CARCINOMA OF THE CERVIX AND STAIN FOR MUCIN

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SUMMARY

Many a time macus secreting adenocarcinoma of cervic resemble pure squamous carcinoma under routine haematioxylin and eosin stain. In the present study PAS (Periodic Acid Schiff) stain was performed to reclassify the previously diagnosed squamous cell carcinoma of cervix on routine histopathology section which revealed 16.04 percent of cases are either adenosquamous carcinoma or adenocarcinoma of the cervix which is of prognostic significance.

INTRODUCTION

Squamous cell carcinoma constitute 90-95% of the carcinoma cervix and that adencarcinoma make up the bulk of the residue; but this view is now known to be incorrect, only about 70% at most of cervical carcinomas are purely squamous variety (Buckley et al 1989). Adenocarcinoma pursue an unusual aggressive course and are associated with a much worse prognosis than their purely squamous counterparts. Many a time mucus secreting adenocarcinoma of cervix resemble pure squamous carcinomas under routine haematoxylin and eosin stain because of the lack of glandular differentiation that would indicate an adenocarcinoma. Moreover many mucus secreting neoplasms escape detection unless a mucin stain is applied (Yajima et al 1984; Benda et al 1985; Buckley et al 1988). Therefore present study was conducted to reclassifu squamous cell carcinoma of cervix diagnosed under routine haematoxylin and eosin stain with the help of PAS stain.

MATERIAL AND METHODS

One hundred and sixty two specimens were reported as squamous cell carcinoma of cervix by the department of pathology in a

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rural based medical college at Sewagram; during the period from 1986 to 1990. The age of the patients varied from 30 to 65 years. Sections were taken from every block to perform PAS stain for mucin.

RESULTS

Of the original group of 162 squamous cell carcinoma; 136 fulfilled the diagnostic criteria for pure squamous cell carcinoma after the application of PAS stain for mucin. The remaining 26 neoplasms were no longer regarded as pure squamous cell carcinoma, 23 (14.19%) were reclassified as adenosquamous carcinoma and 3(1.85%) as adenocarcinoma (Table 1.)

TABLE I

Reclassification of 162 Squamous Cell Carcinoma of cervix with PAS (Periodic Acid Schiff) Stain.

Histological type	No.of cases	Percentage
Pure Squamous Carcinoma.	136	83.95%
Adeno Squamous Carcinoma.	23	14.19%
Adeno Carcinoma	3	1.86%
Total	162	100%

DISCUSSION

To differentiate adenocarcinoma of cervix from pure squamous cell carcinoma is not just of histogenic or academic interest; but also helps us to determine the prognosis. The importance of recognising these mucus containing neoplasms has been clearly shown by Benda et al (1985) and Buckley et al (1988), that all mucus secreting neoplasms exhibit an increased tendency to metastasize to the regional lymph nodes compared with squamous carcinoma. On routine haematoxylin and eosin stain a proportion of poorly differential cervical carcinoma are considered as squamous because of the lack of glandular differentiation that would indicate an adenocarcinoma. Benda et al (1985) applied the stain for mucin for reclassifying the diagnosed cases of squamous cell carcinoma of the cervix which revealed that only 65.70% are actually squamous carcinomas, the other being mainly adenocarcinomas and adenosquamous carcinomas. In the present series after PAS stain 26(16.04%) cases out of 162 cases of already diagnosed squamous cell carcinoma on haematoxylin and eosin stain turn out to be either adeno squamous (14.19%) or adenocarcinoma (1.86%) which is of prognostic significance. Therefore to label a case of carcinoma cervix from the diagnos-

tic as well as prognostic point of view PAS stain or any other stain for mucin (eg Alcian blue) is a must.

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