

5th International Asia Pacific Organization

Istanbul, Turki

03-07 April 2010

Prof. Nor Hayati Othman

Dekan Pelantar Penyelidikan Sains (Klinikal)

✓

The Effectiveness Of Cervical Cytology Screening In Detecting High Grade Squamous Intraepithelial Lesions And Squamous Cell Carcinoma; an experience with 182 cases in Kelantan, Malaysia.

Azmin Aila Aziz*, Mukarramah Che Ayub, Nor Hayati Othman***

**Pathology Department, School of Medical Sciences, Universiti Sains Malaysia, **
Pathology Department, Hospital Raja Perempuan II, Kota Bharu, Kelantan, Malaysia*

ABSTRACT

This retrospective study was to determine the effectiveness of cervical cytology screening in detecting high grade squamous intraepithelial lesions and squamous cell carcinoma using histopathology as the gold standard. All cases diagnosed as CIN II, CIN III and squamous cell carcinoma by histopathology from 2002 to 2006, seen in 2 Hospitals; Hospital Universti Sains Malaysia [HUSM] and Hospital Raja Perempuan Zainab II [HPRZ] were included in the study. For each case, the cervical cytology results were traced. The cytology results were divided into 3 categories: 'concordant', 'minor discordant' and 'major discordant'. The concordance rate between cytological diagnoses and histopathological diagnoses was determined. The smears from the 'minor discordant' and 'major discordant' categories were traced and the smears were subjected to rescreening. The 2001 Bethesda system was used to classify the revised diagnoses of rescreening.

There were 182 cases of CIN 2, CIN 3 and invasive squamous cell carcinoma diagnosed by histopathological examination. We found that only 56% of the cases had a previous Pap smear. Of the patients who had received Pap smears, 63.7% of the cytological diagnoses were concordant', 17.6% were in the 'major discordant' category and 18.6% were in minor discordance with the histopathological diagnoses. The concordance rate between the histopathology and Pap smears was statistically significant ($P<0.05$).

24 (23.5%) smears from the 'major discordant' and 'minor discordant' categories were subjected to repeat cytology examination. The revised diagnoses of the re-examination

were similar to the initial screening diagnoses in 6(30%) smears. In 18(70%) smears the revised diagnoses were changed. The false negative rate was 17.6% and the sensitivity of Pap smear was 82.4%.

This study shows, Pap smear was found to be underutilised in 23.5% of cases, where it was used for diagnosis rather than for screening. We noted there is a higher diagnostic error in laboratory that has a higher workload.

In conclusion, Pap smear is effective in detecting high grade squamous intraepithelial lesions and squamous cell carcinoma with a high sensitivity. The false negative rate is within acceptable range.

Keyword: Cytology, CIN II, CIN III, squamous cell carcinoma and histopathology