CO-INFECTION OF VAGINAL UREAPLASMA UREALYTICUM AND MYCOPLASMA HOMINIS INCREASES ADVERSE PREGNANCY OUTCOME IN PATIENTS WITH PRETERM LABOR OR PRETERM PREMATURE RUPTURE OF MEMBRANES

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Objective: The purpose of this study was to determine the prevalence and antimicrobial susceptibilities of Ureaplasma urealyticum (UU) and Mycoplasma hominis (MH) in patients with preterm labor or preterm premature rupture of membranes (PPROM) and evaluate the relationships between genital mycoplasmas on colonization density and adverse pregnancy outcomes.

Methods: The study group consisted of 179 women with preterm labor or PPROM. Vaginal cultures for UU and MH were taken for all the patients at admission and histology of the placentas were evaluated after delivery. The culture results were divided into three groups; no colonization, low density colonization (<10,000 CFU/mL) and high density colonization (≥10,000 CFU/mL).

Results: The prevalence of positive vaginal fluid culture for genital mycoplasma was 62.5%(112/179); this group included 99 patients carrying only UU, no patients carrying only MH and 13 carrying both organisms. Low Apgar score and histologic chorioamnionitis were significantly increased in patients with high density colonization of UU. Compared to only UU positive patients, gestational age at birth and birth weight were significantly decreased and preterm birth, low Apgar score and NICU admission were significantly increased in the patients with both organisms. Susceptibilities of UU to erythromycin and clarithromycin were 78% and 92%, while susceptibilities of mixed isolates were 46% and 62%, respectively.

Conclusion: Vaginal MH tends to be detected with UU and the patients carrying both organisms simultaneously had more severe adverse pregnancy outcomes compared to only UU positive patients in preterm labor or PPROM.