

PREVALENCE OF UTI IN FEBRILE CHILDREN UNDER 2 YEARS***Dr.Yasir Abdulelah Mahmood**

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BACKGROUND

UTI should be considered in any child under 2 years of age or younger who has unexplained fever. Non specific clinical presentation of UTI is common in young children. In boys, most UTIs occur during the 1st year of life, UTIs are much more common in uncircumcised boys. Beyond 1-2 years, there is striking female preponderance, E coli is the most common pathogen. A UTI may be suspected based on symptoms or findings on urinalysis, but a urine culture is necessary for confirmation and appropriate therapy.

Aims of the study

1. To determine the prevalence of UTI in febrile children under 2 years old.
2. To determine the effect of breast feeding on UTI. Prevalence.
3. To determine the effect of circumcision on UTI. Prevalence.

PATIENTS AND METHODS (METHODOLOGY)

A cross sectional study was done to determine the prevalence of UTI in febrile children under 2 years old who presented to the emergency department and pediatric wards of Alkhansa Teaching Hospital during the period from the first of April 2010 to the first of November 2010, all patients were randomly chosen, There were 600 patient included in our study 315 (52.5%) of them were girls and 285 (47.5%) of them were boys, there were 282 patients under 1 year (Girls=140, boys =142), and 318 of patients between 1-2 years of age (Girls =175, boys =143), first of all taking good history and examination and send the patients to GUE, then those with positive findings in GUE (pyuria, bacteruria or both) send them for urine culture. children were included in the study if have possible cause of fever such as Gastroenteritis or URTI and were excluded from study if have definite source of fever (such as meningitis, pneumonia and septic arthritis) then children with proved UTI send them for Ultrasonography of abdomen.

RESULTS

There were 600 patients included in our study 315 (52.5%) of them were girls and 285 (47.5%) of them were boys, with boy to girl ratio was (0.9/1) there were 34 positive results, overall prevalence in our study sample were (5.7%), girls were 21(61.8%) and boys were 13 (38.2%), 11 patient (84.6%) of boys were uncircumcised, the overall prevalence were more

common in girls (girl to boy ratio was 1.6/1), but it did not reach statistical level of significance.

The prevalence was more in girls in the second year of life whereas the prevalence in boys were more than double of that in girls in the first year of life. there were 438 patient had possible cause of fever such as URTI (240 patient) and Gastroenteritis (198 patients) and those with specific signs and symptoms (non identified cause of fever) were 162, but still the prevalence of UTI is more common among those with non identified cause of fever (8%) (13/162) as compared with those with possible cause of fever (4.8%) (21/438). while the type of possible cause of fever is not significant although higher percentage of children (6.6%) (13/198) were presented with Gastroenteritis than those with URTI (3.3%) (8/240). most of the patients had non specific signs or symptoms such as vomiting (50%) (17/34), diarrhea (44.1%) (15/34), poor feeding (35.2%) (12/34) constipation (8.8%) (3/34) and failure to thrive (5.9%) (2/34).

The specific signs or symptoms related to UTI such as: crying on micturition (11.8%) (4/34), frequency (5.9) (2/34), suprapubic tenderness on examination (8.8%) (3/34), and red color urine (2.9%) (1/34), the prevalence of UTI according to type of feeding: bottle feeding (73.5%) (25/34), mixed bottle and breastfeeding (20.6%) (7/34), Breastfeeding (5.9%) (2/34).

The predominant pathogen was E. coli (67.7%) (23/34), followed in frequency by Klebsiella (14.7%) (5/34), proteus (8.8%) (3/34), Enterococcus spp. (5.9%) (2/34), Citrobacter spp. (2.9%) (1/34).

CONCLUSIONS

UTI. Is prevalent in febrile children without a definite source of fever. UTI. Is more common in boys among

febrile children less than 1 year old especially those who are uncircumcised, whereas it is more common in girls who are more than 1 year old. UTI. is more prevalent in young children with bottle feeding.