

An Overview of Urinary Tract Infection their Causes and Prevention

John Kennedy

Department of Andrology , University of Oxford, England, United Kindom

DESCRIPTION

A Urinary Tract Infection (UTI) is an infection that affects all or part of the urinary system. When it affects the lower urinary system, it's called a bladder infection (cystitis), and when it affects the upper urinary tract, it's called a kidney infection (pyelonephritis). Urination pain, frequent urination, and the need to urinate despite an empty bladder are all indications of a lower urinary tract infection. Fever and flank pain are common signs of a kidney infection, in addition to the symptoms of a lower UTI. Urine may occasionally seem bloody. Symptoms in the elderly and young can be vague or non-specific. *Escherichia coli* is the most common cause of illness, however other bacteria or fungus can also cause infection risk factors include female anatomy, sexual intercourse, diabetes, obesity, and family history. UTIs are not categorized as sexually transmitted infections, despite the fact that sexual contact is a risk factor. Kidney infection, it usually happens after we get a bladder infection, but it can also happen as a result of a blood infection. In young, healthy women, a diagnosis can be made only on the basis of symptoms. Diagnosis can be challenging in persons with unclear symptoms since germs can be present without an illness. A urine culture may be useful in difficult conditions or if treatment fails.

A bladder infection is also known as a lower urinary tract infection. The most typical symptoms are urine burning and the need to urinate frequently (or an urge to urinate) in the absence of vaginal discharge, as well as severe pain. These symptoms might range from moderate to severe, and they last on average six days in healthy women. There may be some soreness above the pubic bone or in the lower back. In addition to the traditional symptoms of a lower urinary tract infection, people with an upper urinary tract infection, or pyelonephritis, may experience flank discomfort, fever, nausea, and vomiting. In rare cases, the urine may seem crimson or contain visible pus.

Symptoms and signs

Elderly: In the elderly, urinary tract symptoms are typically absent. Some patients arrive to a health care practitioner with incontinence, a change in mental status, or weariness as the only symptoms, while others present with sepsis, a blood infection, as

the initial symptom. Because many elderly persons suffer incontinence or dementia, diagnosing them might be difficult. When someone has signs of systemic infection but is unable to describe urinary symptoms, such as when advanced dementia is present, it is fair to get a urine culture. Fever or a temperature increase of more than 1.1°C (2.0°F) from normal, chills, and an elevated white blood cell count are all systemic indications of infection.

Children: A fever may be the only indication of a Urinary Tract Infection (UTI) in young children. When females under the age of two or uncircumcised males under the age of a year have a fever, many medical societies advocate a urine culture due to the lack of more visible symptoms. Infants may not eat well, vomit frequently, sleep more than usual, or show signs of jaundice. Urinary incontinence (loss of bladder control) can develop suddenly in older children. Bacterial meningitis affects about 1 in 400 infants aged 1 to 3 months who have a UTI. 80%-85% of community-acquired urinary tract infections are caused by uropathogenic *E. coli* from the gut, with *Staphylococcus saprophyticus* accounting for 5%-10%. It's possible that they're caused by viral or fungal infections in rare cases.

Pathogens involved in healthcare-associated urinary tract infections (primarily connected to urinary catheterization) include *E. coli* (27%), *Klebsiella* (11%), *Pseudomonas* (11%), *Candida albicans* (9%), and *Enterococcus* (7%), among others. *Staphylococcus aureus* urinary tract infections are usually caused by blood-borne infections. The urethra can be infected by *Chlamydia trachomatis* and *Mycoplasma genitalium*, but not the bladder. Rather than a urinary tract infection, these infections are frequently classed as urethritis.

Urinary Tract Infections (UTI): What causes them?

Intercourse: Sexual activity causes 75%-90% of bladder infections in young sexually active women, with the risk of infection increasing with the frequency of sex. This incidence of frequent UTIs during early marriage has been dubbed "honeymoon cystitis." Sexual activity has no effect on the likelihood of having a UTI in postmenopausal women. Use of spermicide, regardless of sexual frequency, raises the incidence of UTIs. The usage of the diaphragm is also linked. The use of

Correspondence to: John Kennedy, Department of Andrology ,University of Oxford, England, United Kindom, E-mail: johnkennedy@1948.uk

Received: 01-Apr-2022, Manuscript No. ANO-22-23457; **Editor assigned:** 04-Apr-2022, PreQC No. ANO-22-23457(PQ); **Reviewed:** 18-Apr-2022, QC No. ANO-22-23457; **Revised:** 25-Apr-2022, Manuscript No. ANO-22-23457(R); **Published:** 02-May-2022, DOI:10.35248/2167-0250.22.11.278.

Citation: Kennedy J (2022) An Overview of Urinary Tract Infection their Causes and Prevention. *Andrology*.11:278.

Copyright: © 2022 Kennedy J. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

birth control pills or condoms without spermicide does not raise the risk of an uncomplicated urinary tract infection.

Sex: UTIs are more common in women than in men because the urethra in women is shorter and closer to the anus. Due to the loss of beneficial vaginal flora as a woman's estrogen levels decline with menopause, her risk of urinary tract infections rises. Additionally, repeated urinary tract infections are linked to vaginal shrinkage, which can occur after menopause.

Recurrent urinary tract infections in men can be caused by chronic prostatitis/chronic pelvic pain syndrome and chronic bacterial prostatitis (not acute bacterial prostatitis or silent inflammatory prostatitis). As men get older, their risk of infection rises. The presence of bacteria in the urine of older

men does not appear to alter the incidence of urinary tract infections.

Catheters for the urinary tract

Urinary catheterization raises the risk of infection in the urinary tract. Bacteriuria (bacteria in the urine) has a daily risk of three to six percent, and preventive antibiotics have not been shown to reduce symptomatic infections. Catheterizing only when necessary, employing aseptic method for insertion and ensuring clear closed drainage of the catheter can reduce the risk of an associated infection. Urinary tract infections are also a risk for men scuba divers who use condom catheters and female scuba divers who use external catching devices for their dry suits.