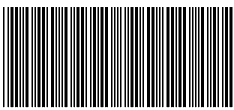




RECEIVED
10-Oct-25

05-Oct-25

Actinobacteria Phylum Bacteroidetes Phylum Euryarchaeota Phylum Firmicutes Phylum Proteobacteria Phylum Verrucomicrobia Phylum



Dr Test Doctor Test Clinic. 123 Test Street, Test Suburb Victoria 3125

Lab ID
Patient ID PAT-100009
Ext ID 25283-0032

Test Patient

Sex: Female • 45yrs • 01-Jan-80
123 Home Street, Test Suburb Vic 3125

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UTI SEXUALLY TRANSMITTED INFECTIONS

TEST	RESULT
Chlamydia trachomatis	DETECTED
Mycoplasma genitalium	Not Detected
Mycoplasma hominis	Not Detected
Neisseria gonorrhoeae	Not Detected

UTI SEXUALLY TRANSMITTED INFECTIONS

TEST	RESULT
Trichomonas vaginalis	Not Detected
Ureaplasma parvum	Not Detected
Ureaplasma urealyticum	Not Detected

UTI Comments:

Citrobacter freundii ELEVATED:

C. freundii is a species of facultative anaerobic Gram-negative bacteria which is becoming a prevalent urinary tract pathogen, particularly in elderly or hospitalized patients. Particularly in the immunocompromised, C. freundii overgrowth may trigger UTI or intestinal infection. Biofilm formation plays a major role in the infection rates of C. freundii as well as the emergence of multi-drug resistance.

TREATMENT OPTIONS:

The resistance of uropathogenic C. freundii to fluoroquinolones, co-trimoxazole, and cephalosporin has been increasing in recent years. Many reports have indicated the presence of multi-drug resistance in organisms causing UTIs. If treatment is warranted, studies of antibiotic susceptibility patterns of C. freundii UTI infections have shown ciprofloxacin, nalidixic acid, imipenem and aztreonam to have decreased frequency of resistance. Rule out allergy to above medication before prescribing/taking.

Escherichia coli ELEVATED:

E.Coli is a Gram-negative, facultative anaerobic, rod-shaped, coliform bacterium which are found naturally in the intestinal tract of humans and the environment. A subset of E. coli are capable of causing enteric/diarrhoeal disease; and a subset cause extra-intestinal disease, including UTIs. It is isolated in 70-95% of uncomplicated and 20-50% of complicated UTI cases. A variety of virulence genes are associated with Escherichia coli mediated urinary tract infections contributing to pathogenesis.

TREATMENT OPTIONS:

There is worldwide emergence of multi-resistant E.Coli associated with UTIs. Resistance to oral antibiotics limits treatment options. If treatment is warranted, studies of antibiotic susceptibility patterns of E. coli UTI infections have shown imipenem, netilmicin, aztreonam, cefepime, ciprofloxacin, cotrimoxazole, fosfomycin, trimethoprim, amoxicillin, co-amoxiclavulanic acid , IV Ceftriaxone or carbapenems to have decreased frequency of resistance. Rule out allergy to above medication before prescribing/taking.

Klebsiella oxytoca ELEVATED:

Klebsiella oxytoca is a Gram-negative, rod-shaped bacterium which is emerging as a crucial persisted bacterial pathogen in urinary tract infection (UTI). Klebsiella species are isolated commonly in complicated UTI cases. K. oxytoca can acquire antimicrobial agents resistance by producing lactamases and carbapenemase.

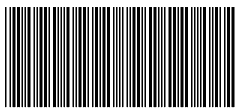
TREATMENT OPTIONS:

There is worldwide emergence of multi-resistant pathogens associated with UTIs. Resistance to oral antibiotics limits treatment options. If treatment is warranted, studies of antibiotic susceptibility patterns of K. oxytoca UTI infections have shown increased susceptibility to cephalosporin. Rule out allergy to above medication before prescribing/taking.

Pseudomonas aeruginosa ELEVATED:

The non-fermentative gram negative bacilli P. aeruginosa has emerged as a major cause of nosocomial infections globally. Surgical site, blood stream and urinary tract infections (UTIs) are the most frequently reported types, with UTIs the most common infection. UTIs caused by P. aeruginosa are usually hospital acquired and related to urinary tract catheterization or surgery.

TREATMENT OPTIONS:



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P. aeruginosa infection is of particular concern as it commonly possesses inherent resistance to antimicrobial agents (multi drug resistant) and are often resistant to almost all β -lactams, aminoglycosides and quinolones. If treatment is warranted, antibiotic regimen may need to be broad spectrum and need to be modified to take into account patients recent antibiotic exposure and monitoring of infection symptoms for effectiveness. Many reports have indicated the presence of multi-drug resistance in organisms causing UTIs. Studies of antibiotic susceptibility patterns of P. aeruginosa UTI infections have shown oral ciprofloaxcin, norfloxacin, IV gentamicin and ceftazidime to have increased susceptibility.

CHLAMYDIA TRACHOMATIS-DETECTED:

Chlamydia infection may be asymptomatic or cause dysuria, discharge, testicular or pelvic pain, bleeding, dyspareunia and may proceed to cause pelvic inflammatory disease or prostatitis. Often asymptomatic, left untreated it can cause serious reproductive complications in women. Even asymptomatic infections should be treated and must always include the patient's partner/sexual contacts.

This organism may be classified as a notifiable pathogen. Confirmation has been performed through repeat testing and/or verification on a secondary platform, where required. The result will be reported to the relevant Department of Health in accordance with statutory requirements. For specific state-based notification obligations, please refer to your local public health authority.

TREATMENT OPTIONS:

Possible treatment options may include: azithromycin 1 g orally, as a single dose OR doxycycline 100 mg orally, 12 hourly for 7 days (If macrolide allergic)

Candida Albicans ELEVATED:

Candida albicans is an opportunistic pathogenic yeast that causes Candidiasis fungal infection with overgrowth. Infection of the urinary tract due to Candida albicans is an uncommon but well-described complication called candiduria. Conditions that predispose to candiduria include diabetes mellitus, antibiotic and corticosteroid therapy, as well as factors such as local physiology and disturbance of urine flow. Lower urinary tract candidiasis is usually the result of a retrograde infection, while bladder or renal parenchymal infection may follow. Persistent candiduria may prompt renal studies. Persistent candiduria may prompt renal studies.

TREATMENT OPTIONS:

If treatment is warranted fluconazole 200mg (Child: 5mg/kg up to 200 mg) orally daily, for 7 days may be used. Relapse may be frequent and likelihood increased with catheter use. Rule out allergy to above medication before prescribing/taking.

Methodology

Quantitative PCR (qPCR), Polymerase Chain Reaction (PCR)