Chancroid

Manitoba
Health
Public Health

Communicable Disease Control Unit

Case Definition

Laboratory-confirmed case: Detection of *Haemophilus ducreyi* in a specimen taken from any anatomical site (normally the genital tract).

Reporting Requirements

- All positive tests for *H. ducreyi* are reportable by laboratory.
- All cases of chancroid are reportable by attending health care professional.

Clinical Presentation/Natural History

Chancroid is an acute bacterial infection localized in the genital area and characterized clinically by single or multiple painful, necrotizing ulcers at the site of infection, frequently accompanied by painful swelling and suppuration of regional lymph nodes. Minimally symptomatic lesions may occur on the vaginal wall or cervix. Asymptomatic lesions may occur in women, but are probably uncommon. Chancroid ulcers, like other genital ulcers, are associated with increased risk of HIV infection.

Since many pathogens can cause genital ulcers, it is important to differentiate them. Genital ulcers should be examined by darkfield microscopy to detect syphilis, and cultured for *H. simplex*.

Etiology

Chancroid is caused by *Haemophilus ducreyi*, the Ducrey bacillus.

Epidemiology

Reservoir: Humans

Transmission: By direct sexual contact with discharge from open lesions and pus from buboes. Auto-inoculation to non-genital sites may occur in infected people. Sexual abuse must be considered when chancroid is found in children.

Occurrence:

General: Chancroid is more often diagnosed in men, and is often associated with men who frequent female sex-trade workers. It is most prevalent in tropical and subtropical regions of the world, where the incidence may be higher than that of syphilis and may approach that of gonorrhea in men. It is much less common in North America. Outbreaks and some endemic transmission do occur, principally among poor inner-city residents.

Manitoba: It has been several years since a confirmed case of chancroid has been reported.

Incubation Period: Most commonly from three to five days, but may be up to 14 days.

Susceptibility and Resistance: Susceptibility is general. Uncircumcised men are at higher risk of infection than circumcised men. There is no evidence of natural resistance.

Period of Communicability: Until the original ulcer(s) and/or discharging lymph nodes are healed, which usually takes several weeks without antibiotic treatment. Antibiotic therapy eradicates *H. ducreyi* and lesions generally heal in one to three weeks.

Diagnosis

Identification of the organism is made by isolating it from exudate from the edges of the ulcer, or from pus from buboes. Cadham Provincial Laboratory staff should be consulted in advance to optimize specimen preparation and culture results.

Key Investigations

- History of relevant exposure, including travel history.
- Appropriate counselling and contact investigation.
- Patients with genital ulcers should be tested for herpes, syphilis and HIV.

Control

Management of Cases:

- Cases should be interviewed for history of exposure, risk assessment, contacts, and promotion of safer sex practices. Test for HIV infection and other STDs if indicated.

  Treatment:

  - Although antibiotic sensitivity should be determined, one of the following regimens is recommended:

    ceftriaxone 250 mg IM in a single dose; **or** erythromycin 500 mg orally qid for 7 days.

  - Alternative regimens that are effective include azithromycin, 1 gram orally as a stat dose, and ciprofloxacin (adults only), 500 mg orally as a stat dose.
  - Follow-up schedules are individualized, but should be at no more than one week intervals until the lesion(s) are clearly resolving. Follow-up should continue until complete resolution has occurred. Patients should understand the importance of abstaining from sex while clinical disease is present.

Management of Contacts:

- Sex partners should be evaluated for other STDs (particularly herpes and syphilis) and treated with a regimen effective for chancroid.
- If genital ulceration is present, the ulcer should be swabbed and sent for culture. Treatment should be provided while awaiting culture results.
- Sex partners without visible signs may be carriers and should receive presumptive treatment.

Management of Outbreaks:

- Empirical therapy for persons at high risk, with or without lesions (including sex-trade workers, clinic patients reporting sex-trade worker contacts, and clinic patients with genital ulcers and negative darkfields), has been effective in controlling outbreaks.

Preventive Measures:

- As with all STDs, provision of sex education, including delay of initiation of sexual activity, establishment of a mutually monogamous relationship, reduction in numbers of sex partners, consistent condom use, etc.
- Protect the community by preventing and treating STDs in cases and contacts, by discouraging multiple sex partners and anonymous or casual sexual activity, and by teaching methods of personal prophylaxis, especially the correct and consistent use of condoms.
- Include information about risk for STDs during pre-travel health counselling.
- Diagnose and treat STDs early; educate the public about symptoms of STDs and modes of spread; and make STD services culturally appropriate, and readily accessible and acceptable, regardless of economic status.