

URINARY TRACT INFECTIONS URINARY AND ITS IMPACT ON GETTING PREGNANT IN BASRAH CITY

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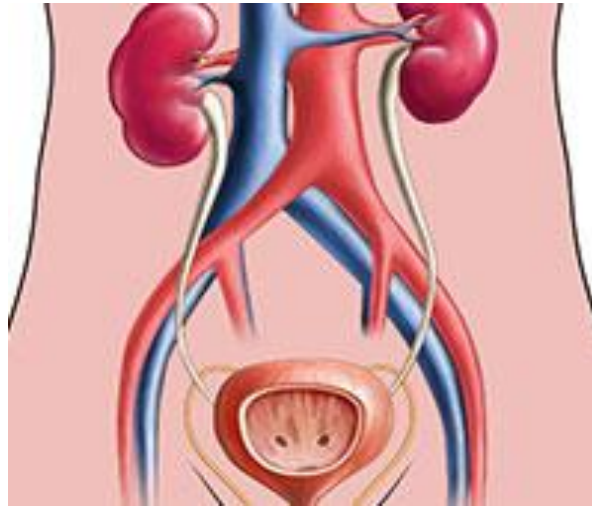
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Abstract: Laboratory diagnosis of urinary tract infection depends on UTI on microscopic examination and culture and urine depends on bacteriological models in microscopic examination on the number of pus cells in the microscopic field under high power and research indicates that there is a close relationship between the presence of bacteria and the appearance of pus cells in the urine sample at a rate of (85)% and accordingly the reviewers were classified into infected and uninfected. Females are more males susceptible to the disease and the reason for this may be the proximity of the urethral opening to the anus in females which facilitates ascending infection. As for what is related to the effect of the health status of the parents related to the same disease on the extent of the individual's infection with the disease maybe This may be attributed to health conditions and some health habits followed, and thus the similarity in the extent of exposure to the factors that cause the disease. No them believes There are genes related to the disease that are inherited from parents to children.. How much to There are patterns. "Special" blood groups may have a role in the incidence of the disease. As for the effect of age on the incidence of the disease, as Age is related to the incidence of the disease. It is believed that the reason for the difference in the results of this study with the results of previous studies regarding the disease and blood groups may be due to the small size of the sample Where sample size affects the results of statistical analysis As for the effect of educational attainment on the incidence of the disease .Lost She pointed out Previous studies The cultural level has a significant impact on the incidence of the disease, while that The differences are not significant in our current study. The reason for this may be due to the success of the media campaign that was bought. I wrote It has directorate departments .health Regarding health awareness and health practices in general and watery diarrhea in particular, which coincided with the period in which the study was conducted. This matter, health culture, leads to health promotion. As for the effect of housing, the results showed that the infection rate among individuals Residents The side is higher than its percentage in Residents In the villages of the district, it is believed Researchers that The reason may be that this study coincided with the intense campaign to prevent watery diarrhea and the health teams Focus To rural areas, visit them and provide them with sterilized water or sterilization pills, in addition to adopting the numbers Many Including sterile and bottled water and residential reliance Centers The area is connected to the water supplied by the drainage network, where it reaches it. quantities From pollutants, especially those that reach it from sewage and industrial water, in addition to the increase in population and agricultural activity, which causes industrial pollutants to reach that water, and the entry of biological pollutants into the body increases the possibility of them reaching the urinary system through the lymphatic route or through their filtration through the glomeruli with urine.

Keywords: UTI, Urogenital diseases, Disease of pregnant mother, kidney disease.

Introduction

The human urinary system consists of a group of important organs that work together in an integrated manner. These organs produce urine, then store it and excrete it outside the body. The urinary system consists of four main organs: the kidneys, ureters, bladder and urethra. Each has a specific function. The kidneys work to sort waste and unnecessary materials from the blood, then move through the ureter to the bladder, which stores urine until it is full, and then it is disposed of through the urethra and expelled from the body (4).



The urinary system, which consists of the kidneys, bladder, ureters and urethra, is one of the important systems in the human body due to the nature of the work it performs in purifying the blood from harmful substances and surplus substances that the body does not need and getting rid of them in the form of urine. Urine, its specifications and contents are good indicators that reflect the normal or pathological physiological state in addition to the other functions of the kidney in maintaining the natural balance of body fluids. (1)

The widespread and ill-considered use of antibioticsUrinary tract infections have increased, and the reason for this may be that the continued use of these antibiotics for long periods of time has led to the emergence of resistance by microorganisms and the emergence of strains with high tolerance to antibiotics. Bacteria are the main cause of many cases of urinary tract infections, among the other organisms responsible for the disease are negative bacteria that are isolated from urine samples of infected people and that have mechanisms of resistance to antibiotics. Urinary tract infections may be the only disease that people suffer from, and it may be a secondary disease due to the presence of other diseases, as the infection may be isolated or may accompany other diseases such as gastroenteritis, malnutrition, and acute respiratory infections.And urinary tract infection is related to the patient's condition, gender and age.more from its association with the pathological symptoms of various urinary tract infections therefore, urinary tract infection is one of the most dangerous diseases.Problems health, which millions of people face, especially among women, as the infection rate among women is higher than that of men. This disease is not common among men, but it is extremely dangerous if a man is infected with it.Urine is free of any bacterial, viral or fungal contamination. Urinary tract infection occurs when digestive system bacteria located in the anus, which is very close to the urinary tract opening, reach the anus and begin to grow and multiply. Inflammation may be caused by one type of bacteria, such as E. coli, where the infection begins in the penis and then moves to the bladder. If left untreated, it moves to the ureters and from there to the kidneys. It may also be transmitted in other ways, as bacteria can move from the blood to the kidneys (or it may move from the intestines to the bladder through the lymphatic blood vessels). People differ in their

susceptibility to the disease, as some are more susceptible to infection than others, in addition to the fact that any defect in the urinary system impedes the movement of urine or blockage. It increases the susceptibility to infection because urine stagnant provides an opportunity for bacteria to multiply. This disease is one of the common diseases during childhood. On the one hand, the use of catheter tubes which reach the bladder through the penis and is considered one of the sources of disease, as it helps in introducing bacteria into the bladder. Women who have had the disease are the most prone to infection again with the disease, as studies have indicated the risk of recurrence of infection in women due to the presence of factors that help bacteria in the cells lining the wall of the urinary system, which help bacteria adhere and then move into the urinary system. This issue has also been linked to the presence of similar blood groups among women who are constantly infected with this disease. The prevalence of the disease varies according to geographical and health conditions, as poor health conditions and malnutrition affect the occurrence of many infections. (1)

Urinary tract diseases:-

Severe kidney and bladder infections: This infection is caused by the presence of high amounts of bacteria or microbes that can reach the urinary system through the bloodstream or through the reproductive organs. This infection is widespread and prevalent among children and the elderly, especially those who suffer from throat infections and a weak immune system. These diseases and infections can be treated with various antibiotics available in pharmacies. **Accumulation of salts in the kidneys and bladder:** There are salts that accumulate in the body and cannot be eliminated; they stick to the walls of the kidneys and ureters and cause severe pain to the infected person and a feeling of very severe kidney colic.⁽¹⁾

Salt accumulation can be treated by drinking plenty of fluids or giving the patient an intravenous solution to increase urination and wash the kidneys of accumulated salts. **Formation of dirt stones and others in the kidneys and ureters or their formation in the bladder:** The stone is formed from salt deposits that stick to the wall of the kidneys or ureter, and the bladder is of varying sizes, as it can be the size of a pinhead or the size of a golf ball. This stone leads to very serious and multiple problems, including: severe renal colic, obstruction of the ureter, severe pain, and an increase or contraction of the kidney size. It is treated by fragmentation using a laser or through surgical operations (2). **Acute kidney infections and the continuation of this inflammation without exposure to any treatment;** if this disease is not treated as soon as possible, it can lead to a malfunction in kidney functions and failure. Treatment is done by dialysis and taking large amounts of calcium and proteins by injection or through daily meals. Here dietary diseases and diseases resulting from genetic genes; Such as the presence of more than two kidneys or ureters in the urinary system, or a small size of the kidney, ureter, or even the bladder, which leads to the continuous accumulation of salts, and the slowness in getting rid of these salts. **Acquired disease,** and it can be through changing the location of the kidney and its falling down, which results from using a harsh diet, which leads to the disappearance of the fat surrounding the kidney, which makes it fall down slightly⁽³⁾.

What causes or helps these infections occur?

There are two types of urinary tract infections: the first, called simple, occurs in non-pregnant women in the absence of any health problem or birth defect and is not related to sexual intercourse. The second, called complicated, occurs in the presence of any of the following conditions (2):-

- 1- **Kidney and urinary tract defects:** such as reflux from the bladder to the ureter, mechanical dysfunction of the bladder wall muscles as a result of injuries or diseases of the nervous system, or the presence of blockages with stones or compositions or tumors.
- 2- **Pregnancy:** Pregnancy does not increase the chances of developing a urinary tract infection, nor does it change the type of bacteria causing the infection. However, the chances of the infection spreading to

the kidneys are higher than in non-pregnant women, as a result of the relaxation of the ureter and the pressure of the full uterus on the bladder. ⁽⁹⁾

- 3- Diabetes: This disease increases the risk of bacterial infections because it suppresses the immune system and causes hardening of the arteries, which reduces blood flow to some parts of the body. These two factors weaken the body's defenses and help microbes multiply. Diabetes can also cause a nerve disorder in the bladder called "neurogenic bladder," which leads to urinary stasis and bacterial multiplication.
- 4- Frequent friction during intercourse, especially with the use of condom.
- 5- Menopause can cause vaginal atrophy, urinary incontinence, or bladder cysts.
- 6- Long-term bladder catheterization, such as in cases of stroke and some cases of bladder nerve dysfunction.

What are the symptoms?

- 1- Burning sensation when urinating, difficulty in urinating, and a feeling of frequent and urgent need to urinate. Here, it is important to know that burning sensation when urinating has two causes; the first, which is the most common, is "inflammation of the bladder and urethra," and the second occurs in women who suffer from "inflammation of the vaginal opening," which causes severe pain when urine passes through it.
- 2- In case of bladder infections, the patient may feel pain in the lower abdomen (suprapubic area).
- 3- In the case of kidney infections, the patient may feel pain in the affected side, which may be accompanied by fever, chills, and nausea.
- 4- There may be purulent discharge or a change in urine color.

Do urinary tract infections occur without symptoms?

The answer is yes. Some cases do not show symptoms and are only discovered through examinations and tests, and this is also common in the elderly. ⁽¹⁾

What should you do if you experience similar symptoms?

You should go to the doctor immediately for examination and necessary tests. The doctor will usually resort to a clinical examination and take some information to determine the causes and detect any accompanying diseases. Of course, a urine analysis and bacterial culture will be done to confirm the cause of the symptoms, identify the bacteria causing the problem, and determine a treatment plan.

Perform the required tests correctly

When a bacterial culture is necessary, the best urine sample is the first morning sample. It should be noted that the sample should be collected when the bladder is full and after cleaning the area well from front to back with soap and water and drying well, or with an antiseptic solution, then collecting the urine in a sterile cup in the middle of the urination process and not at the beginning. The laboratory doctor will often advise you to let a few drops of urine pass and then place the cup in the urethra to collect the appropriate sample. Urine culture usually takes three days ⁽⁷⁾.

Other tests?

Some doctors may request one or more types of X-rays to check for possible causes of inflammation (especially the complex type), because failure to treat the cause will lead to recurrence of the infection in the long term..

Types of rays used in this field:-

- 1- Plain abdominal X-ray (KUB): It reveals the presence of kidney or urinary tract stones, but its benefit is limited, especially when the colon is full.
- 2- Abdominal ultrasound (Ultrasound): It reveals swelling of the ureter and kidney as a result of blockage. It may also reveal some stones. It is also important to ensure that there is no pus inside or around the kidney and to show the size of the kidney (to ensure that there is no atrophy) and its shape (to ensure that there are no defects), the size of the prostate, and the shape of the bladder (to ensure that its wall is free of cavities).
- 3- Color rays (IVU): It shows the size and shape of the kidneys, the shape of the urinary tract from beginning to end, and the location of the blockage (if any). It may be recommended if there are still white blood cells or pus cells in the urine despite treatment of the infection and disappearance of the symptoms, but it exposes to radiation and is harmful to pregnant women and patients with chronic renal failure in its advanced stages, so the approval of a kidney doctor must be obtained before performing it.
- 4- CT scan: Good and more accurate. It has the same previous benefits as well as the same disadvantages.
- 5- Bladder X-rays MCUG: It is used to detect vesicoureteral reflux, especially in children.
- 6- Cystoscope (Cystoscopy): For those who have persistent blood or burning in the urine despite no bacteria or other obvious cause. ⁽²⁾

General symptoms of urinary tract infection:-

- 1- A strong and constant need to urinate.
- 2- Burning sensation when urinating.
- 3- Constant leakage of urine, in small amounts.
- 4- Presence blood in urine (Hematuria) or cloudy urine with a very strong odor.
- 5- presence of germs in urine.⁽⁷⁾

Each of the different types of infection has its own distinct urinary tract infection symptoms, depending on the area where the infection occurs.

Symptoms of urinary tract infection depend on the affected area.:-

- 1- (Kidneys (Pyelonephritis Acute pyelonephritis - back pain, chills and shivering, nausea, vomiting and fever.
- 2- (Bladder (cystitis- Cystitis) - a drop in body temperature to abnormal levels (hypothermia), pressure in the pelvic area, a feeling of discomfort in the lower abdomen, the need to urinate frequently and pain when urinating.
- 3- Urethra (Urethritis)- Burning sensation when urinating⁽⁵⁾.

Causes and risk factors of urinary tract infection:-

The urinary system consists of the kidneys, ureters, bladder and urethra. Each of these components plays an important role in removing waste from the body. The causes of urinary tract infections are usually the entry of bacteria into the urinary system, through the urethra, and then begin to multiply in the bladder.

Although the urinary system is designed in a way that is supposed to prevent the entry of prokaryotes, (Prokaryote) This, however, sometimes this defense system fails to perform its task. When such a failure occurs, the bacteria take control and begin to multiply, causing severe and acute inflammation in the urinary tract. ⁽⁹⁾.

Most urinary tract infections occur in women, primarily, and affect the urethra and bladder.

The cause of cystitis, in most cases, is *Escherichia coli* (*Escherichia coli*). This type of bacteria (germs) is usually found in the digestive system and intestines. Having sex can cause cystitis, but a person does not have to be sexually active to get this infection. All women are susceptible to cystitis, due to the anatomical structure of the female body, especially because the origin of the urethra is close to the anal opening, and due to the short distance between the origin of the urethra and the bladder.

Urethritis may begin when bacteria from the digestive tract, found in the stomach and intestines, travel the short distance from the anus to the origin of the urethra..

Moreover, due to the short distance between the origin of the urethra and the vaginal opening in women, there are diseases transmitted through sexual contact (sexually transmitted diseases— STD - Sexually transmitted diseases), such as Herpes simplex virus (Herpes simplex), gonorrhea and chlamydia, which can also cause urethritis.⁽¹⁾.

Urinary tract infection risk factors:-

Some people are more susceptible than others to urinary tract infections. Causes of urinary tract infections and risk factors include:

- 1- **Sex:** About half of all women will get a urinary tract infection at some point in their lives, and some will get it more than once. The main reason for this is the female body's anatomy. The urethra is shorter in women than in men, which means that bacteria have to travel a shorter distance to reach the bladder.
- 2- **sexual activity:** Women who are sexually active more often are more likely to get a UTI. Sex can irritate the opening of the urethra, allowing bacteria to enter more easily and travel to the bladder.⁽⁴⁾.
- 3- **Use of some contraceptives:** Women who use a diaphragm as a contraceptive are at greater risk of urinary tract infections than women who use spermicide as a contraceptive.
- 4- **Age:** After reaching menopause (menopause- Menopause or age Amenorrhea- Amenorrhea), urinary tract infections become more common, because the tissues of the vagina, urethra and base of the bladder become thinner and weaker due to the loss of Estrogen..
- 5- **urinary tract disorders** like Kidney stones or other.
- 6- **Diabetes:** and other chronic diseases that can impair the immune system.
- 7- **Prolonged use of catheters in the bladder:**

The immune system in women plays a very important role in the degree of risk. Recurrent urinary tract infections It is one of the most important causes of urinary tract infections in women. Bacteria can combine with urinary tract cells very easily, especially in women, because they lack the protective elements that normally allow the bladder to defend itself against germ invasion.⁽⁹⁾.

Further studies are needed to determine the causes of microscopic urinary tract infections, the risk factors that cause them, and how to deal with them and activate them in a way that helps women who suffer a lot from recurrent urinary tract infections..

Complications of urinary tract infection:-

If UTIs are treated promptly and properly, complications are rare. However, if left untreated, they can worsen and lead to more severe symptoms that can cause significant discomfort..

A UTI that is not treated properly can progress to acute or even chronic kidney infection (acute pyelonephritis), which can cause permanent kidney damage..

Young children and the elderly are most at risk of kidney damage from UTIs, because symptoms tend to be ignored or mistakenly attributed to other medical conditions. Pregnant women who have UTIs are at greater risk of having low birth weight or premature babies..

A woman who has had more than three UTIs is more likely to have additional infections in the future. ⁽³⁾

1- Diagnosis of urinary tract infection:-

When a urologist suspects (Urologist) If there is an infection, a urine sample will be requested to be tested for pus, red blood cells or bacteria (germs) in the urine. To avoid contamination of the sample, the genital area may be requested to be cleaned with antiseptics before starting to collect the sample, from the middle of the urine stream.

Laboratory examination of a urine sample (urinalysis), sometimes with a culture test (Culture) Urinary, reveals whether there is an inflammatory infection. Although there is no simple test that can distinguish whether the infection is in the upper or lower urinary tract, a combination of fever and localized, concentrated pain can indicate that the infection has reached the kidneys, too.

2- Urinary tract infection treatment:-

If symptoms characteristic of a urinary tract infection appear in a generally healthy person, treatment of a urinary tract infection The effective and basic treatment is with antibiotics. The type of medication and the duration of treatment are determined according to the patient's general health condition and the type of bacteria detected in the urine test. ⁽²⁾.

A Urinary tract infection in pregnant women: symptoms, treatment and prevention:-

The urinary tract is an ideal breeding ground for unwanted visitors: bacteria. They multiply rapidly in areas compressed by the expanding uterus. This pressure—combined with the muscle-relaxing properties of hormones in the body—makes it easier for intestinal bacteria that normally live on the skin and in feces to enter the urinary tract during pregnancy... adding further problems to the pregnant woman's problems..

In many cases, a pregnant woman may have an infection even though she has never had any symptoms – and when left untreated, a UTI can cause serious problems. Fortunately, these common infections are easily treated, which keeps you healthy and makes you more comfortable. ⁽¹⁰⁾.

What are urinary tract infections?

The urinary tract, which rids the body of waste and excess water, consists of two kidneys, where urine is produced; two ureters, which carry urine to the bladder; the bladder, which collects and stores urine; and the urethra, a tube that sends urine out of the body..

In some cases, normal bacteria that live on the skin and other areas can get into areas where they don't belong, and one of these areas is the urinary tract. While most cases of urinary tract infection It can occur in the bladder (called acute cystitis, or bladder infection), in the urethra (called urethritis), or, in more serious cases, up into the kidneys (called acute pyelonephritis, or kidney infection). ⁽³⁾.

Causes of urinary tract infection during pregnancy:-

There are many factors that lead to urinary tract infections during pregnancy, including:

1- Changes in the body:-

All women are at risk of UTIs (even more so than men because women have shorter urethras, making it easier for bacteria to enter the bladder). But pregnant women may be more vulnerable: Hormonal changes can make it easier for bacteria to enter the bladder and cause an infection. The growing uterus also puts increased pressure on the bladder, making it more difficult to empty urine completely (which also means that women carrying twins are more likely to get UTIs) (⁷).

2- bacteria in the intestine-

The bacteria that cause UTIs can come from many places. A common invasive bacteria, E. coli, comes from the intestines. Because the urethra is located near the rectum, these bacteria can travel up the urethra. Wiping from front to back every time you use the bathroom can help keep bacteria away from this area..

3- intercourse:-

Sex during pregnancy is perfectly healthy (unless your doctor tells you otherwise) – but there is a downside: it has the potential to lead to a urinary tract infection, because bacteria from near your vagina can be pushed into your urethra during intercourse. It may not be romantic, but it's important to pee before and after sex to move those bacteria out..

4- Streptococcus The group B:-

This type of bacteria, which is commonly carried in the digestive tract, can cause urinary tract infections during pregnancy. Late in pregnancy, your doctor will test you for this infection and treat it with antibiotics if needed.⁽⁵⁾.

There are also some risk factors that are less controllable. If any of these apply to a pregnant woman, she should be sure to discuss them with her doctor so that she can be closely monitored for signs of infection.:-

- History of recurrent urinary tract infections.
- Maternal diabetes.
- sickle cell anemia.
- Kidney diseases.
- Previous urinary tract surgery.

Symptoms of urinary tract infection during pregnancy:-

Every woman's body is different, so be sure to tell your doctor about any pain or discomfort you're experiencing during pregnancy — especially if you experience any of the following typical UTI symptoms(1):-

- 1- Sense burning during urination
- 2- Frequent trips to the bathroom to urinate (although frequent urination alone is a common—and harmless—side effect of pregnancy))
- 3- A strong desire to urinate while the amount of urine expelled is small.
- 4- Cloudy, dark, bloody, or foul-smelling urine.
- 5- Low grade fever.
- 6- Pain or discomfort in the lower abdomen.

7- Pain that occurs on one side between the upper abdomen and the back or on the back, which may indicate a kidney infection, which should be treated immediately⁽⁸⁾.

8- Chills, nausea, and vomiting, which can also be signs of a kidney infection. Keep in mind: It has been estimated that up to 7 percent of all pregnant women have UTIs without any symptoms at all. Because untreated infections can lead to complications — including kidney infections and, rarely, an increased risk of fetal growth restriction and premature birth — urine tests and prenatal visits are really important.

Treatment of UTI in pregnant women:

And Think you might have a urinary tract infection? The standard way to diagnose one (during pregnancy or otherwise) is with a urine culture. Most doctors will order a “clean catch” sample, where you urinate into a cup midstream after carefully wiping your outer vaginal area.

If you are diagnosed with a UTI, your doctor will likely give you pregnancy-safe antibiotics for 7 to 14 days to get rid of the bacteria. Make sure you take the full recommended course, even if you start to feel better halfway through treatment, and drink plenty of water.

Preventing urinary tract infections during pregnancy :-

While UTIs can occur no matter what precautions a pregnant woman takes, a few steps can help reduce the chances of getting a UTI during pregnancy.:-

- 1- **stay hydrated:** By trying to drink enough water every day, increasing bathroom time helps flush bacteria out of the urethra.
- 2- **The bathroom pigeons:** Pregnant women may feel like they are waddling to the bathroom every five minutes – but it is important to never hold back. As soon as you get the urge to go, go. Make sure you expel all of the urine, and also try leaning forward while sitting on the toilet. Empty your bladder again before going to bed at night.
- 3- **Wearing cotton underwear that opens up:** These clothes will help keep the area dry, since bacteria thrive in moisture.
- 4- **front to back scanning:** This applies to every visit to the bathroom.
- 5- **Avoid feminine hygiene products:** Douching or powders can irritate an already vulnerable area.
- 6- **eat well:** Maintain high resistance by following a healthy pregnancy diet and staying active. Some practitioners recommend eating yogurt that contains active cultures or taking probiotics if you are taking antibiotics to help restore the balance of beneficial bacteria. Ask your doctor first, though; some types of probiotics are definitely more effective than others.⁽¹⁰⁾

While it was once thought that a compound in cranberry juice could help reduce the frequency of UTIs, experts now say the benefit, if any, is small. So feel free to eat some of the red stuff if you want it—it will help with hydration—but don’t waste it, because most varieties are also loaded with refined sugar⁽³⁾.

Urinary tract infections are infections that affect the urinary system, which consists of the kidneys, urinary tract, bladder, and urethra. Infections can attack any of the components of the urinary tract, but the urethra and bladder are more susceptible to infection. Women are more likely than men to get urinary tract infections, and these infections have an impact on the general health of the body. In married women, infections have an impact on pregnancy.⁽⁵⁾

That The effect of infections on pregnancy Urinary tract infections in married women contribute to delaying pregnancy. These infections are caused by fungi or bacteria. The obstruction of urinary tract infections to pregnancy can be explained by the following: Infections kill sperm before they reach the uterus for fertilization and pregnancy. Infections prevent the completion of the marital relationship in a natural way. Infections change the nature of the fluids or natural secretions present in the vagina.⁽⁵⁾.

Appropriate treatment for infections After consulting a doctor, the necessary medical tests are performed to determine the cause of the infection, such as fungi, bacteria, etc., and the doctor then provides the appropriate treatment, which is often an antibiotic that the couple must take, in addition to some medical supplements for the woman's immune system, and other treatments that the doctor deems appropriate. The treatment process usually does not take more than two weeks, but there are some cases that require a longer period of time to recover, due to ignoring treatment for a long time, so doctors do not recommend neglecting to treat infections at the beginning of their occurrence; It is worth noting that a woman who suffers from severe urinary tract infections, to the point of worsening the condition to acute kidney inflammation, or renal pelvic inflammation, is quickly admitted to the hospital and injected with antibiotics intravenously.⁽⁶⁾ .

Symptoms of infection Feeling pain in the pelvic area, lower abdomen, back, and sides. Feeling pain when urinating, and sometimes having difficulty urinating. A burning sensation when urinating. Urine with a little blood. Urinary urgency that the woman cannot control, and the woman with the infection is forced to urinate many times more than the normal rate. A general feeling of being unwell. A temperature higher than the normal rate of thirty-seven degrees Celsius. Feeling continuous pain in the lower back, pelvic area, or sides. Feeling trembling. Nausea and vomiting. Severe diarrhea. Headache ⁽³⁾.

Tips to reduce inflammation:-

- 1- Wear cotton underwear.
- 2- Change underwear twice daily.
- 3- Do not use regular soap to wash the vagina. Instead, choose a suitable wash or rinse with warm water.
- 4- Drink plenty of water ⁽¹⁰⁾.
- 5- Avoid eating foods with added spices and seasonings.
- 6- Don't put off going to the bathroom.
- 7- Make sure to keep the vaginal area dry after showering or going to the bathroom, because infections usually occur in moist areas, and germs are active there.
- 8- Sleep enough hours during the night to support and enable the immune system to confront germs. ⁽²⁾.

How to prevent urinary tract diseases (7):-

Drink more than two liters of water a day. Avoid drinking alcohol and alcoholic beverages of all kinds. Avoid eating salty foods. Avoid sexual intercourse. Avoid severe and harsh diets because they have very serious effects on the urinary system. Do not take drugs and medications without consulting a doctor and taking his instructions ⁽⁸⁾.

If there are bacteria causing the infection, the doctor will prescribe an appropriate antibiotic. It is recommended to take it regularly and for the period specified by the doctor (without increasing or decreasing it), while adhering to the following advice:-

- 1- Drink plenty of water and fluids (such as barley water or sugarcane juice) unless there is a medical reason preventing this.

- 2- Frequent urination, not holding urine for long, urinating after intercourse, urinating before going to bed at night, and cleaning well before intercourse.
- 3- Treating any constipation as it prevents complete emptying of the bladder when urinating.
- 4- Convert urine to alkaline liquid using a suitable effervescent solution in the absence of renal failure or liver disease.
- 5- Avoid condoms and topical chemicals for birth control and use other methods of birth control if this is the reason for the infection returning.
- 6- Avoid sitting in a bathtub (a tub filled with soapy water) for long periods of time and avoid adding chemicals (fragrances) to the bath water. ⁽⁶⁾.

CONCLUSION:-

- 1- Planned parents should treat urinary tract infectio, especially mother.
- 2- Personal hygiene of puberty girls, especially using changing clean towels every two hours.
- 3- If its disease in the family,we warn against taking antibiotics to control inflammation for two weeks and cut off antibiotics.
- 4- When you feel aneed to recuperate, you must immediately go to the bathroom to get rid of the accumulated salts that cause the formation of the kidney stones, bladder, and ureter.

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