

ORIGINAL ARTICLE

Study of cap pap versus conventional pap in suspicious cervical lesions

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ABSTRACT

BACKGROUND: CAP Pap test is a new test developed as an adjunct to routine PAP to improve its sensitivity. This test combines a simple biochemical test of enzyme labelling with conventional Pap Test in which abnormal squamous cells of the cervix are labelled for the presence of the Lysosomal enzyme, cervical acid phosphatase (CAP).^{8,9,10} **Objectives:** 1. To establish the sensitivity of new test CAP PAP in cervical carcinoma screening. 2. To assess the utility of CAP PAP as an adjunct to routine PAP. **MATERIAL AND METHODS:** The study comprised of 100 females who were randomly selected. Two smears of each patient were examined by panel of four experts independently and reported. The study was a single centric, random assignment, blinded, 2-group (test and control), and split-sample design to assess safety and efficacy of the new test in comparison with the control for cervical cancer screening in standard Pap test environment. Cervical biopsy was the Gold standard test for the present study. This data was compared and the sensitivity and specificity of the test was noted. **RESULT:** CAP PAP showed greater sensitivity(100%) as compared to Pap test(75%), while specificity(97.2%) is little lesser than Pap(100%). **CONCLUSION:** The CAP-PAP Test is a simple diagnostic tool which can be used with routine Pap staining on the same slide adding to the accuracy of routine Pap. This Test could be the future of cervical carcinoma screening.

Keyword: Cervical Carcinoma, Screening, sensitivity

INTRODUCTION

Cervical cancer ranks as the most common cancer among women in India, and most frequent cancer among women between 15 and 44 years of age. About 7.9% of women in the general population are estimated to harbor cervical HPV infection at a given time, and 82.5% of invasive cervical cancers are attributed to HPV16 or 18.¹ Cervical carcinoma is the only cancer which documents the remarkable effects of screening, in early diagnosis and curative therapy on mortality rates. Much credit to this gain belongs to the effectiveness of Pap smear in detecting cervical precancerous lesions and accessibility of the cervix to colposcopy and biopsy.² Despite the fact that more than 80% of cervical cancer cases are in developing countries, only 5% of women there have ever been screened for cervical abnormalities.³ Application of Pap test has resulted in a

dramatic reduction of both mortality and morbidity in the countries it was first introduced. The multi-centric study in India evaluated the accuracy of conventional cytology. The sensitivity of the cytology for detection of high-grade lesions was 57%.⁴ Despite the high burden of disease and the increasing absolute number of cases due to population growth, there are no organized screening programs for cervical cancer prevention anywhere in India.⁵

To improve the detection of precancerous cervical lesions using Pap smear screening, a number of adjunctive tests have been developed including thin layer cytology;⁶ use of magnified chemiluminescent screening examination (speculoscopy) combined with Pap smear (Papsure);⁷ However, limited by their prohibitive cost factor and unavailability beyond few tertiary care referral centres, these newer technologies have no role in large scale screening programs of developing countries

Some new researchers have proposed a cheap and simple test, viz., cervical acid phosphatase – Pap an icolaou test (CAP-PAP Test; Mark Pap Test) as an adjunct to routine Pap. In this test abnormal

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