Study the relation between Parameters Before and after treatment in Urinary tract infections

Prepared By :

- Ali Abdul Hussein Yaser
- Hasan Mohammed Hasan
- Sajjad Mohammed Hamza

supervised By :

Dr. Ruqaya Munther Ewadh

2023-2024

بسم الله الرحم الرحيم

﴿يَرْفَعِ اللَّهُ الَّذِينَ آمَنُوا مِنكُمْ وَالَّذِينَ أُوتُوا الْعِلْمَ دَرَجَاتٍ ۚ وَاللَّهُ بِمَا تَعْمَلُونَ خَبِيرٌ﴾

صدق الله العلي العظيم

إهداء

بسم الله الرحمن الرحيم والحمد لله رب العالمين والصلاة والسلام على سيد العالمين من الاولين والآخرين حبيبنا وشفيعنا رسول الله محمد (صلى الله عليه وآله وسلم)

الى أهل بيت النبوة ومعدن الرسالة ومختلف الملائكة، الى كنز علم رب العالمين ومفتاح جنانه الى آل بيت النبي وذرياتهم الأطهار

الى سيدي ومولاي صاحب العصر والزمان الحجة بن الحسن المهدي (عج)

الى من أنار لي طريق المسير وما كانت تضحياتي لتُثمر لولا تضحياته – أبي العزيز-

الى من وضع الله الجنة تحت أقدامها وسهرت الليالي والأيام وغذتني بنبع حنانها – أمي الحنون-

الى سندي وقوتي في أيام ضعفي واستكانتي – أخوتي وأخواتي-

الى شعلة المعرفة الى من علموني الحروف والكلمات ومهدوا لي طريق الوصول – معلمي ومدرسي ودكتوري الفاضل-

الى من بتضحياتهم بقينا وبدمائهم وصلنا وبذكرياتهم لازلنا نعيش أيامنا – شهدائنا الأبطال-

الى شهداء العز والإباء ومثال الصمود – شهداء فلسطين الحبيبة-

أُهدي لكم هذا العمل، سائلين المولى القدير القبول والسداد إنه حكيمٌ مجيد

Conclusion

This research was divided into three sections:

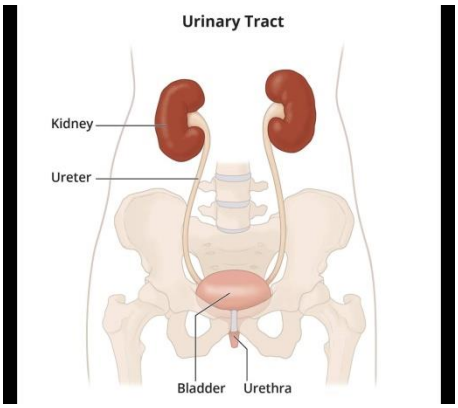
I. In the first section, we will talk about the urinary system in general, then a summary of what was shortened from the practical side, then the components of the system and the function of each organ, and then we will talk about the practical side of integrating data based on what attracts it by collecting it and discussing this data.

II. In the second section, we will learn about the urinary system and discuss the problems that affect the system in different genders and ages, from men to women and ending with children.

III. The third and final section, after we learned about what the urinary system is, its function, and the problems that we can face, we will talk about ways to diagnose these problems in people who suffer from them, as well as ways to treat them. . Then we will learn about how to prevent these diseases, and we will present the objectives that were relied upon in writing this scientific research.

Introduction

The urinary system, also known as the renal system, is a complex network of organs responsible for the production, storage, and elimination of urine from the body. Comprised of the kidneys, ureters, bladder, and urethra, this vital system plays a crucial role in maintaining homeostasis by regulating the body's fluid balance, electrolyte levels, and pH.



Summary of the practical side

Through the reviews and data that we collected from patients with urinary system problems and through reviewing the analyzes that were performed on them, we noticed that the levels of red blood cells, the level of urea in the blood, and the levels of minerals such as sodium, potassium, and chlorine decreased for male patients, while they increased for female patients.

After treatment urea & creatinine values decreased and all patients whose creatinine and urea levels reached to normal values after treatment.

Since the basis of the infection is bacterial, we note that the treatment was based primarily on antibiotics and some other treatments such as proton pump inhibitors, normal saline, glucose saline, or insulin, depending on the condition of the patient who suffers from other diseases such as blood pressure or diabetes, as it is often affected and is Giving these medications to prevent other problems or to correct the patient’s condition

Anatomy of the Urinary System:

1. Kidneys:

The kidneys are bean-shaped organs located on either side of the spine, just below the ribcage. They are the primary filtration units of the urinary system, responsible for filtering waste products, toxins, and excess ions from the blood to produce urine.

2. Ureters:

Each kidney is connected to the urinary bladder by a narrow tube called the ureter. The ureters serve as conduits for transporting urine from the kidneys to the bladder through peristaltic contractions, ensuring unidirectional flow and preventing backflow of urine.

3. Urinary Bladder:

The urinary bladder is a hollow, muscular organ located in the pelvic cavity. It serves as a temporary reservoir for storing urine until it is expelled from the body during micturition (urination). The bladder's capacity to stretch enables it to accommodate varying volumes of urine while maintaining continence.

4. Urethra:

The urethra is a tubular structure that extends from the base of the bladder to the exterior of the body. Its primary function is to convey urine from the bladder to the external environment during urination. In males, the urethra also serves as a passageway for semen during ejaculation.

In summary, the urinary system plays a pivotal role in maintaining homeostasis by regulating the body's fluid balance, electrolyte levels, and pH. Through the intricate processes of filtration, reabsorption, secretion, and concentration, the kidneys and associated structures ensure the efficient elimination of metabolic waste products while preserving essential nutrients and maintaining physiological equilibrium.

The practical side

These samples were collected during the period from (3/24/2024 to 4/20/2024) by reviewing the files of patients hospitalized in Imam Sadiq Teaching Hospital, as well as some private laboratories such as the Alnukhba Laboratory and the Alaitihad Laboratory, for those suffering from urinary system problems that led to Their condition deteriorated and they were subjected to examinations and treatment

Through this data, we created statistics that can be summarized as follows:

Patient's name	Sex	Age	Diagnosis before treatment	Treatment	Diagnosis after treatment
عبد الله ابراهيم حسين	Male	50 years	RBC = 3.9 (4.7 - 6.1 cells/mcL) B.Urea 4.6 (6 - 24 mg/dL) Sodium 126 (135 - 145 mEq/L) Potassium 3.2 (3.5 - 5.2 mEq/L) Chloride 83 (96 - 106 mEq/L)	Meropenem Vial 500ml 1x2 Paracetamol vial 1x2 Lasix amp. 1x2 Chart RBS/4hrs N/S 1x2 Vancomycin vial 1x1 1g in 100 cc N/S	S.Glucose 15.4 B.Urea 4.2 (6 - 24 mg/dL) S.Creatinine 60 S. Uric acid 385
تقى حيدر خليل	Female	25 years	B.Urea 98 (15 - 45 mg/dL) S.Creatinine 3 (0.7 - 1.2 mg/dL)	Omeprazol 40mg 1x2 in 100cc N/S Zofran amp. 1x3 Ringer 1x1 Ceftriaxone vial 1g in 100cc N/S Paracatamol vial 1x2	B.Urea 7.3 (15 - 45 mg/dL)
خديجة هاشم حسن	Female	43 years	B.Urea 45.28 (3.3 - 7.5 mmol/L) S.Creatinine 262 (62 - 124 umol/L) Glucose 9.26 (3.6 - 6.1 mmol/L)	G/W 1x2 IV G/S 1x3 IV Omeprazol vial in 100cc N/S Ceftriaxone vial in 200cc N/S S.insulin/2hrs ATR Plavix tab. 75 mg 1x1 Diazepam (as needed) Vancomycin vial 1x1 1g in 100cc N/S	B.Urea 7.4 (3.3 - 7.5 mmol/L) S.potassium 3.6 (3.5 - 5.3 mmol/L) S.sodium 144 (136 - 155 mmol/L) S.chloride 110 (95 - 105 mmol/L)

حكيمة عبدالله زامل	Female	80 years	B.Urea 30 (6 - 24 mg/dL) S.Creatinine 326 (53 to 97.2 µmol/L) HIV negative HBS negative HCV negative	Ringer 1x3 N/S 1x3 Meropenem 500 mg 1x3 Paracetamol vial 1x2 B12 1x1 B6 1x3 Crestor tab. 20mg 1x1 Plavix tab. 75 mg 1x1 Flagyl vial 1x1 Vancomycin vial Fucidin cream	
سعوده حسن علي	Female	50 years	Sodium 140.5 (135 - 145 mEq/L) Potassium 5.0 (3.5 - 5.2 mEq/L) Chloride 103.7 (96 - 106 mEq/L) PCV 28% (38.3% - 48.6%) RBC 6.0 - 6.5 (4.2 to 5.4 cells/mcL) WBC 6.7 (4.5 - 11.0 cells/mcL)	Meropenem vial 1x1 in 100cc N/S Omeprazole 1x1 Paracetamol vial 1x1 Insulin sol ATRX	
حسن محمد جاسم	Male	15 days	RBS 5.3 (4.7 - 6.1 cells/mcL) DDimer 2027.326 (<500) Ca ARS 8.358 (8.500 - 10.200)	Incubator Ampicillin vial 250mg Claforan vial 250mg in 20cc N/S 1x2 Paracetamol vial 35mg 1x4 G/S 135 cc/16 hrs x2 Chart observation	
قحطان مزهر حسين	Male	69 years	S.Glucose 6.9 (5.7% - 6.4%) B.Urea 11.2 (6 - 24 mg/dL) S.Creatinine 132 (53 to 97.2 µmol/L) S.Sodium 157.9 (136 - 155 mmol/L) S.Chloride 124.7 (95 - 105 mmol/L) RBC 10 (4.7 - 6.1 cells/mcL) Pus cell 2 - 4 (0 - 2)	Meropenem vial 500mg in 50cc G/S 1x2 Flagyl vial 1g 1x2 Vancomycon vial 500mg in in 50cc G/S 1x1 G/S 1x3 Nexium vial 40mg in 50cc G/S 1x1 Aspirin tab. 100mg 1x1 Plavix tab. 100mg 1x1 G/W 1x3 B1 amp. 1x1 B12 amp. 1x1 Fluconazol vial 1x1 Mycostatin drop 1x4	

محمد علي عبد الحسين	Male	41 years	Pus /15-20 (0 - 2) RBCs /0-1 (4.7 - 6.1 cells/mcL) Epithelial/few Crystal /uric acid few Amorph /few Glucose /+		
رعد عبد الامير	Male	50 years	Pus /0-2 (0 - 2) RBCs /0-1 (4.7 - 6.1 cells/mcL) Epithelial/few Crystal /uric acid few Amorph /urate+		
كوثر عماد	Female	28 years	Pus /4-6 (0 - 2) RBCs /0-2 (4.2 - 5.4 cells/mcL) Epithelial/++ Bacteria /few Amorph /urate (few)		
علي كاظم	Male	25 years	Pus /2-4 (0 - 2) RBCs /1-3 (4.7 - 6.1 cells/mcL) Epithelial/few Crystal /absent (uric acid few) Amorph /urate+		
طيف محمد	Male	34 years	Pus /40-50 (0 - 2) RBCs /2-4 (4.7 - 6.1 cells/mcL) Mucus/++ Amorph /urate+		
هاشم عباس	Male	64 years	RBCs /70-80 (4.7 - 6.1 cells/mcL) Epithelial/few Amorph /urate ALB trace		
عبد الله حبيب	Male	56 years	Pus /2-4 (0 - 2) RBCs /12-15 (4.7 - 6.1 cells/mcL) Mucus/++ Amorph/urate +		
ام البنين محمد	Female	32 years	Pus /10-15 (0 - 2) RBCs /0-2 (4.2 - 5.4 cells/mcL) Epithelial/++ Mucus/++ Bacteria/+++ Amorph/few Reaction/alk		

Table(1) show the relation titer of Blood suger, S.Gr, S.UREA Before treatment.

Parameters Before treatment	MALE Mean±S.err	FEMALE Mean±S.err	T test	P= value
Blood suger mmol/L	13.00 ± 2.88	10.50 ± 2.75	0.61	0.35
S.Gr	400.12 ± 20.21	500.12 ± 30.60	2.61	0.016*
S.UREA	34.24 ± 10.75	54.75± 15.76	1.11	0.30

,* p<0.05

Table(2)show the relation titer of Blood suger, S.Gr, S.UREA after treatment.

Parameters After treatment	MALE Mean±S.err	FEMALE Mean±S.err	T test	P= value
Blood suger mmol/L	10 ± 2.2	8.66 ± 0.36	0.69	0.55
s. Gr	211.36 ± 34.05	249.33 ± 38.05	0.80	0.049*
s.urea	20.00± 3.34	17.00 ± 1.90	0.85	0.033*

,* p<0.05

Discussion

The p value of urea and sugar was found to be 0.05&0.033 (p< 0.05), while p value of blood sugar and creatinine comparison was also found to be significant. These findings revel that there is strong relationship of blood sugar level with urea level. As there is increase in blood sugar level an increase in urea level has been detected. This corroborates with the findings of Zimmer (1) that hyperglycemia is one of the major causes of progressive renal damage[2].

urea is the result of protein and amino acid catabolism, which is the product of the liver which will be filtered by the glomerulus. If kidney function decreases, the ability of the kidneys to excrete urea also decreases where the ability of the glomerulus to filter decreases, which will result in a buildup of urea in the patient's blood[3].

An increase in urea level is seen when there is damage to the kidney or the kidney is not functioning properly. Increment of blood urea level with the increment of blood sugar level clearly indicates that the increase blood sugar level causes damage to the kidney. Research conducted by Saweirs Walaa.[4] had found that increase urea and serum creatinine in diabetic rats indicates progressive renal damage. 8 In our fi nding sex was not the determining factor for the diabetes. There was not relationship between sex and the blood sugar levels likewise significant relation between sex and urea level was also not observed [5-7].

Creatinine itself is a metabolism from muscle creatine, which is synthesized by the liver and is found in the skeleton of muscle and blood to be excreted by the kidneys in urine. Creatinine to be excreted depends on muscle activity. Creatinine is filtered by the glomerulus. Creatinine values that are above normal after hemodialysis therapy illustrate that there are other variables that cause high creatinine levels such as body weight, comorbidities, and even the adequacy of hemodialysis itself. Just like urea, if there is impaired or decreased kidney function, creatinine buildup will occur in the body[8].

Our study disagreed with other study which found However male showed slightly higher creatinine level than the females but the p value was not signifi cant. This result is supported by various researchers who showed that sex wise variation occurs only in serum creatinine level but not in blood sugar level and urea level. High serum creatinine level was seen in males than females, which could be because of storage of creatinine as a waste product in muscle mass and the presence of high muscle mass in males[9]

Urinary Tract Infection

A urinary tract infection is an infection that affects any part of the urinary system. The urinary system includes the kidneys, ureters, bladder, and urethra. Most infections affect the lower part of the urethra; That is, the bladder and urethra.

Women are more susceptible to urinary tract infections than men. If the infection is limited to the bladder, it can cause a person significant discomfort and pain. However, it can develop into serious health problems if the urinary tract infection spreads to the kidneys.

Reaching menopause, 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.

Urinary tract infection in men

Although bladder infections are more common in women, men can also get them.

Signs and symptoms of a bladder infection (cystitis) in men include:

- frequent urination
- A strong, constant need to urinate (urgency)
- A burning or tingling sensation during or immediately after urination (dysuria)
- Mild fever
- Cloudy urine with a strong odor
- Blood in the urine (hematuria)
- Problems urinating, especially if you have a prostate problem

An increased risk of bladder infections in men may be associated with:

- Prostate enlargement (benign prostatic hyperplasia or BPH)
- Kidney stones
- Diabetes
- Abnormal narrowing of the urethra (urethral stricture)
- Recently used a tube to drain your bladder (urinary catheter).
- A procedure in which an instrument is inserted into the urethra, the opening at the tip of the penis where urine leaves the body
- Treatment for bladder infections depends on the cause, but usually includes antibiotics.

Urinary tract infection in women

Women of childbearing age are considered the most vulnerable to urinary tract infections, as their urethra is shorter than that of men, and the opening of the urethra is close to the genital area, which makes it easier for bacteria to enter the bladder and cause a urinary tract infection.

It is not surprising to know that about 40% of women experience a urinary tract infection at least once in their lives. Married women, during pregnancy, and after surgery are the most vulnerable to infections.

Symptoms of urinary tract infection in women:

- Pain in the lower abdomen or lower back.
- Burning during urination.
- Frequently going to the bathroom and feeling an urgent need to go to the bathroom with small amounts of urine.

- Getting up during the night to urinate.
- Change in color and smell of urine.
- The presence of blood in the urine.
- High temperatures accompanied by nausea and chills.

Often there is no clear cause for recurrence of infections. But the reason may be:

The body has defenses that protect it from infection, and any change that may occur to the body increases the possibility of infection. For example, if there are problems with the bladder or kidneys (the presence of congenital problems or the presence of stones), this increases the chances of exposure to a urinary tract infection.

Sexual intercourse is considered one of the main factors causing urine infections.

Women's bodies are under the influence of the hormone estrogen and menopause leads to a decrease in this hormone, which leads to weakness and dryness in the reproductive system and increases the possibility of urinary infections.

Pregnancy increases the possibility of recurring infections due to changes that occur in the urinary tract throughout pregnancy and childbirth.

Urinary tract infections in children

Urinary tract infections are a common condition in children. Most cases of urinary tract infections are caused by bacteria that enter the opening of the urethra (the tube that carries urine from the bladder to the outside of the body) and travel upward to the bladder, and sometimes to the kidneys.

In severe and rare cases, bacteria can move from the kidneys into the bloodstream, causing an infection in the bloodstream (sepsis) or infection in other organs of the body.

Diagnosis of urinary tract infection

When the urologist suspects the presence of an infection, he requests that a urine sample be given to examine the presence of pus, red blood cells, or bacteria in the urine. To avoid contamination of the sample, he may request that the genital area be cleaned with antiseptics before beginning to collect the sample from the middle of the urine stream.

Laboratory examination of the urine sample, which is sometimes added to the culture test, reveals whether there is an inflammatory infection, and although there is no simple test that can distinguish whether the infection is present in the upper or lower urinary tract, there is a combination of fever and pain. Concentrated local inflammation may indicate that the inflammation has reached the kidneys.

Treatment of urinary tract infection

If characteristic symptoms of a urinary tract infection appear in a generally healthy person, the main effective treatment for a urinary tract infection is 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 examination.

1. Treating minor inflammation

The most common medications to treat simple urinary tract infections include:

(Sulfamethoxazole - trimethoprim)

(Amoxicillin)

(Ampicillin)

(Nitrofurantoin)

(Ciprofloxacin)

(Levofloxacin)

Symptoms disappear after a few days of receiving treatment for urinary tract infections. However, the patient may need to continue taking antibiotic treatment for more than a week, and it is necessary to be careful to take all the medication doses prescribed by the doctor, to ensure complete and final neutralization of the causes of the infection.

When treating a simple urinary tract infection in a generally healthy person, short-term treatment is usually recommended, such as taking antibiotics for just three days, but checking whether this treatment is appropriate for the eye symptoms.

The patient may also be prescribed pain-relieving medications that relieve pain in the bladder and urethra and relieve burning during urination.

One of the side effects of these medications is a light blue or orange coloring of the urine.

2. Treating recurrent urinary tract infections

For a patient who suffers from recurrent urinary tract infections, the patient may be prescribed antibiotics for a longer period of time or a self-treatment program, whereby the patient takes an antibiotic for a few days as soon as the characteristic symptoms of a urinary tract infection appear.

Treating infections that occur as a result of sexual relations,

The doctor may prescribe a single dose of an antibiotic after each sexual intercourse.

For a woman who has passed the menopausal stage, her doctor may advise her to use vaginal estrogen therapy to reduce the risk of recurring urinary tract infections.

Cranberry juice has proven effective in preventing recurrent urinary tract infections, and it can be prescribed for those who can tolerate it and drink it chronically.

3. Treatment of acute inflammation

Treatment of acute urinary tract infection may require hospitalization with intravenous antibiotics

Alternative treatments

Urinary tract infections cannot be treated with herbs, but some herbs may help relieve symptoms, such as:

Cranberries.

Bearberry.

Horsetail plant.

the Garlic.

How to prevent urinary tract infection:

- Drink plenty of fluids especially water

Drinking water helps dilute urine, thus increasing the frequency of urination, allowing bacteria to be expelled from the urethra before infection begins.

- Try drinking cranberry juice

Studies conducted to determine whether cranberry juice protects against urinary tract infections have not reached definitive results. However, drinking cranberry juice is probably harmless.

- Urinate when needed

Doctors recommend urinating as soon as you feel the need, because emptying the bladder periodically helps protect the urethra from bacteria that lead to urinary tract infections.

- **Urinating after intercourse**

Married couples should pay attention to urinating before and immediately after sexual intercourse, to get rid of bacteria that one party may transmit to the other party.

- Avoid feminine products that are likely to cause irritation

Using these preparations in the genital area may cause urethral irritation.

These preparations include deodorant sprays, vaginal douches, and powders.

- Changing the method of contraception

Female condoms, condoms without lubricant, or condoms treated with spermicides can contribute to bacterial growth.(4)

References

١-

Bacterial urinary tract infections. Merck Manual Professional Version. https://www.merckmanuals.com/professional/genitourinary-disorders/urinary-tract-infections-utis/bacterial-urinary-tract-infections. Accessed June 10, 2020.

٢-

Zimmer P, Alberti KG, Shaw J. Global and societal implications of the diabetes. Nature 2001;414:782-7.

٣-

Olimpia Ortega, Isabel Rodriguez, Alvaro Molina, Ana Hernandez. Chronic renal failure – complications, cardiovascular morbidity/ mortality 2005;73-4.

٤-

Schrier RW, Gottschalk CW, Disease of the Kidney, (5th ed.). Boston, little, Brown, 1993; 2153-89.

٥-

Saweirs Walaa. Diabetic nephropathy, Edren Juny 2006; 25.

-6

Trinder P. Determination of glucose in blood using glucose oxidase with an alternative oxygen acceptor. Ann Clin Biochem 1969; 6:24-7.

٧-

Berthelot M.: Report Chem.Aplique 1859; 1:284.

٨-

Owen A, Iggo B, Scandrett FJ, Stewart, CP. The determination of creatinine in plasma or serum and in urine: A critica1examination. Biochem J 1954;58:426.

٩-

Anjaneyulu, Muragundla; Chopra, Kanwaljit quercetin, an anti-oxidant biofl avonoid, attenuates diabetic nephropathy in rats. Clinical & Experimental Pharmacology & Physiology 2004;31:244-8.

١٠-

Ashavaid TF, Todur SP, Dherai AJ. Establishment of reference intervals in Indians population. Ind J of Clin Biochem. 2005;20:110-8

١١-HootonTM. Acute simple cystitis in men. https://www.uptodate.com/contents/search. Accessed June 10, 2020.

١٢-

Bladder infection (urinary tract infection) in adults. National Institute of Diabetes and Digestive and Kidney Diseases. https://www.niddk.nih.gov/health-information/urologic-diseases/bladder-infection-uti-in-adults/all-content. Accessed June 10, 2020. ٢ Dr. Alaa Asfour

١٣-

Specialist in obstetrics, gynecology and laparoscopic surgery, specialist in urology and pelvic reconstructive surgery.

https://www.webteb.com/aboutus/team/

١٤-

MSDmanuals website

https://www.msdmanuals.com/ar/home

١٥-

Myoclinic

https://www.mayoclinic.org/ar/diseases-conditions/urinary-tract infection/symptoms-causes/syc-20353447

١٦-

Myedoctor website

https://myedoctor.net

17- https://ar.m.wikipedia.org/wiki/%D8%AC%D9%87%D8%A7%D8%B2_%D8%A8%D9%88%D9%84%D9%8A

18- https://www.google.com/amp/s/altibbi.com/amp/%25D9%2585%25D8%25B5%25D8%25B7%25D9%2584%25D8%25AD%25D8%25A7%25D8%25AA-%25D8%25B7%25D8%25A8%25D9%258A%25D8%25A9/%25D8%25A7%25D9%2585%25D8%

19- https://www.google.com/amp/s/www.aljazeera.net/amp/health/2022/4/25/%25D8%25A7%25D9%2584%25D8%25AA%25D9%2587%25D8%25A7%25D8%25A8-%25D8%25A7%25D9%2584%25D9%2585%25D8%25B3%25D8%25A7%25D9%2584%25D9%2583-

20- https://www.medcare.ae/ar/services/view/urology/urinary-tract-infection.html

21- https://www.haliltugtepe.com/ar/treatments/urinary-tract-infections

22- https://www.andalusiaegypt.com/%D8%B9%D9%84%D8%A7%D8%AC-%D8%A7%D9%84%D8%AA%D9%87%D8%A7%D8%A8-%D8%A7%D9%84%D9%85%D8%B3%D8%A7%D9%84%D9%83-%D8%A7%D9%84%D8%A8%D9%88%D9%84%D9%8A%D8%A9

23- https://redirect.clalit.co.il/

24-
https://www.samitivejhospitals.com/ar/article/detail/%D8%A7%D9%84%D9%85%D8%B3%D8%A7%D9%84%D9%83-%D8%A7%D9%84%D8%A8%D9%88%D9%84%D9%8A%D8%A9