

# CERVICO-VAGINITIS WITH INFERTILITY

### **ESSAY**

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By

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# INTRODUCTION AND AIM OF THE WORK

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Reproductive and genital tract infections are wide spread in the third world due to biochemical, behavioral and social factors. Without early diagnosis and accurate therapy, their complications severely compromise women's health, fertility and productivity (Wasserheit, 1989).

In 80% of patients with clinical symptoms of colpitis and cervicitis, culture of the cervical secretions showed pathogenic bacteria. Inflammation is proved to impair the normal function of the cervical mucosa and if it will lasting for a long time, it can lead to irreversible changes (Similjanic et al., 1980).

Cervico-vaginal infections e.g. Chlamydia trachomates, Mycoplasma hominis, Ureaplasma urealyticum, Gonococci and other infections were studied by many authors as a cause of infertility (Arya et al., 1980, Gump et al., 1984 and Carol et al., 1990).

# AIM OF THE WORK

The study of cervical and vaginal infections in relation to infertility with emphasis on the new methods for their diagnosis.

# REVIEW OF THE LITERATURE

# THE PROBLEM OF HUMAN FERTILITY

That which is not yet living awakes to life. That which already lives generates life; that was but part of a living organism is given life.

"Hippocrates"

One of the principle processes of life is reproduction, without which, there would be no existence of any kind, simple or complex, plant or animal. The basic biologic urge assures survival of the species (Sielger, 1986).

Among the simpler classes of the animal kingdom, fecundity being almost universal, species survival is largely dependent upon the "survival of the fittest". However, as the classes become more complex, and the processes of living more specialized, survival of the species depends not so much upon being the "fittest" as upon the proper and efficient coordination of the intricate mechanism of reproduction and its complex psychologic and economic elements. The reproductive process of man is indeed complicated in comparison to other species (Friberg, 1980).

Levels of infertility may be influenced by differ ence in prevalence of sexual transmitted diseases, access to adequate health care for sexually transmitted diseases, abortion and child birth affecting levels of disease transmission. Secondary infertility is especially decreased by access to adequate obstetric health care and may be 2 or 3 times as prevalent as primary infertility in some developing regions.

Environmental factors as chemical toxins, nutrition and genetically determined factors also affect the levels of infertility (Hatcher et al., 1989).

The following definitions for fertility are adopted from the World Health Organization:

<u>Primary infertility</u>: The couple has never conceived despite unprotected intercourse for at least 12 months.

Secondary infertility: The couple has previously conceived but is subsequently unable to conceive within 12 months despite exposure to unprotected intercourse (Hatcher et al., 1989).

<u>Sterility</u>: Should be used only if no therapy can correct the defect [for example: congenital absence of the uterus and ovaries, azoospermia] (Mosher, 1982).

<u>Pregnancy wasting</u>: The woman is able to conceive but unable to produce a live birth [unable to carry the fetus to a viable age] (Hatcher et al., 1989).

### ETIOLOGY OF INFERTILITY:

There is no uniformity of opinions about the proportion of various factors to which infertility is attributed. Substantial reduction in sperm numbers or motility including azoospermia occurs in up to 30% of infertile unions. Disorders of ovulation accounts for another 20-30% of cases while tubal disease may be present in between 15-30% of the couples. Endometriosis is found in about 10-15% of women. Cervical factors including immunological incompatibility is present in about 5% (Rodney and Shearman, 1989).

In many couples, more than one factor may be operative. On the other hand, in a substantial minority of couples, somewhere between 4% and 10%, complete investigation shows no reason for their infertility (Rodney and Shearman, 1989).

### EVALUATION OF INFERTILITY:

The diagnostic evaluation of infertility should be thorough and complete as rapidly as possible. At the initial interview, all the tests available and the reasons they are performed should be explained to patients. The available therapies and the prognosis for the various factors of infertility should also be discussed. The patients should know that after a complete diagnostic infertility evaluation, in about 10% of cases the etiology for infertility still cannot be defined. However, they should also be told that only a few years ago this was true for 30% of infertile couples. If medical science continues to advance, it may soon be possible to determine the cause of all infertility. Patients should be assured that as new diagnostic tests are developed, it is the physician's responsibility to make the new advances available (Kliger, 1982).

Infertile men and women who have had a symptomatic genital infection are likely candidates to have some damage to their reproductive tract. Thus, evaluation for tubal damage should be performed early in the infertility workup of a woman with a history of hospitalization for salpingitis.

Concern must be taken about infections that could cause obstruction of, or functional damage to the male of female reproductive tract without producing symptoms. Other infections could interfere with sperm transport in the lower female tract or impair the functional properties of spermatozoa (Bernstein, 1989).

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