Vulvodynia

Background

1. Definition
    - Vulvar discomfort-often burning
    - Not caused by infection, inflammation, neoplasia or clinically identifiable, neurologic disorder (definition from the International Society for the Study of Vulvovaginal Disease)
2. General info
    - Diagnosis of exclusion
    - Discomfort may range from mild to severe
    - Tenderness is often present with gentle pressure to the vulva, introitus, or hymenal areas
    - Triggers may include intercourse, tight clothing, tampon insertion, prolonged sitting

Pathophysiology

1. Pathology of disease
    - No single cause of vulvodynia
    - Possible links to urinary oxalates, genetics, hormones, inflammation, infection, or neuropathic changes
2. Incidence, prevalence
    - 3.8% of American women have chronic vulvar pain of 6 months or more
    - 9.9% of American Women experience vulvar pain in their lifetime
3. Risk factors for any miscarriage
    - Caucasian
    - Age 20-50 years
    - Stable long-term sexual relationship
4. Morbidity / mortality for any miscarriage
    - Burning, stinging, irritation and rawness of the vulva
    - Adverse effect on sexual life, relationships, psychological effects

Diagnostics

1. History
    - Exacerbating and alleviating factors
    - Duration of symptoms: 3-6 months typical
    - Allergies
    - Medical and surgical history
    - Sexual history
    - Response to previous treatments
2. Physical examination
    - Vulva may be erythematous
    - Presence of rash or altered skin/mucosa is not consistent with vulvodynia (in these cases further evaluation is necessary)
    - Cotton swab testing: press 3-5mm on vestibule at 2, 4, 6, 8, 10 o'clock positions (will identify and help classify areas of localized pain)

3. Diagnostic testing
    - Laboratory evaluation
        - Vaginal secretions should be evaluated with wet mount and KOH
        - If indicated, the vagina should be evaluated with vaginal pH, fungal culture, and Gram Stain
    - Other studies
        - Testing for HPV is unnecessary
4. Diagnostic criteria
    - Discomfort with intercourse or at the vulvar region for at least 3 months
    - No dermatologic changes other than erythema or edema
    - Pain localized to the vulva
    - No Candida infection
    - Positive cotton swab test

Differential Diagnosis

1. Key DDx
    - Candida Infection
    - Lichen Planus
    - Vaginismus
2. Extensive DDx
    - Allergic Vulvitis
    - Lichen Sclerosis
    - Vulvar Atrophy
    - Vulvar Intraepithelial Neoplasia

Therapeutics

1. No cure for vulvodynia, very few randomized trials of vulvodynia treatments
2. Vulvar Care Measures:
    - Cotton underwear in daytime, none at night
    - Avoid vulvar irritants (perfumes, dyed toilet articles, douches)
    - Use of mild soaps, none applied to vulva
    - Wash vulva gently with water and pat dry
    - Use emollient without preservatives (petrolatum) after washing
    - Use adequate lubrication for intercourse
    - Ice packs
    - Rinse and pat dry vulva after urination
3. Topical Therapies
    - Lidocaine Ointment 5%: apply to vulvar region PRN and 30 min before sexual activity, may be used for long-term overnight use
    - Emla: apply 2.5g cream or 1 disc PRN or 1 hour before intercourse ELA-Max: apply to vulvar region PRN, amount depends on individual patient response
    - Plain petrolatum-apply to vulva PRN
    - Capsaicin: apply cream or ointment to vulvar area TID-QID
    - Compounded ointments: topical Amitriptyline 2% and baclofen 2% (Ointments preferred to creams)

4. Oral Medications
    - Antidepressants
        - Amitriptyline 25mg qHS for 10 days then titrate to max 150mg qHS
        - Venlafaxine: 37.5mg qD titrate to max 225mg qD
        - Paroxetine: 10mg qD titrate to max 60mg qD
    - Anticonvulsants
        - Gabapentin: 300mg qHS titrate to max 600mg TID
5. Biofeedback and Physical Therapy
    - Particularly helpful if coexistent vaginismus
6. Intralesional Injections
    - Trigger point steroid and bupivacaine injections have been successful for some patients with localized vulvodynia
7. Surgical:
    - Vestibulectomy-used as last treatment option. If present, vaginismus should be treated first
    - Surgical Techniques
        - Local excision
        - Total vestibulectomy
        - Perineoplasty
        - Surgery for Pudendal Nerve Entrapment
8. Complementary and Alternative Therapies for Chronic Vulvar Pain
    - Dietary changes- Low oxalate diet, urinary oxalates are a potential source of local irritation
    - Smoking cessation
    - Decreased alcohol
    - Massage
    - Ice
    - Acupuncture
    - Salt water baths
    - Exercise
9. Multidimensional Aspects of therapy-patients may need sexual counseling, couples counseling, psychotherapy

Follow-Up

1. Return to office
    - For follow-up of current treatment strategy
    - Will vary amongst patients depending on treatment and severity
2. Refer to specialist
    - Referral to a subspecialist should be considered for any patient who is unresponsive to treatment
3. Admit to hospital
    - Unnecessary

Prognosis

1. Progression is unclear
2. Generally considered a chronic condition
3. Some data suggests approximately one half of women with vulvodynia eventually report resolution of symptoms with medical treatment

Prevention

1. Unknown
2. The cause of vulvodynia has not yet been determined

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