
LETTER TO THE EDITOR

Atypical Squamous Cells : ASCUS is out ! Now, ASC-US and ASC-H for Reporting of Cervical Cytology

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To the Editors,

I read with great interest the article by Ghosh and colleagues on their analysis of the results of cervical screening in a Nepalese population. However, a few clarifications need to be made. Authors use the Bethesda terminology for their analysis. The first Bethesda workshop was held in 1988 and recommendations were made for the use of a uniform system of terminology for reporting of cervical cytology. A second workshop was held in 1991 to modify the Bethesda System based on laboratory and clinical experience. In the Bethesda terminology (1991), the term "atypical squamous cells of undetermined significance (ASCUS)" was used to designate cellular abnormalities that were more marked than those attributable to reactive changes but that quantitatively or qualitatively fell short of a definitive diagnosis of "squamous intraepithelial neoplasia (SIL)". Further, pathologists were encouraged to qualify ASCUS with respect to whether a reactive process or SIL was favoured (Solomon et al., 2002).

In 2001, the system was reevaluated and after a year long review process the 2001 Bethesda System was developed. The 2001 Bethesda System differs with regard to reporting equivocal results. All atypical squamous cells (ASC) is now considered to be suggestive of SIL and estimates suggest that 10% to 20% of women with ASC have underlying CIN 2 and 3. Therefore, the category ASCUS favour reactive was eliminated. Pathologists are now encouraged to downgrade judiciously to "negative for intraepithelial lesion or malignancy" a portion of cases previously termed ASCUS favour reactive. The ASC are now qualified as of undetermined significance (ASC-US) or "cannot exclude HSIL" (ASC-H). The qualifier undetermined significance is retained to emphasize that some cases of ASC-US are associated with underlying CIN-2 or 3. The term ASC-H is thought to include approximately 5% to 10% of ASC cases overall and therefore reflects a mixture of true HSIL and its mimics. By highlighting such cases ASC-H will enable more rapid detection and treatment of some cases of CIN2 and CIN3 (Solomon et al., 2002). It was realised that a uniform terminology should be developed/ adopted throughout Nepal for reporting results of cervical cytology (Bhanot and Mital, 2002).

The direct precursor of cervical cancer is high-grade

dysplasia, which in about a third of instances may progress to cervical cancer over a period of 10-15 years. In their analysis Ghosh et al., did not find any patient with HSIL under the age of 26 years. However, they conclude that, screening women younger than 26 years could help early detection of precancerous lesions in the cervix ! The central purpose of cervical screening is the detection of "high grade squamous intraepithelial lesions (HSIL)". It has been recognised that most low grade squamous intraepithelial lesions (LSIL), especially in young women represent a self-limited human papilloma virus (HPV) infection.

Support for this comes from the findings that cervical screening programs initiated in a number of developing countries where screening was extended to younger women (Costa Rica \geq 15 years, since 1970; Cuba \geq 20 years, since 1968; Mexico 25 years, since 1974; and Colombia 25 years, since 1970) failed to produce the desired results. In Chile, cervical cancer mortality did not change much from 1970–1985. The programme was reorganised in 1990 which resulted in decreased mortality. In contrast, cervical screening programmes in developed countries involving the screening of sexually active women annually or once in every 2-5 years have resulted in large declines in both cervical cancer incidence and mortality. Organised screening programs with systematic follow-up and surveillance have shown the greatest effect which are largely lacking in developing countries. Moreover, conventional screening using cytology involves establishment of infrastructure, training of staff, spreading awareness and efficient management of detected abnormalities. This means enormous financial and technical limitations for developing nations. In South Africa, it was proposed to initiate screening at the age of 30 years with three smears being carried out in a woman's lifetime (Sankaranarayanan R et al., 2001). From a 32 years of experience of hospital based screening in India, it was substantiated that a single lifetime screening between 41 and 50 years of age was an effective control strategy for cervical cancer in developing countries (Misra JS et al., 2004), where systematic recall, follow-up and surveillance have severe financial and resource implications.

Further, in a recently published study from Nepal, the commonest age group for the occurrence of CIN was reported to be 31- 40 years (80%) (Bashyal and Dali, 2004). For low to middle income developing countries the cost and

resource implications involving screening women once every 2-5 years are substantial and still remain an inhibitory factor for their successful implementation. Recently, using computer based models for assessment of cost-effectiveness of a variety of cervical screening methods in India, Kenya, Peru, South Africa, and Thailand, it was concluded that visual inspection of cervix with acetic acid (VIA) or DNA testing for HPV in one or two clinical visits are cost effective alternatives to conventional three-visit cytology-based screening programs (Goldie et al., 2005). It is thought, if women between the ages of 35 and 45 years are targeted once or twice in their lifetime, these would be among the most cost-effective interventions available and could lower the incidence of cervical cancer by 50 percent worldwide. It was also suggested that a focus on high risk groups like sex workers was warranted where financial and technical constraints are predominant (Moore and Tajima, 2004). I hope this is of benefit to those who use the Bethesda terminology for cervical cytology reporting and for planning of cost-effective strategies for early detection of cervical cancer in the region.

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Umesh Kumar Bhanot

Department of Pathology
University of Ulm, Albert-Einstein-Allee 11
D-89081 Ulm, Germany
Phone: +49-731-500-23301
Fax: +49-731-500-23884
e-mail: umesh.bhanot@uniklinik-ulm.de