A STUDY OF DNA METHYLATION PATTERN IN PROMOTOR REGION OF p16, p15 & E CADHERIN GENES FROM CERVICAL SCRAPINGS

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OBJECTIVES

1. Screening suitability of cervical scrapings for promoter region methylation of p15, p16, e-cadherin genes as early markers of neoplasia
2. Comparison of methylation pattern in neoplasia and normal cervix
3. Correlation of methylation pattern with cytomorphological findings in papanicoalou stain

METHODOLOGY

20 cases and 30 controls were selected from Gynaecology OPD. Samples collected: cervical smear, cervical brushing. Work flow: collection of cervical scrapings → Kit based DNA extraction → Bisulphite modification → MPS PCR for three genes → gel electrophoresis → gel documentation with UV transilluminator

RESULTS

Biopsy reports of nine out of twenty cases were available and rest of the cases were lost to follow up. Out of the nine biopsy reports available: 04 cases were large cell keratinizing squamous cell carcinoma, 03 were large cell non keratinizing SCC, 01 case of moderately differentiated adenocarcinoma and 01 case of CIN II

CONCLUSION

Testing cervical scrapings for cancer by molecular marker based assays is likely to cause false negatives, especially due to sampling errors.