THE PREVLANCE OF URINARY TRACT INFECTION AMONG PRIMARY SCHOOL GIRLS IN KIRKUK CITY [+]

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Abstract

Randomly selected sample (100) from primary school girls in kirkuk city from (1 / 9 / 2003) to (1 /12 / 2003) was used to detect the prevalence of urinary tract infection among them .

The study shows that the main age group affected with (UTI) is between (8–10) year forming(72 –72 %) and most of girls suffered from burning micturation(34 – 48 %) . The commonest causative organism for the infection was *E coli* (30 – 42.8 %) .

Finaly the cases mainly respond to metheprim (oral antibiotic tablet) (52-74.2 %).

المستخلص

تمت دراسة ١٠٠ عينة من طالبات المدارس الابتدائية في مدينة كركوك للفترة من (١ / ٩ / ٢٠٠٣) لغاية (١ / ١٢ / ٢٠٠٣) لمعرفة معدل انتشار التهاب المجاري البولية بينهم ومن خلال الدراسة تبين بان معظم الفتيات اللواتي يعانين من التهاب المجاري البولية هن بين عمر (٨-١٠) سنوات إذ شكلن نسبة (٧٢-٧٢%) وكانت جميعهن يعانين من حرقة في الادرار بنسبة(٣٤-٥و٤٨%).

إن المسبب المرضي الأكثر شيوعا لمعظم الحالات هي E-coli إذ شكل نسبة(٣٠-٤٢،٨ %) وقد استجابت معظم الفتيات للعلاج بالمضادات الحيوية التي تكون على شكل حبوب بنسبة (٥٢ _ ٧٤،٢ %) .

Introduction

Urinary tract infection (UTI) is defined as the presence of bacteria in urine along with symptoms of infection .[1,2]

UTI is common among girls , (5 %) than boys (1-2%), the Incidence of UTI in infants ranges from approximately (0.1 – 1.0 %) in all new born infant .[3,4]

Infection of the urinary tract before age of one years occurs more frequently in boys than in girls , after that age both bacteriuria and UTI are more common in girls [5,6]

For girls over 7 years of age with no systemic signs , treatment with oral antibiotics should be carried out for (7,8,9,10)days . diagnostic imaging in these

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patients is not necessary with the first UTI but may be indicated in cases of recurent UTI . [7]

The clinical presentation of UTI is variable ,in a child with so called (a symptomatic) bacteriuria [8,9] see Table (1).

Signs + symptans of urinay tract infection in children *:-*

1- urinay traction fection signs + symptans

Dysuria
Freqency
Haematuria
Abdaminal / suprapubic pam
Enuresis
Dribbling

2- systemic signs and symptams

Fever
Vamiting / diarrhea
Flank / back pain

Any condition that leads to urinary stasis (renalcalculi , obstructiveuropathy , vesico – uretericreflux and voiding disorders) may predespose to the development of UTI in children as in .[10,11].

The usual (rate) of infection is presumed to be haemategenous , later on in life infection is usually caused by traveling of bacteria to the urinary tract [12].

Aim of the Study

1- To detect the commonest age group affected by UTI among primary school girls .
2- To find out the causative organism and the clinical presentation of UTI among them .

Methods

Questionnaire was made containing the Name , age , school , signs and symptoms that the girl may complain from , and other important things listed at the end at the study .

The girls who are suspected to have UTI , were studied further and clinical examination done including blood pressure abdominal exam to exclude tender or palpable kidney or mass .

Mid stream sample of urine was taken for culture to confirm the diagnosis , The samples were collected and the results obtained together with the questionnaire and many tables and numbers results and studied .

Urine culture was made for more sever cases to exclude the type of bacteria .IN AZADI- HOSPITAL by using (Maccinges-ager)

Results and Discussion

Urinary tract infections (UTI) are among the most common bacterial infections encountered by primary care physicians , although (UTI) does occur with as great frequency in children as in adults . [13,14] . They can be a source of significant morbidity in children .

Table -1- The Presence Of UTI Among The Sample According to the Age Group .

Age	Number	Percentage
6.8	18	18 %
8.10	70	70 %
10.12	12	12 %
Total	**100**	**100 %**

The commonest age group who suffer from UTI is between(8 – 10) year (70 %) as shown in Table -1- .

This is acceptable with the report done by (hobeman 1999) .[15,16] .

UTI incidence of school age children is 1-2 % while the age between (7 – 11) years is 2-5 % , (8 – 4 %) of girls and 1-7 % of boys have suffered at least one episodes . [17] .

Table - 2- causative organism according to the urine culture

Organism	Number	%
E - coli	**30**	**42.8 %**
streptcoccus	**22**	**31.4 %**
Staphlococcus	**13**	**18.5 %**
Klebsilla and other	**5**	**7.3 %**
Total	**70**	**100 %**

Table -2- shows that the causative organism is mainly due to E- coli ,(30 – 42.8 %) E-coli is the most common infecting pathogen in children .[18]

In older children and adults infection most often starts from early age in small children still using diapers stool (which is largely bacteria) and how can sit for some time right at the meatus , the longer it sits there , the more likely it is that bacteria may enter the urethra . also girls urethra are so much shorter and on the other hand girls may become prone to UTI through wiping back to front when they first go to toilet . [18] .

Table - 3 - Signs and Symptoms In The Affected Sample …

Symptoms	Number	%
Burning Micturation	34	48.5 %
Loin pain, fever	14	20.0 %
Bloody urine	12	17.1 %

Nausea and vomiting	10	14.4 %
Total	**70**	**100 %**

Table - 4 - Responding Treatment Amang The Sample …

Drng	Number	%
Tablet (Metheprim)	52	74.2 %
Capsules (Ampcillen)	11	15.8 %
Injection (Garmaycin)	7	10 %
Total	70	100%

Once we diagnose UTI , Antibiotics should be started , and Table (4) shows that most of the girl respond to the metheprem (52 – 74.2 %) the others respond to capsules (like Amoxcill or Ampcillen) , (11–15.8%) .We start Antibiotics right after we get the urine culture , and again shortly after the Antibiotics are finished urine analysis is made to make sure we eradicate all infection [19,20].

Conclusion

1- UTI most commonly occurs in children between age of (8 – 10) years of age .
2- The commonest organism is E – Coli .
3- Most girls complain of burning micturation and respond to oral antibiotic therapy .

Recommendations

1- Good hygiene including wiping after urinatian in girl .
2- Avoidance and correction of consptiation .
3- Avoidance of chemical irritants and tight clothing might be recommended
4- Health education about the symptoms and way of transmission of urinary tract infection through television and films .
5- More health services through hospital and health centers by providing a good investigation and follow up,

(Questionnaire)

Name
Age
Social status :-
Time of onset of the disease :-
Any complain of :- Abdominal pain *yes* *no*
Burning micturation *yes* *no*
Vomiting and nausea
Bloody urine
Fever
Generalized weakness
Other symptom

Previous hospitalization *yes* *NO*

Management and treatment

Injection *yes* *No*

Capsules

Tablets

Clinical Examination :-Tempreture .

Blood pressure mmhg

Pulse rate

Abdominal exam for

Tenderness

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