Introduction

This study was undertaken to document the necessity to review cases reported as Atypical Squamous Cells of Undetermined Significance (ASC-US) and determine the prevalence of different high risk HPV (HR-HPV) genotypes amongst women residing in Kuwait. To detect any difference in the distribution of these genotypes between Kuwaiti and Non-Kuwaiti women.

Methods

Thinprep specimens from 180 women reported as ASC-US over a period of one year (June 2017 to May 2018) were reviewed by three people and a consensus report reached. These cases of ASC-US were subjected to Aptima HR-HPV assay and those found to be HR-HPV positive were genotyped using the Aptima HPV genotyping assay into three groups - HPV 16, HPV 18/45 and others.

Results

Only 105 of 180 (58.3%) smears reported as ASC-US in Mubarak Al-Kabeer Hospital were ASC-US by consensus. In the remaining cases the consensus report was Negative for Intraepithelial lesion or Malignancy (NILM) and Epithelial Cell Abnormalities (ECA) in 58 (32.2%) and 17 (9.5%) women respectively. HR-HPV was found in 20/105 (19%) ASC-US, 1/58 (1.7%) NILM and 6/17 (8.6%) cases with ECA. There were 13 Kuwaitis and 7 Non-Kuwaitis with HR-HPV and ASC-US. The genotyping for HPV 16, HPV 16, 18, 45 and others in Kuwaitis was 3 (4.9%), 6 (9.8%), and 4 (6.5%) while in non-Kuwaitis was 1 (2.3%), 1 (2.3%) and 5 (11.6%). The genotyping in one NILM case was HPV 18/45 while the 6 cases with ECA and HR-HPV were positive for HPV 16 (1case), HPV 16, 18, 45 (1case) and others (4cases).

Conclusion

Most HR-HPV infection seen in patients with ASC-US in Kuwait were HPV 16, 18, 45(8 cases) and others(13 cases). Interestingly, only 1.7% of ASC-US smears reviewed as NILM had HR-HPV while 19% smears which remained in the ASC-US category had HR-HPV. We feel that review of cases with ASC-US can help determine cases which need HPV typing. This may considerably reduce the cost in developing countries.