RESIDENT ROUNDS: PART II

Genital Ulcers

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There are many items in the differential diagnosis of genital ulcers.

TABLE 1.

Sexually Transmitted Infections

Disease	Incubation	Clinical Lesion	Diagnosis	Organism
Chancroid	3 to 10 days	Multiple, painful, soft, purulent ulcers with undermined edges	Culture	Haemophilus ducreyi
Granuoma Inguinale (Donovaniasis)	2 to 12 weeks	Chronic, beefy, indurated, red, friable ulcer	Bacterial smear, histology	Klebsiella granulomatis
Genital Herpes	3 to 7 days	Painful. History of herpes infection; vesicles, erosions, ulcers.	Tzanck, DFA, culture, PCR	HSV 2 > HSV 1
Lymphogranuloma Venereum	3 to 12 days	Transient, painless, indurated ulcer	Culture, serologies, PCR	Chlamydia trachomatis L1 -3
Primary Syphilis	10 to 90 days (21 days avg)	Single, painless, indurated, nonpurulent ulcer	Serologies, Darkfield microscopy	Treponema pallidum

TABLE 2.

Other Genital Ulcers

Disease	Etiology & Differential Diagnosis	Clinical Lesion
Cutaneous Crohn's disease	1. Occurs in association with or precedes intestinal Crohn's disease. A number of genetic abnormalities lead to an exaggerated T-cell response. 2. HLA-DRB1*07 association (ileal disease only)	1. Genital involvement found in approximately two-thirds of children and one-half of adults. Labial or scrotal erythema and swelling are the usual presenting signs. 2. Perianal lesions consist of ulcers, fissures, sinus tracts or vegetating plaques (seen in approximately one-third of patients with intestinal Crohn's disease)
Recurrent aphthae	1. Idiopathic/ Nonsexually Acquired Genital Ulceration (NSAGU); 2. Related to an underlying systemic disorder (IBD, SLE, HIV, Behçet's disease, reactive arthritis*, cyclic neutropenia, PFAPA (periodic fever, aphthous stomatitis, pharyngitis and adenitis) syndrome, certain hereditary periodic fever syndromes (e.g. HIDS, NOMID) 3. Possibly related to an underlying nutritional disorder (controversial): vitamin B12, folate or iron deficiency	1. Painful, typically less than 5 mm in diameter, round to oval, creamy-white erosions/ulcers with an erythematous halo
Cutaneous Manifestations of Lupus Erythematosus	1. Genital erosions and ulcers are often seen in SLE and DLE; they must be differentiated from infectious etiologies (see table), aphthae, trauma, NMSC, other connective tissue diseases, drug eruptions, Bowen's disease, lichen planus, and lichen sclerosus	1. In DLE, erosions and ulcers are gray, red, and often hyperkeratotic. Up to 24% of patients with DLE have invovment of oral, nasal, ocular, or genital mucosa; 2. In SLE, mucosal ulcers often often shallow, angulated, with proment hemorrhage. Mucous membrane lesions are seen in 20–30% patients with SLE

TABLE 2. *Continued*

Other Genital Ulcers		
Disease	**Etiology & Differential Diagnosis**	**Clinical Lesion**
Behcet Syndrome (oculo-oral-genital syndrome)	Recurrent oral aphthae (at least 3 times in a 12 month period) in the presence of any 2 of the following: 1. recurrent geital ulceration, 2. retinal vasculitis or anterior or posterior uveitis, 3. cutaneous lesions (erythema nodosum, pseudofolliculitis or papulopustular lesions, or acneiform nodules in postadolescents who are not receiving corticosteroids), 4. a positive pathergy test; high prevalence in the far east and Mediterranean countries; neurologic manifestations may mimic multiple sclerosis with remissions and exacerbations; untreated ocular disease may lead to blindness; other manifestations may include thrombophlebitis, thrombosis, and polyarthritis; etiology is unkown	2-10 mm or larger sharply circumscribed ulcers with a dirty grayish base and a surrounding bright red halo located on the scrotum, penis, or urethra in men, or the vulva, vagina, or cervix in women, or on the genitocrural fold, anus, perineum, or rectum in both sexes; may be accompanied by macules, papules, or folliculitis, swelling of regional lymph nodes, and fever; histopathology reveals leukocytoclastic vasculitis
Basal cell carcinoma	Rare in non-hair-bearing sites including genitals, more common with nodular subtype. Often biopsied with suspicion for SCC	Shin, pearly papule or nodule and arborizing telangiectasias. Ulcer may have rolled border
Squamous cell carcinoma	Often preceded by intraepithelial neoplasia. May be associated with HPV 16, 18 , 31, and 33. Associated with smoking and immunosuppression. Lichen sclerosus and lichen planus predispose. DDx includes BCC or amelanotic melanoma	May present as warty white plaques, erosions/ulcers, or hyperpigmented patches. Ulcers have heaped up edges (in men, rare if circumcised)
Traumatic	By history	
Idiopathic HIV-associated	Usually affect oral mucosa as well. Rule out infectious etiologies	Present as major apthae
Fixed Drug Eruption	NSAID use, sulfa-based medications	May start as erosive vulvovaginitis but can progress to frank ulceration if the culprit medication is not discontinued
Mucosal erythema multiforme	May occur after HSV infection and also involves oral mucosa commonly	

Disclosures

None of the authors have declared any relevant conflicts.

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