

**CARCINOEMBRYONIC ANTIGEN PATTERN
IN HUMAN PAPILLOMA VIRUS INFECTIONS
OF THE FEMALE LOWER GENITAL TRACT**

Thesis
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by

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بسم الله الرحمن الرحيم

« وما أوتيتم من العلم إلا قليلا »

صدق الله العظيم

(سورة الإسراء آية ٨٥)



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ABBREVIATIONS

Biliary glycoprotein	(BGP)
Calcium	Ca ⁺⁺
Carcinoembryonic Antigen	(CEA)
Cervico - vaginal	C-V
Deoxyribo Nucleic Acid	(DNA)
Dinitrochlorobenzene	(DNCB)
5- Flurouracil	(5- Fu)
Human Papilloma Virus	(H.P.V.)
Kilodalton	(K.D)
Large Loop Excision of The Transformation Zone	(L.L.E.T.Z)
Milliliters	(ml)
Nanogram	(ng)
Non-specific Cross - reacting Antigen	(NCA)
Pregnancy Specific -b Glycoprotein	(P.S.G.)

INTRODUCTION

INTRODUCTION

In the last 12 years knowledge of human papilloma virus (HPV) infection has expanded at a breath taking pace . This is due to fortuitous progress and interplay of several branches of the natural sciences and medicine including virology , molecular biology , biochemistry , immunology and pathology (*Krebs , 1989*).

HPV has a prevalence of 10 -35 % and a transmission rate of 85% (*Schneider et al. , 1992*) .

The spectrum of HPV - related clinical manifestations ranges from inapparent to overt lesions and include both benign and malignant conditions (*Nuovo et al. , 1990*) .

Approximately 90 % of invasive carcinomas of the uterine cervix contain HPV - DNA , predominantly types 16 and 18 . (*Lorinez et al. , 1992*) .

The very large number of HPV infections and the suboptimal screening for cancer precursors in many countries account for

the fact that approximately 20% of all cancer deaths in women world - wide are from HPV associated cancers (*Krebs, 1989*).

The need for widespread screening methods and improvements on treatment of lesions associated with papilloma virus is obvious (*Krebs, 1989*), specially those with oncogenic potential (*Reid, 1987*).

Carcinoembryonic antigen (CEA) was first discovered by Phil Gold and Samuel Freedman in 1965. The impact of this finding in the area of cancer research has been profound (*Hammerström et al., 1990*).

Klavins et al. (1985) described elevated plasma levels of CEA in various neoplastic diseases as in breast cancer, colorectal carcinoma, lung carcinoma and various gynaecological malignancies.

Lower serum CEA elevations were in a group of non neoplastic conditions e.g. bowel disease, liver diseases, hypertension and in healthy smokers (*Stockley et al., 1986*).

The increasing occurrence of CEA from premalignant lesions

to advancing malignant growth suggests that CEA elevation may reflect an aggressive potential in premalignant lesions (*Lindgren et al , 1979*) .

Membranous CEA expression is a marker of differentiation in squamous carcinomas and may influence tumour behaviour and hence patient survival (*Sanders et al , 1993*).

AIM OF THE STUDY

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The aim is to investigate the role of carcino-embryonic antigen in the assessment of patients with human papilloma virus infections of the lower genital tract .

REVIEW OF LITERATURE