

# Haemophilus ducreyi

Haemophilus ducreyi is a gram-negative pleomorphic coccobacillus that causes an acute sexually transmitted infection called a chancroid. This disease is rare in the United States and is most commonly seen in Africa and Southeast Asia. It is thought that chancroids may be an important cofactor in the transmission of HIV in these areas. Few days after inoculation, the person will develop a tender papule in the external genitalia that erodes, producing a painful ulcer. Haemophilus ducreyi is also known to cause the regional lymph nodes, particularly in the inguinal region, to enlarge and become inflamed, and this is called a bubo. The inflamed lymph node may even erode the overlying skin to produce a draining ulcer. On Gram stain, Hameophilus ducreyi has a characteristic look of short parallel chains, often described as a school of fish appearance. It can be treated with either azithromycin or ceftriaxone.



**PLAY PICMONIC** 

#### Characteristics

#### **Gram-Negative**

Graham-cracker Negative-devil

This is a gram-negative bacteria.

#### Coccobacillus

# Cockeyed-rod

Coccobacillus is an intermediate shape between spherical coccus and rod-shaped bacilli.

#### Pleomorphic

Playdough-morphic-jar

Pleomorphic means that the bacteria can take on multiple physical forms.

### **Parallel Short Chains**

**Parallel Chains** 

On Gram stain, the bacteria appear as short parallel chains that are often described as a school of fish appearance.

### School of Fish Appearance on Gram Stain

Fish shaped chains

On Gram stain, the bacteria appear as short parallel chains that are often described as a school of fish appearance.

# Signs and Symptoms

# Chancroid

Chained-droid

A chancroid is an acute, sexually transmitted ulcerative infection caused by Haemophilus ducreyi.

### Painful Genital Ulcer

Ulcer-volcanoes on Penis-pole

Patients develop a painful ulcer involving the external genitalia. Initially, the lesion develops as a tender papule and then erodes to produce an irregular ulcer.



## **Buboes**

Blue-bow

Inguinal lymph nodes may become enlarged and tender and can erode the overlying skin to produce a draining ulcer in the inguinal region.

# **Treatment**

# Azithromycin

Zipper-mice

Azithromycin is a macrolide antibiotic that can be used as treatment for Haemophilus ducreyi.

# Ceftriaxone

Chef-tri-axes

Ceftriaxone is a cephalosporin antibiotic that can be used as treatment for Haemophilus ducreyi.