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PREVALENCE OF UTI IN PREGNANT FEMALES

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ABSTRACT:

A urinary tract infection (UTI) is an infection that affects part of the urinary tract. When it affects the lower urinary tract it is known as a bladder infection (cystitis) and when it affects the upper urinary tract it is known as a kidney infection (pyelonephritis). Symptoms from a lower urinary tract infection include pain with urination, frequent urination, and feeling the need to urinate despite having an empty bladder. A total of 140 pregnant females presenting in obstetrical clinics were included in this study. Brief demographic data i.e. name, maternal age, gestational age, history of burning micturition, fever or any other history were noted on a predefined proforma. All the data was entered and analyzed using SPSS Ver. 23.0. All the qualitative variables were presented as numbers and percentages. The quantitative variables were presented as mean and standard deviation. The mean age of the patients was 31.45±3.23 years. The minimum age was 25 years, and the maximum age was 34 years. The mean gestational age of the patients was 28.23+1.23 weeks. Out of 140 females, only 23 patients had burning micturition along with occasional episodes of fever. Thirty-five patients had burning micturition only. They never any episode of fever. Eleven patients among these also had gestational diabetes.

Keywords: Pregnancy UTI

INTRODUCTION:

A urinary tract infection (UTI) is an infection that affects part of the urinary tract. When it affects the lower urinary tract it is known as a bladder infection (cystitis) and when it affects the upper urinary tract it is known as a kidney infection (pyelonephritis). Symptoms from a lower urinary tract infection include pain with urination, frequent urination, and feeling the need to urinate despite having an empty bladder. Symptoms of a kidney infection include fever and flank pain usually in addition to the symptoms of a lower UTI. Rarely the urine may appear bloody. In the very old and the very young, symptoms may be vague or non-specific.

The most common cause of infection is Escherichia coli, though other bacteria or fungi may sometimes be the cause. Risk factors include female anatomy, sexual intercourse, diabetes, obesity, and family history. Although sexual intercourse is a risk factor, UTIs are not classified as sexually transmitted infections (STIs). Kidney infection, if it occurs, usually follows a bladder infection but may also result from a blood-borne infection. Diagnosis in young healthy women can be based on symptoms alone. In those with vague symptoms, diagnosis can be difficult because bacteria may be present without there being an infection. In complicated cases or if treatment fails, a urine culture may be useful.

In uncomplicated cases, UTIs are treated with a short course of antibiotics such as nitrofurantoin or trimethoprim/sulfamethoxazole.

Resistance to many of the antibiotics used to treat this condition is increasing. In complicated cases, a longer course or intravenous antibiotics may be needed. If symptoms do not improve in two or three days, further diagnostic testing may be needed. Phenazopyridine may help with symptoms. In those who have bacteria or white blood cells in their urine but have no symptoms, antibiotics are generally

not needed, although during pregnancy is an exception. In those with frequent infections, a short course of antibiotics may be taken as soon as symptoms begin or long-term antibiotics may be used as a preventive measure. About 150 million people develop a urinary tract infection in a given year. They are more common in women than men. In women, they are the most common form of bacterial infection. Up to 10% of women have a urinary tract infection in a given year, and half of women have at least one infection at some point in their lifetime. They occur most frequently between the ages of 16 and 35 years. Recurrences are common.

Lower urinary tract infection is also referred to as a bladder infection. The most common symptoms are burning with urination and having to urinate frequently (or an urge to urinate) in the absence of vaginal discharge and significant pain. These symptoms may vary from mild to severe and in healthy women last an average of six days. Some pain above the pubic bone or in the lower back may be present. People experiencing an upper urinary tract infection, or pyelonephritis, may experience flank pain, fever, or nausea and vomiting in addition to the classic symptoms of a lower urinary tract infection. Rarely, the urine may appear bloody or contain visible pus in the urine.

Pregnancy UTI is classified into two categories of symptomatic and asymptomatic. The involvement of the lower urinary tract, leading to asymptomatic bacteriuria is the most common cause of UTI during pregnancy. The involvement of the upper urinary tract can lead to symptomatic bacteriuria and is characterized by acute Pyelonephritis. Based on performed researches, the prevalence of symptomatic urinary tract infection in pregnant women has been 17.9% and asymptomatic form in 13%. If asymptomatic infection is not treated, it leads to some clinical manifestations in mother and

newborn (1-3). The objective of this study was to see the prevalence of urinary tract infection among the pregnant females presenting in obstetrical clinics.

Material of Methods:

A total of 140 pregnant females presenting in obstetrical clinics were included in this study. Brief demographic data i.e. name, maternal age, gestational age, history of burning micturition, fever or any other history were noted on a predefined proforma. All the data was entered and analyzed using SPSS Ver. 23.0. All the qualitative variables were presented as numbers and percentages. The quantitative variables were presented as mean and standard deviation.

RESULTS:

The mean age of the patients was 31.45±3.23 years. The minimum age was 25 years, and the maximum age was 34 years. The mean gestational age of the patients was 28.23+1.23 weeks. Out of 140 females, only 23 patients had burning micturition along with occasional episodes of fever. Thirty-five patients had burning micturition only. They never any episode of fever. Eleven patients among these also had gestational diabetes.

DISCUSSION:

A number of measures have not been confirmed to affect UTI frequency including: urinating immediately after intercourse, the type of underwear used, personal hygiene methods used after urinating or defecating, or whether a person typically bathes or showers. There is similarly a lack of evidence surrounding the effect of holding one's urine, tampon use, and douching. In those with frequent urinary tract infections who use spermicide or a diaphragm as a method of contraception, they are advised to use alternative methods. In those with benign prostatic hyperplasia urinating in a sitting position appears to improve bladder

emptying which might decrease urinary tract infections in this group. Using urinary catheters as little and as short of time as possible and appropriate care of the catheter when used prevents catheter-associated urinary tract infections. They should be inserted using sterile technique in hospital however non-sterile technique may be appropriate in those who self catheterize. The urinary catheter set up should also be kept sealed. Evidence does not support a significant decrease in risk when silver-alloy catheters are used. The mainstay of treatment is antibiotics. Phenazopyridine is occasionally prescribed during the first few days in addition to antibiotics to help with the burning and urgency sometimes felt during a bladder infection. However, it is not routinely recommended due to safety concerns with its use, specifically an elevated risk of methemoglobinemia (higher than normal level of methemoglobin in the blood). Acetaminophen (paracetamol) may be used for fevers. There is no good evidence for the use of cranberry products for treating current infections. Those who have bacteria in the urine but no symptoms should not generally be treated with antibiotics. This includes those who are old, those with spinal cord injuries, and those who have urinary catheters. Pregnancy is an exception and it is recommended that women take 7 days of antibiotics. If not treated it causes up to 30% of mothers to develop pyelonephritis and increases risk of low birth weight and preterm birth. Some also support treatment of those with diabetes mellitus and treatment before urinary tract procedures which will likely cause bleeding (4-6).

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