ASYMPTOMATIC BACTERIURIA OF PREGNANCY IN RIPAS HOSPITAL, BRUNEI DARUSSALAM

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Background:
Asymptomatic bacteriuria is a condition in which urine culture reveals a significant growth of pathogenic bacteria that is greater than $10^6$ of colony-forming units per millilitre (cfu/mL) of urine without the patients having any clinical symptoms of urinary tract infections (UTI). Studies have shown that asymptomatic bacteriuria in pregnancy has a direct bearing not only on the health of the pregnant woman, but also on that of the foetus. Thus, this study aimed to determine the prevalence of asymptomatic bacteriuria of pregnancy at the RIPAS Hospital, Brunei Darussalam’s premier hospital.

Material & Methods:
A total of 170 pregnant women attending for antenatal clinic at the Department of Obstetrics and Gynaecology at the RIPAS Hospital who did not have signs and symptoms of UTI volunteered to take part in this study. After the procedure of the study was explained to them they were asked to produce clean-catch midstream urine specimens in chemically clean sterile universal bottles. The specimens were processed for microscopy, culture and sensitivity (mcs) following standard laboratory diagnostic procedures.

Results:
Of the 170 pregnant women participants in the study, urine specimens from seven of them met the criteria for the diagnosis of asymptomatic bacteriuria, suggesting a prevalence of 4.1% in the sampled population. The organisms isolated were Klebsiella species (71.4%) and Escherichia coli (28.6%) both of which were sensitive to amoxicillin, vancomycin, tetracycline and erythromycin.

Conclusion:
The prevalence of asymptomatic bacteriuria in our study population compares with those reported in neighbouring ASEAN countries but further studies involving more pregnant women across the four Health Districts in Brunei Darussalam are needed. In the meantime, the findings of this study strongly suggest that routine screening for asymptomatic bacteriuria in pregnancy be considered an essential part of antenatal care in Brunei Darussalam.

Keywords:
Asymptomatic bacteriuria, antenatal care, pregnancy, routine screening, Klebsiella species, Escherichia coli