

SUMMARY

Studies in other countries have shown a strong association between Human Papillomavirus (HPV) types 16 and 18 and squamous carcinoma of the cervix. However, no studies have been done to show how strong the link is, in cancer of the cervix in Sri Lankan women. Therefore, the objective of the present study was to determine the incidence of HPV types 16 and 18 in squamous carcinoma of the cervix.

Material and methods

The study group consisted of fifty three patients from the Cancer Institute, Maharagama who had histologically diagnosed squamous carcinoma of the cervix. A clinical history sheet was filled out on all of them.

Cervical biopsies from the first fifteen of these fifty three patients and from fifteen age matched patients who were investigated for other gynaecological problems but who had histologically normal cervixes were used for studies on human papillomaviruses.

Polymerase Chain Reaction

DNA was extracted from paraffin embedded biopsies from fifteen of the fifty three patients and all controls. Polymerase chain reaction was performed on extracted DNA employing primers specific for HPV 16 and 18 DNA.

Results

HPV 16 DNA was detected in 11 out of 15 (73.3%) cervical cancer biopsies, in comparison with 3 out of 15 (20%) controls ($p < 0.01$). HPV 18 was detected in 3 out of 15 (20%) cervical cancer biopsies but not in a single control biopsy.

Patients with cervical cancer had begun sexual activity earlier and had had more pregnancies than women in the general population.

Conclusions

Although the study was limited to a small number of cases, the results are suggestive that there is a strong association between HPV 16 and squamous carcinoma of the cervix.