

ABSTRACT

The aim of our study is to find out prevalence of asymptomatic bacteriuria in pregnant women. This study also helps to find out the most common organism involved, the antibiotic susceptibility, and risk factors associated with asymptomatic bacteriuria.

Method:

Over an year, urine samples were collected from 121 pregnant women with varying gestational periods attending the antenatal clinic first visit. A clean catch mid stream urine specimens were collected in a sterile container and processed within one hour. In case of delay, the samples were refrigerated at 4°C. Screening tests such as wet mount, gram staining, hanging drop test were done. Culture of urine samples were done by a semiquantitative method, Nutrient agar, Blood agar, MacConkey agar and cystine lactose electrolyte deficient medium (CLED) agar plates and incubated at 37°C for 24 hours. Significant bacteriuria with $>10^5$ CFU/ml of urine was confirmed by colony count. Organisms were identified and antibiotic sensitivity test of the isolates were performed.

Results

Out of the total number of 121 pregnant women included in our study, 22(18.18%) patients were identified by culture to have significant bacteriuria. Maximum numbers of patients belong to the age group (20-30 years) and

highest percentage of significant bacteriuria (50%) was identified in the same age group. This study shows high percentage of asymptomatic bacteriuria in 2nd (45.45%) trimester and in primigravidas (63.64%). The percentages of positives with significant bacteriuria were high among the upper lower socio-economic group (36.36%). E. coli (50%) was the most common organism followed by K. pneumonia and Staphylococcus saprophyticus (13.64%). Prevalence of Gram-negative organism was 72.73%. The drug sensitivity revealed that 81.81% of isolates were sensitive to Amikacin followed by Cephalexin (68.18%). 77.27% of patient had previous history of UIT before one yr and was treated. Past history of catheterizaion and anemia was present in 68.18% of patient. Highest number of positive culture in patient with BMI >30 kg/m² (40.91%).

Conclusion:

Prompt treatment of ASB early in pregnancy significantly reduces the chances of adverse pregnancy outcome.

Thus, screening for ASB should ideally be done in all pregnant in the 1st trimester, and should be treated aggressively with suitable antibiotics and promptly followed up.

Key Words: Asymptomatic bacteriuria; UTI in pregnancy; Pyelonephritis; preterm labor; uro-pathogens.