URINE CULTURE TEST

DESCRIPTION
A bacterium known as Escherichia coli (E. coli) causes the majority of lower urinary tract infections (UTIs). Fortunately, this microorganism is treatable with several antibiotics, including trimethoprim-sulfamethoxazole, ciprofloxacin, and nitrofurantoin. For most people the infection will be easily eliminated with one of these antibiotics. Some doctors prescribe an antibiotic without performing a urine culture but the test can definitively identify a UTI.

The urine culture tests for the presence of a single type of bacteria. If high counts are found the test is generally considered a positive urine culture. If there are multiple bacteria strains, the culture may have been contaminated and the urine culture may need to be redone. Symptoms of a UTI include pain and burning when urinating and a frequent urge to urinate. If symptoms are present, but the urine culture is negative, you may want to consult your doctor who may order a specialized urine culture to look for a wider range of the non-diluted urine to determine if bacteria at lower counts or other microorganisms may be causing the symptoms. The presence of low number of bacteria and the presence of white blood cells may indicate a condition known as acute urethral syndrome.

WHY DO I NEED THIS TEST?
A urine culture is usually ordered when a person has symptoms typical of a UTI such as pain or burning when urinating and frequent urges to urinate. Sometimes antibiotic therapy may be prescribed without requiring a urine culture for young women who display symptoms. If the infection is more complicated or symptoms do not respond to initial therapy, then a culture of the urine is recommended. Pregnant women without any symptoms may be screened for bacteria in their urine, which could affect the health and development of the fetus. A urine culture may be ordered with a urinalysis or as follow up to abnormal results on a urinalysis.

An untreated infection can move from the lower urinary tract to the upper urinary tract and infect the kidney itself, and possibly, enter the bloodstream, causing septicemia. Septicemia symptoms include fever, chills, elevated white blood cell count, and fatigue. If you or your doctor suspects that you have septicemia, you should consult your doctor and have a blood culture. Your doctor will then be able to prescribe antibiotics accordingly.

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Ekan Essien, MD, MPH, a native Georgian, received his BA from Duke University. Dr. Essien continued his education at Florida A&M University where he received his Masters of Public Health in Epidemiology; received his medical degree from Meharry Medical College in Nashville, Tennessee; and obtained training in general and trauma surgery at Grady Memorial Hospital at Morehouse School of Medicine. He is a candidate in the post graduate fellowship in anti-aging and regenerative medicine from the American Academy of Anti-Aging Medicine.