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| 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.  
| 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, grey, 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. Abnormal 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.  
   a. Saline:  
   1) Increased WBCs  
   2) Intermediate/parabasal/basal cells, numerous bacteria identified  
   3) Absence of lactobacilli  
   b. KOH:  
   1) WNL unless concomitant infection  
   2) Assess for amine color, hyphae, spores  
3. Vaginal pH 5.5-7.0  
4. Urinalysis with culture and sensitivities as indicated |
### Vaginitis/cervicitis screening, as appropriate.

#### ASSESSMENT

**Atrophic Vaginitis (Urogenital)**

#### PLAN

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<td>1. Vaginal estrogen creams include one of the following if no contraindications to estrogen therapy:</td>
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<td>a. Conjugated estrogens (Premarin vaginal cream 0.625 mg/gram) 0.5 - 2 gm PV for 21 days, then 7 days off OR twice a week.</td>
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<td>b. 17 beta estradiol (Estrace vaginal cream (0.01%) 2-4 gm vaginal Qd X 1-2 weeks. Maintenance: 1 gm vaginally 2-3 X/week. Reevaluate in one month.</td>
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<td>2. Vaginal rings, if no contraindications to estrogen therapy:</td>
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<td>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.</td>
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<td>b. Estradiol acetate (Femring 0.05 or 0.1 mg/day ring) Insert vaginally for 3 months and then remove.</td>
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<td>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.</td>
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<td>3. 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. A progestogen is generally not indicated, however may consider adding a progestin challenge to high risk females. The need to discontinue or taper therapy should be assessed by the clinician with the client at 3 – 6 month intervals.</td>
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<td>4. Use of vaginal supplemental lubricants/jellies (water soluble) and/or vaginal moisturizers (i.e.: Replens).</td>
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#### 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: |
   - Abnormal vaginal bleeding, (if any abnormal vaginal bleeding, stop estrogen immediately and contact the clinician) |
   - Symptoms of thrombophlebitis or thromboembolism |
   - Severe headaches, dizziness, or changes in vision |
   - Breast lumps |
   - 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 of 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. |
4. Any client with vulvar leukoplakia or suspicious vulvar, vaginal, or cervical lesions. |

### References:
