A CYTOLOGIC, COLPOSCOPIC AND PATHOLOGIC STUDY OF THE LOWER GENITAL TRACT DURING PREGNANCY

THESIS

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By

Dr. OSMAN TAHA DONIA
M.B., B.Ch., M.Sc.

Professor KAMAL F. ABDEL KADER
Professor and Head of the Department of Obstetrics and Gynaecology, Benha Faculty of Medicine.

Professor AHMED EL-TAWIL
Professor of Pathology, Department of Pathology, Ain Shams Faculty of Medicine.

Professor MOHAMMED B. SAMMOUR
Professor, Director of Cyto-Diagnostic Unit, Department of Obstetrics and Gynaecology, Ain Shams Faculty of Medicine.

Dr. MOHSEN KHAIRY
Assistant Professor of Obstetrics and Gynaecology, Benha Faculty of Medicine.

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INTRODUCTION

During pregnancy there is increased vascularity and oedema of the lower genital tract. The cervix shows hyperplasia of its glands and microscopically there is prominence of the basal cells near the squamo-columnar junction (Pritchard and MacDonald, 1976).

In a colposcopic study made by Kiguchi and Suda (1984), it was found that the development of metaplastic squamous epithelium is more likely to occur in the 3rd trimester, with a difference in its development between primigravidae and multigravidae.

During pregnancy, the cervix becomes everted, especially in the primigravida, exposing the transformation zone where premalignancy and malignancy develop and the endocervical limit of this zone can be examined colposcopically in almost all patients (Duncan, 1981). As the majority of the patients with precancerous lesions of the cervix now fall into the childbearing age group, pregnancy provides a suitable occasion to examine them (McDonnell et al., 1981). Shingleton and Orr (1983) emphasized that the routine use of cytological and colposcopical screening during antenatal care has been responsible for increasing the number of patients with early stages of cervical neoplasia.

Moreover, Larsen and Galask (1980), concluded that the pregnant women may certainly harbor organisms of significant virulence in her cervical and vaginal flora. Candida albicans is harbored in the vagina in about one third of pregnant women (Novak et al., 1975). It may cause serious maternal complications
as disseminated maternal candidiasis (Mead, 1974). It also may cause congenital candidiasis of the foetus (Johnson et al., 1981). Trichomonas infection was reported in 20 to 30% of pregnant women (Niswander, 1980). T.V. has recently been claimed as a cause of pre-term labour (Editorial, Obstet. Gynecol. Survey, 1980) and baby girls born to infected mothers may acquire the infection during passage through the birth canal (Al-Salihi et al., 1974). Gardnerella vaginalis was reported in 21.2% of pregnant women (Lewis et al., 1971). Gardnerella vaginalis during pregnancy was found to be associated with abortions, amnionitis and endomyometritis after caesarean section or difficult vaginal delivery (Reimer and Reller, 1984). Neonatal infection with Gardnerella vaginalis may also occur and present as septicaemia, respiratory distress and jaundice. Chlamydia trachomatis was detected in 4% of the pregnant women (Schachter, 1978). Chlamydial infection during pregnancy was found to be associated with postpartum sepsis and low birthweight infants (Naib, 1970). Herpes simplex virus (HSV) was reported in 1% of pregnant women (Naib et al., 1970) and few cases of disseminated HSV was reported in pregnancy by Kobermann et al. (1980). The biggest worry about HSV infection in pregnancy is, however, the risk of neonatal herpes which is a fatal disease (Bingham, 1984).

In a study made by Garry and Jones (1984), 2 forms of condylomata were observed in the lower genital tract of women. One type is erythrocondyloma which looks red before the application of acetic acid and this was found to be associated with pregnancy in
80% of cases and that it often involuted after delivery. The other type is the leukocondyloma which looks white before acetic acid and this is usually not associated with pregnancy. Genital warts often increase in size during pregnancy and may obstruct labour (Bingham, 1984). It would seem that a definite relationship has been established between children with laryngeal papillomas and mothers with genital warts (Quick et al., 1980).

Therefore, it is obvious that the diagnosis and management of the above mentioned specific infections during pregnancy is extremely important.