

Common Urological Diseases Among Iraqi Patients

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Abstract: A study was conducted on patients attending urology clinic in Al-Kindy teaching hospital in the period between 2-12-2015 until 1-3-2016. The aim of the study is to see what diseases presents to Iraqi urology clinic and what are the most common diseases among Iraqi patients and their distribution according to age and sex. This study will show the distribution of diseases among Iraqi patients so that future planning can be made regarding which instruments is needed more and what diseases are preventable" and problems to focus on preventing such diseases. Also it enables us to compare our country with other countries so that we can know which diseases are more prevalent in our country compared with other countries and this has important implications on diagnosis, treatment, prevention of these diseases.

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I. Introduction: -

The most common afflictions of the urinary tract are:

- 1- Urinary tract infections
- 2- Pathological conditions of the prostate
- 3- Urinary calculi .

Urinary tract infections is a term that is applied to a variety of clinical conditions ranging from the asymptomatic presence of bacteria in urine to sever infections of the kidney with resultant sepsis . UTI is one of the more common medical problems

There are four possible modes of bacterial entry into the genitourinary tract : the first one is per urethral bacteria ascending into the urinary tract causes most UTI. Othe modes of bacterial entry are Hematogenous spread , Lymphogenous spread. The second common Affliction is pathological condition of the prostate.

The prostate gland is the male organ most commonly afflicted with either benign or malignant neoplasms popularized the concept of zonal anatomy of the prostate. Three distinct zones have hare been identified. The peripheral zone accounts for 70% of the volume of the young adult prostate , the central zone accounts for 25% and the transition zone accounts for 5% 60-70% of carcinoma of the prostate originate in the peripheral zone , 10 – 20 % in the transition zone and 5-10 % in the central zone . Benign prostate Hyperplasia Uniformly originate in the transition zone.

Patients and Methods :-

All Patients presented to Urology clinic to Al-Kindy teaching hospital were taken in the study in the period between (2-12-2015) to (1-3-2016). Each patient name ,age, sex , symptoms and the diagnosis were written. After that analysis of these data done to classify patients according to sex, age, diseases to reach result. 248 patients were included in this study. Patients with definite final diagnosis were included After documentation by imaging or other appropriate method

Statistical analysis system – SAS (2012) was used to analyze the data to study the effects of age and sex in same disease and the difference correlated by (chi – square)

Statistical analysis

Patients presented to Urology clinic at Al-kindy teaching hospital were taken in the period between 2-12-1015 until 1-3-2016 as a sample for patients presenting to urology clinic in Iraqi hospitals

These patients were classified according to age , sex , diseases .

The common diseases were taken into the study, rare diseases not included into the study

After that Statistical analysis system were used to analysis the data.

In table number 1 which is classification of diseases according to age and sex ,

Urinary tract Infections are the diseases with higher incidence in male than female for many reasons, because of high incidence of urinary stone among male patients and because of prostate enlargement and also for cultural reasons in which men seek medical advice to urology more than some women who prefer Gynecologist or female doctor.

The other common diseases is urinary stone with higher incidence among male than female and incidence of renal stone slightly higher than ureteric.

Renal calculi are two to three times more common in men than women with higher incidence of renal stone than ureteric stone among male patients could be because many ureteric stone can pass spontaneously.

The significance of finding is found by X² which in 12.74 for urinary tract infections, 10.92 for ureteric stones, 10.87 for renal stone

In table number 2 show the relation between diseases and age group in 10 – 19 years old.

Urinary tract infections are the most common followed by ureteric stone and then renal stone.

In the 20 – 29 years old the commonest diseases were urinary tract infections followed by renal stone then ureteric stone

And we observe there is increase in the incidence of urinary Stone beginning at the age of 20 years.

In the age group 30 – 39 the most common diagnosis was urinary tract infections followed by renal stones and then ureteric stones in 40 – 49 y urinary Tract infections first disease in incidence, followed by ureteric stones and then renal stones

Above 50 years the most common finding was urinary tract infections, then ureteric stone , then renal stone .

X² for urinary tract infections is in 4.782 and for ureteric stone 9.4619 for urinary tract infections stones 9.027

These finding goes with the known information that urinary stone diseases are uncommon before 20 years and peak incidence occurs in the forth to sixth decade of life .

High risk stone formers:-

General factors:-

- 1- Early onset of urolithiasis.
- 2- Familial stone formation.
- 3- Brushite-containing stone (CaHPO₄.2H₂O).
- 4- Uric acid and urate-containing stones.
- 5- Infection stones.
- 6- Solitary kidney .

Diseases associated with stone formation:

- 1- Hyperparathroidism
- 2- Metabolic syndrome.
- 3- Nephrocalcinosis
- 4- Gastrointestinal diseases (i-e jejuno- ileal) bypass , intestinal resection (crohn's).
- 5- Genetically Determined stone formation cystinurea (type A , B and AB)
- 6- Primary Hyperoxaluria (PH)
- 7- Renal tubular acidosis type1
- 8- 2 ,8 dihydroxyadene uria
- 9- Xanthinuria
- 10- Lesch – nyhan syndrome

Statistical Analysis

Patients presented to urology clinic At Al-Kindy teaching hospital were taken in the period between 2/12/2015 until 1/3/2016 as a sample for patients presenting to urology clinic in Iraqi hospitals these patients were classified as follow:-

Table (1): Distribution of samples according to sex (Number and Percentage)

Number (Percentage)			Sex
Renal stone	Ureteric stone	UTI	
17 (% 70.83)	16 (%69.57)	85 (%76.58)	Males
7 (%29.17)	7 (%30.43)	26 (%23.42)	Females
24	23	111	Total
** 10.875	**10.9221 (P< 0.01)**	**12.741	X ² Square

Distribution of studied samples according to Age (Number and percentage)

Number (Percentage)			
Renal stones	Ureteric stones	Urinary tract infections	
(%12.30)3	(%17.93)4	(%22.52)25	19 -10
(%37.5)9	(% 8.70)2	(% 13.51)15	29-20
(%33.33)8	(%4.35)1	(%22.52)25	39-30
(%12.30)3	(%30.43)7	(%21.62)24	49-40
(%4.17)1	(%39.13)9	(%19.82)22	50and above
24	23	111	Total
**9.027	**9.461	*4.782	X ² SQUARE
(P<0.01)**; (P<0.05)*			

Distribution of samples of undescended testes according to age (Number and percentage)

Number (Percentage)			
(%2.86)1	(%80.00)4	(%74.00)37	19 -10
(%0.00)0	(% 0.00)0	(% 2.00)1	29-20
(%0.00)0	(%0.00)0	(%0.00)0	39-30
(%0.00)0	(%0.00)0	(%4.00)2	49-40
(%97.14)34	(%20.00)1	(%20.00)10	50and above
35	5	50	Total
**14.863	**13.250	*11.385	X ² SQUARE
(P<0.01)**			

The results of my study was similar to other studies which found that wasn't common diseases presenting to urology clinic was urinary stone diseases, benign prostate enlargement, urinary tract infections.

II. Conclusions:

This study was performed in Al-Kindy teaching hospital in urology clinic in between 2/2/2015 until 1/3/2016 to analyze the common complaint and diseases presenting to urology clinic and it is the first study of its kind in Iraq as far as I know. the result concluded that the most common complaints presenting to urology clinic are:

- 1) urinary stone diseases
- 2) urinary tract infections
- 3) benign prostatic hyperplasia.

These results confirms that efforts should be placed on management of these diseases like improving the management of urinary stone diseases:-

- 1) Extracorporeal shock wave lithotripsy.
- 2) Improving endourological Equipment's.
- 3) Improving Expertise of sargeons and working personal.

Improvement need to focus on improving treatment of urinary infections.

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