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Vulvar Diseases, Part 1

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Disease	Symptoms	Clinical Features	Associations	Management	Other
Bacterial vaginosis	Vulvar pruritus and/or irritation, foul fishy odor	Vaginal discharge	Increased risk for preterm birth in pregnant women, more common in women with PID	Oral metronidazole 500 mg twice daily for 7 d, metronidazole gel 0.75%, clindamycin cream 2%, probiotics	Complex change in vaginal flora, imbalance of vaginal ecosystem (eg, absence of lactobacilli), clue cells in Papanicolaou test
Candidiasis	Severe pruritus	Vulvar erythema, vaginal discharge (creamy white curds), satellite lesions	Most common in uncontrolled diabetic patients, immunosuppressed individuals, and copper IUD users; inguinal and abdominal pannus involvement	Topical imidazole with mild topical steroids, vaginal suppositories with imidazole or nystatin, fluconazole	Vaginal carriers: 15%–30% of women, 40% in pregnancy
Cicatricial pemphigoid	Pain, pruritus, dysuria	Erosive patches and ulcers on the labia majora and labia minora, labial fusion, introital narrowing, urethral stricture, oral and/or ocular lesions present in majority of patients	Other autoimmune disorders (eg, diabetes mellitus, lupus erythematosus, Graves disease)	Topical tacrolimus, thalidomide, dapsone	
Contact dermatitis	Pruritus	Erythema, excoriations	History of reaction to topical medications or treatment-resistant disease	Fragrance-free cleansers, potent topical steroids	Irritant contact dermatitis: diaper dermatitis, urinary incontinence, chronic diarrhea, inflammatory bowel disease; allergic contact dermatitis: neomycin, latex, spermicides, local anesthetics, ethylenediamine, hemorrhoid creams, benzalkonium chloride, methylisothiazolinone

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Disease	Symptoms	Clinical Features	Associations	Management	Other
Desquamative inflammatory vaginitis	Burning/ pruritus, dyspareunia	Spotted rash on vagina/ cervix, vaginal discharge	Autoimmune disorders (eg, diabetes mellitus, Graves disease, lupus erythematosus), low estrogen levels, vitamin D deficiency	Clindamycin vaginal cream 2% daily for 2 wk, hydrocortisone suppository, vitamin D supplement	Depression, fibromyalgia, irritable bowel syndrome
Dysesthetic vulvodynia	Persistent burning pain	Vulva looks normal	Worsens on sitting, walking up stairs, and wearing underwear	Gabapentin, lidocaine hydrochloride jelly 2%, acupuncture, tricyclic antidepressants, botulinum toxin injections, pain management	Depression, fibromyalgia, irritable bowel syndrome
Lichen planus	Variable depending on presentation ranging from asymptomatic to painful/ burning or pruritic	Violaceous or white patches, erythema, erosions	Autoimmune diseases of the thyroid, involvement of gingiva (vulvovaginal-gingival syndrome)	Superpotent topical steroids, topical tacrolimus, topical cyclosporine, hydroxychloroquine, tricyclic antidepressants, surgery for strictures	Common in women in sixth decade of life, T-cell mediated, chronic course can lead to dyspareunia and scarring (similar to lichen sclerosus), anogenital lesions seen in 40% of patients with generalized lichen planus, increased risk for SCC (1%–2%)
Lichen sclerosus	Pruritus	Pallor, atrophy, fissures, purpura; involvement of the vulvar and perianal regions presents in a figure eight configuration	Other autoimmune diseases (eg, diabetes mellitus, Graves disease, lupus erythematosus), association with HLA-DQ7 antigen in women and children, presence of autoantibodies to extracellular matrix protein 1	Superpotent topical steroids 1–2 times daily for 3 mo, tapering to 1–3 times weekly or lower potency steroids; surgery for strictures to relieve dyspareunia and malignancy; sex therapy and counseling	Can occur at any age, scarring may lead to loss of the normal architecture of the vulva, increased lifetime risk for developing SCC (approximately 5%)
Psoriasis	Pruritus, painful fissuring in the perianal and inguinal regions and gluteal cleft	Smooth, well-demarcated, erythematous plaques	Evidence of psoriasis at other sites on total-body skin examination	Potent topical steroids, systemic therapy (methotrexate, topical calcineurin inhibitors), cyclosporine	Typical nail findings (eg, pitting, oil spots, onycholysis)

Abbreviations: PID, pelvic inflammatory disease; IUD, intrauterine device; SCC, squamous cell carcinoma.

Practice Questions

1. **The risk for subsequently developing squamous cell carcinoma in situ of the vulva is most strongly associated with:**
   a. candidiasis
   b. cicatricial pemphigoid
   c. lichen planus
   d. lichen sclerosus
   e. recurrent *Trichomonas* infections

2. **Vitamin D supplements and topical antibiotics commonly are used to treat:**
   a. desquamative inflammatory vaginitis
   b. dysesthetic vulvodynia
   c. human papillomavirus–related severe squamous dysplasia of the vulva and vagina
   d. lichen sclerosus
   e. psoriasis

3. **A 28-year-old diabetic woman presented to your clinic with well-developed vulvar pruritus. She was known to have an implanted copper intrauterine device. A Papanicolaou test would most likely reveal:**
   a. bacteria
   b. herpetic virocytes
   c. high-grade dysplastic squamous cells
   d. koilocytic squamous cells
   e. pseudohyphae

4. **A 54-year-old woman with Sjögren syndrome and atrophic gastritis presented to your clinic with vulvar pruritus. Atrophy of the skin and mucosa with fissures was clinically suggestive of:**
   a. candidiasis
   b. dysesthetic vulvodynia
   c. lichen sclerosus
   d. lichen simplex chronicus
   e. psoriasis

5. **A 48-year-old woman was referred to your clinic for evaluation of persistent burning vulvar pain of 3 months' duration. She said she felt tired most of the time. On physical examination the vulva looked normal. Commonly this condition is associated with:**
   a. diabetes mellitus
   b. fibromyalgia
   c. hypothyroidism
   d. iron deficiency anemia
   e. psoriasis

Fact sheets and practice questions will be posted monthly. Answers are posted separately on www.cutis.com.