Optimal Sampling Source and Time for Wet Mount Detection of *Trichomonas vaginalis* in Cervical Mucus During ART Cycle Evaluation

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Objective: Trichomonas vaginalis (TV) is a sexually transmitted parasitic disease with a global presence. Over a period of two years, 44 couples were assessed for cervical mucous (CM) quality/function as part of their infertility evaluation. Thirteen of 44 couples had TV present in periovulatory CM examination. In one case, TV was seen in fluid aspirated from the uterine cavity. The aim of the study was to evaluate the incidence of TV detection in asymptomatic cases during infertility workup.

Design: Retrospective study. All patients studied were Caucasian with the age range 29 to 39 years. Length of failure to conceive ranged from 1-9 years.

Materials and Methods: Cervical mucus specimens were aspirated from the external cervical os during the patients' periovulatory period. Wet mounts were prepared for microscopic analysis. Uterine fluid specimens were collected if indicated during sonography.

Results: Trichomonas vaginalis trophozoites were always detected in association with white blood cells (WBC) clusters or WBC's/epithelial cell clusters. In some cases, it would take several minutes to find trophozoites. Furthermore, trophozoites were similar in appearance as compared to WBC's and could only be detected by the rhythmic movement of their flagella.

Trichomonas vaginalis was identified in 14 of the women studied, 6 during IUI treatment, 4 as part of a post coital examination, 3 as part of a midcycle mucous examination and in 1 patient following aspiration of fluid in the fundus of the uterus.

All couples testing positive were treated with 2 grams of metronidazole as a one dose treatment. This treatment rendered 13 of 14 couples TV free when CM was evaluated at ovulation in a subsequent cycle. The patient not responding to a single 2 gram dose received 500 mg of metronidazole twice daily for 7 days and subsequently tested negative for TV.

Five of the 14 couples have conceived after the discovery of TV. Four patients conceived following metronidazole and one conceived in the ovulatory cycle when TV was detected. Two pregnancies have delivered healthy infants. One pregnancy is in the third trimester and one is in the first trimester. There was one first trimester spontaneous miscarriage of a tetraploid conceptus.

Conclusions: It is concluded that TV could be present with higher frequency in patients seeking reproductive treatment. It appears that antibiotic treatment enhances the chance for conception in couples so affected.

Disclosures: Nothing to disclose.