

**Adequacy of cervical cytology sampling with the cytobrush and the aylesbury spatula  
MD ( Obstetrics and Gynecology) - 2010 D 2270**

The objective of cervical cancer screening is to reduce cervical cancer incidence and mortality by detecting and treating precancerous lesions. Conventional cytology is the most widely used cervical cancer screening test. Although cytology has been effective in reducing the incidence and mortality of cervical cancer in developed countries in both opportunistic and -more dramatically- organized national programs, it has been less successful and largely ineffective in low resource settings where it has been implemented. Liquid-based cytology, testing for infection with oncogenic types of human papillomaviruses, visual inspection with 3-5 percent acetic acid, and magnified visual inspection with acetic acid, and visual inspection with lugol's iodine have been evaluated as alternative tests. The test characteristics, and the applications and limitations in screening, are discussed with an emphasis on the work of the Alliance for Cervical Cancer Prevention over the past 5 years. Screening involves application of a relatively simple, inexpensive test to a large number of asymptomatic people in order to classify them as likely or unlikely to have the disease of interest. Screening positive persons are then subjected to further investigative/treatment procedures. The objective of cervical cancer screening programs is to reduce cervical cancer incidence and mortality by treating and detecting precancerous lesions. It is well established that invasive cervical carcinomas develop from preexisting, slowly progressing intraepithelial lesions. The direct precursor to invasive carcinomas High grade squamous intraepithelial neoplasia grades 2 and 3(CI 2-3), one third to one half which may progress to cervical carcinoma over 10-15 years. Most low grade intraepithelial lesions (USILs) regress spontaneously. Adenocarcinoma in situ (AIS) is the precursor lesion for invasive adenocarcinoma. Conventional cervical cytology is the most widely used cervical screening test. In general all cervical screening test, predominantly detect cervical squamous lesions and are of limited value in the detection of glandular precursor lesions as a result of difficulties in sampling and visualizing the endocervical canal, as well experience among readers in recognizing Adeno carcinoma insitu. The diagnostic accuracy of cervical smears depends on adequate sampling of the transformation zone of the cervix. An adequate sample of this area should contain endocervical cells. Aylesbury spatula has a pointed end, when inserted in to the endocervical canal and over come this difficulty to some extent. However small areas of abnormality may still be missed if the spatula is not in contact with the tissue at all times, for example when the cervix is irregular and scarred. Endocervical and ectocervical samples should be taken to achieve the best possible chance of detecting abnormalatis.2 Dual sampling of the endo cervix and ectocervix using a brush together with a conventional spatula has been shown to improve the quality of cervical smears2 . However, this involves taking two samples and inevitably takes longer. The aim of this study was to assess whether the use of one of the newer smear taking devices provides higher percentage of smears containing endocervical cells than the Aylesbury spatula. The Cytobrush was chosen because it is designed to be used in endocervical canal. Combination

would increase its acceptability to general practice. There is good evidence of its efficacy. The cervical brush is a device with central fronds which project 10 mm beyond the shorter outer fronds and is 20 mm in length. This means that the squamocolumnar junction which is on average 8-13 mm proximal to the tip of the cervix should be sampled in most women.