

## Comparison of Molecular (PCR) and Pap Smear Methods in Diagnosis of Human Papiloma Virus (HPV) in Women with Genital Warts

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Received: 4 Aug 2012

Revised: 4 Dec 2012

Accepted: 10 Dec 2012

### Abstract

**Background and Objective:** Much research has shown that Human Papiloma Virus (HPV) plays an important role in cervix cancer and it is the cause of 99% of cervix cancer worldwide. Lots of research has been done to find a proper method for HPV diagnosis and screening in patients with genital warts. This study aimed at comparing PCR method with Pap smear test in HPV screening.

**Material and Methods:** Considering the presence of DNA of HPV, 45 vaginal and cervix swap samples of women with genital warts were tested by means of specific PCR and Pap smear from September 2010 to April 2011.

**Results:** Out of 45 vaginal and cervix swap samples of women suffering genital warts, 37 samples (82.2%) are positive. Of 45 Pap smear samples, 13 (29%) are neoplasia and 32 (71%) normal.

**Conclusion:** The difference between the results of PCR and Pap smear is due to low specification and sensitivity of Pap smear. Thus it is recommended using diagnostic PCR method in addition to Pap smear in order to promote the quality of screening in individuals with genital warts.

**Keywords:** Human Papiloma Virus (HPV); Genital Warts; Molecular (PCR); Pap Smear