

Ureaplasma urealyticum

- lacks a cell wall.
- the smallest of free-living microorganism.
- cause genitourinary tract infections.
- highly pleomorphic,
 - may appear as coccoid bodies, filaments, and large multinucleoid forms.
- contains sterols
- Ureaplasma is distinguished from Mycoplasma by its production of urease.

EPIDEMIOLOGY

- The main reservoir of human strains is the genital tract of sexually active men and women;

MANIFESTATIONS

- One half of cases of nongonococcal, nonchlamydial urethritis in men may be caused by *U. urealyticum*.
- In women, *Ureaplasma* has been shown to cause chorioamnionitis and postpartum fever.
 - The organism has been isolated from 10% of women with the latter syndrome.

DIAGNOSIS AND TREATMENT

- Tetracycline is the treatment of choice because it is also active against *Chlamydia*,

Gardnerella vaginalis

- *G. vaginalis*
 - facultatively anaerobic
 - gram-variable rod.
 - one of the organisms responsible for bacterial vaginosis.
 - Most common vaginal infection
 - It is overgrowth

PATHOGENESIS

- Bacterial vaginosis (BV),
 - formerly known as nonspecific vaginitis, was named because bacteria are the etiologic agent in this infection and an associated inflammatory response is lacking.
- BV is the most common cause of vaginitis.

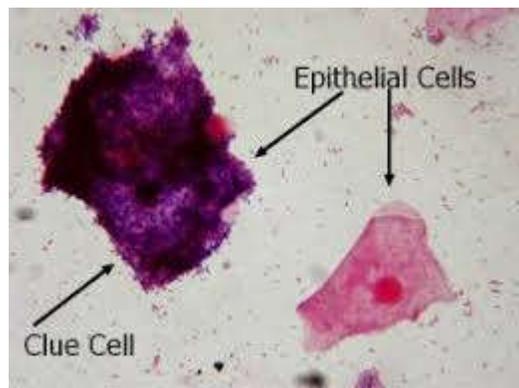
PATHOGENESIS

- BV is known to be a synergistic polymicrobial infection. Some of the associated bacteria include Lactobacillus species and anaerobes.
- Vaginal flora becomes altered, causing an increase in the local pH.
- This may result from a reduction in the H₂O₂ producing lactobacilli.

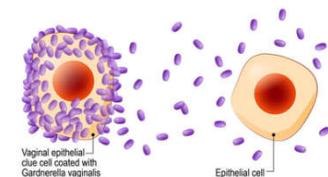
alteration in the vaginal ecology

Gardnerella vaginalis

- It is associated microscopically with clue cells,
– epithelial cells covered in bacteria.
- Although BV is not considered a sexually transmitted disease,
- sexual activity has been linked to development of this infection.



Gardnerella vaginalis



CLINICAL ASPECTS

MANIFESTATIONS

- Symptoms of infection typically include a gray, thin, and homogeneous vaginal discharge that is adherent to the vaginal mucosa, associated with a "musty" or "fishy" odor.

Bacteria Vaginosis Discharge



CLINICAL ASPECTS

MANIFESTATIONS

- there is little vulvar or vaginal irritation associated with this infection,
- the pungent odor is usually the chief complaint.

DIAGNOSIS

- A wet mount preparation of physiologic saline mixed with vaginal secretions should be examined under low- and high-power objectives.
- The characteristic "clue cells" are identified as numerous stippled or granulated epithelial cells.
- Cultures are seldom necessary to establish a diagnosis.

TREATMENT

- The treatment of choice for *G. vaginalis* is oral **metronidazole**, 500 mg twice daily for 6 days.
- A single dose of 2 g proved effective in treatment of adolescent patients, but in general a 5- to 7-day course of treatment is more effective.
- The drug is contra-indicated during early pregnancy and lactation.