

OP17

RECURRENT URINARY TRACT INFECTIONS IN PREGNANCY & THE MATERNAL MICROBIOME; MYSTERY UNRESOLVED

F. Altaf

Objective

The purpose of the review is to study about the different aspects and complexities of recurrent urinary tract infections (UTIs) occurring during pregnancy. An effort has been made to study the effect of maternal microbiome, causation, pathophysiology, and various treatment modalities. Data sources Key search was carried out using MEDLINE and Cochrane Library. Searches performed utilized the key search terms such as urinary tract infection, pregnancy, pyelonephritis, asymptomatic bacteriuria.

Study selection and data extraction

All article abstracts including clinical articles and reviews were evaluated for relevance. Articles pertaining to pregnancy were included. Data synthesis In females, one in three women up to the age of 24 years suffer an episode of uncomplicated urinary tract infection (UTI). *Escherichia coli* is the most common causative organism. Recurrent infections (RUTI) are mainly caused by reinfection by the same pathogen. RUTI are common in women who are pregnant and may cause serious adverse pregnancy outcomes for both mother and child including preterm birth and small-for-gestational-age babies. RUTIs are defined as two episodes of acute bacterial cystitis, along with associated symptoms within the last six months or three episodes within the last year. Research has shown a relationship between the gut microbiome and immunological modulation in patients with recurrent UTI.

Conclusion

Urinary tract infection is one of the diagnoses that is not fully understood, and it has substantial medical and financial implications. There is an urgent need to understand the pathophysiology of UTI and its recurrence. Interventions used to prevent RUTI in pregnancy can be pharmacological or non-pharmacological. So far little is known about the best way to prevent RUTI in pregnant women. Antibiotics may contribute towards recurrence as they disrupt the microbiome. Keywords; Recurrent UTI, pregnancy, maternal microbiome, antibiotics

References

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