

## Evaluation of relation between *Ureaplasma Urealyticum* infection with abortion

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### Abstract

Since long time ago, abortion has been considered as one of the most important medical problems. Bacteria and infectious agents are one of its causes. Possible etiologic role of *ureaplasma urealyticum* in abortion has been suggested for years ago, but it has not been approved completely yet. Therefore, this study has been designed for approving of this hypothesis and prevention of spontaneous abortion. This study was a case control type of investigation done over women referred to private Gyn & Obs clinic, which had spontaneous abortion. Control group was selected among referred women who did not have any previous abortion. To investigate the presence of *ureaplasma urealyticum*, vaginal and cervical culture was performed in both groups. Other interfering variable factors were also assessed and if there was any intervention factor in any one of two groups, sample was removed. After recording of results of study in questionnaire, central indexes were analyzed by  $K^2$ , fisher exact test. 7 persons were eliminated from this study due to intervention factors, so, study was done over 34 patients as case (27 with one abortion and 7 with recurrent abortion) and 47 patients as control group. Mean age in case group was  $26.3 \pm 4.6$  years and in control group was  $23.4 \pm 3.6$  years. Positive vaginal and cervical culture for *ureaplasma urealyticum* in case group was 35% (12 persons) and in control group was 6% (3 persons) ( $P < 0.0001$ ). In patients with spontaneous recurrent abortion, positive culture for *ureaplasma urealyticum* was 71% (5 persons) and in patients with only one spontaneous abortion was 26% (7 persons) ( $P < 0.034$ ).

In comparison with similar studies, positive culture of *ureaplasma urealyticum* in patients of case group were a lot more in this study. Prevalence of *ureaplasma urealyticum* in control group was 6% which is less than similar studies. Proportion of positive culture of *ureaplasma urealyticum* in patients with recurrent abortion was higher than those with only one abortion.

Therefore, it is recommended that pregnant women specially those who have high risk pregnancy and also in women with history of abortion, should be examined for contamination with *ureaplasma urealyticum*. In case of positive results, proper treatment will reduce probable recurrent abortions.

**Keywords:** *Ureaplasma urealyticum*, Spontaneous abortion, Recurrent abortion, Infection.

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