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## ABSTRACT

Chlamydia Trachomatis and Abnormal Reproductive Function in the Female  
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Chlamydia trachomatis has been well documented to be an infective pelvic pathogen which causes tubal damage and therefore ectopic pregnancy and infertility. Methods of detection have mainly identified antibody responses or intracytoplasmic inclusion bodies. Chlamydia trachomatis DNA has been detected in fallopian tube tissue but the studies have used mainly archival paraffinized specimens.

In this study, the prevalence of Chlamydia trachomatis in women with ectopic pregnancy and previous spontaneous miscarriage was determined by antibody (IgG and IgM) status and DNA detection using fresh tissues of endometrium, fallopian tubes and ovaries.

One hundred and forty seven women were tested for antibodies and of these, eighty three were also tested for Chlamydia trachomatis DNA using Polymerase Chain Reaction and In situ Hybridization.

A high prevalence rate for Chlamydia trachomatis was noted in control patients when compared with women in developed countries. Both IgG and IgM antibodies were significantly detected in women with ectopic pregnancies when compared with control patients and positive antibody status was also significant for women aged 25 years or less.

Chlamydia trachomatis DNA was more commonly detected in the tissues of women with ectopic pregnancy, particularly within the fallopian tubes and endometrium. For patients with miscarriage, Chlamydia trachomatis DNA detection was not significantly detected at any level, including the endometrium.

These findings give support to the major role by prior and new Chlamydia trachomatis infection in PID/STD and subsequent tubal pathology. The demonstration of the organism at all levels of the upper genital tract using fresh tissues should provide justification for the direction of resources towards Chlamydia screening programmes.

**Keywords:** Samuel S. Ramsewak; Chlamydia trachomatis; ectopic pregnancy; miscarriage; DNA techniques.