

## 73. STUDY ON ABNORMAL CERVICAL CYTOLOGY IN WOMEN UNDERGOING IN-VITRO FERTILIZATION AND EMBRYO TRANSFER

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### INTRODUCTION

Cervical cytology screening is routinely performed in women undergoing in-vitro fertilization and embryo transfer (IVF and ET). This study was performed to assess the abnormal cervical cytology in women undergoing IVF and ET.

### MATERIALS AND METHODS

This retrospective cross sectional study was performed at a tertiary care reproductive health centre in Colombo. Cervical smears were taken from 168 women undergoing IVF and ET from 2004 January to 2007 June. Cervical cytology diagnosis was made

according to the Guideline for cervical cytology screening and reporting in Sri Lanka 2006. The results were analyzed using Statistical Package for Social Sciences (SPSS) for windows version 15.0.

## RESULTS

Among participants ( $35.7 \pm 5.2$  years of age) 74.0% had primary subfertility ( $n=120/162$ ) and 25.9% had secondary subfertility ( $n=42/162$ ). Mean duration of infertility was 63.5 months,  $SD \pm 42.0$ . The causes of infertility were male factor (22.6%,  $n=38$ ); tubal (26.1%,  $n=44$ ), endometriosis (24.4%,  $n=41$ ), anovulation (15.4%,  $n=26$ ) and unexplained (8.9%,  $n=15$ ).

Cervical cytology was negative for intraepithelial lesion or malignancy (NILM) in 98.2% of women ( $n=165$ ). Among them inflammatory smear was seen in 22.4% ( $n=37/165$ ) and atrophy was seen in 1.2% ( $n=2/165$ ). Cervical cytology showed low grade squamous intra epithelial lesions (LGSIL) in 1.8% of women ( $n=3$ ) in whom 2 women showed koilocytes with atypia and one showed CIN 1 changes.

None of the participants showed high grade squamous intra epithelial lesions (HGSIL), atypical squamous cells of undetermined significance (ASCUS) or glandular cell atypia.

## CONCLUSION

Cervical cytology abnormalities are rare among subfertile women undergoing in-vitro fertilization and embryo transfer. However there were few cases identified as having abnormal cervical cytology, it is advisable to perform routine screening as it is beneficial to detect them prior to pregnancy through IVF procedures.