

CERVICAL ADENOCARCINOMA—A CYTODIAGNOSIS

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SUMMARY

Cervical adenocarcinoma is a rare entity as compared to the squamous counterpart. Cytological evidence of the lesion is difficult but not impossible. Three patients whose pap smears were taken revealed characteristic features of adenocarcinoma (i.e. clusters of tumour cells with characteristic rosettes at places). It is therefore, emphasized that exfoliative cytology is an effective aid in the diagnosis of cervical adenocarcinoma.

Introduction

Adenocarcinoma represents about 10% of all cervical cancers. The lesion originates within the endocervical canal and, because of this location may remain clinically occult for long period of time (Koss, 1979). Due to its relative rarity the lesion entity has not been studied extensively and more so cytologically. Present communication illustrates three cases of cervical adenocarcinoma where cytology lead to diagnosis of adenocarcinoma.

Material and Methods

Three women in their 4 and 5 decade of life presented with history of abnormal bleeding per vaginum while one of them had a history of foul smelling discharge. Per vaginal examination was done revealing growth in two cases and erosion in the other. Colposcopic examination was performed in all cases, punctuation atypical

blood vessels with mosaic pattern were noted. As per routine, cervical smears were collected with Ayer's spatula, fixed immediately in 95% alcohol and subsequently stained with papanicolaou's stain. Smears so prepared were examined microscopically.

Smears showed mixed population of all component layers of cervix i.e. superficial, intermediate and parabasal alongwith endocervical cells. Two of three cases showed marked inflammation with polymorphonuclear cells in the degenerative and fresh state (Fig. 1) while in the third case there was minimal inflammation.

Apart from normal squames, metaplastic cells and normal endocervical cells were found in abundance in one case.

The smears showed presence of cells arranged in clusters and acinar pattern (Fig. 1). Small rosettes were also seen in all cases. The cytoplasmic margins were frayed and dissolved out at places in one case while in two cases the tumor cells were comparatively fresh with clean margins and morphology. Occasionally tall columnar malignant cells

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were also seen. The nuclei of tumor cells were rounded to elongated, hyperchromatic with fine chromatin and enlarged nucleoli. At places in all cases denuded tumor cells were also discerned (Fig. 2).

Keeping in view the arrangement of tumor cells and their nuclear and chromatin pattern, a diagnosis of adenocarcinoma was suggested and colposcopically directed biopsies were done. Subsequently histopathological examination was done. Sections showed endocervical glands majority of them were lined by cuboidal epithelium with significantly hyperchromatic nuclei. Mucinous material and papillary configuration was revealed at places confirming cytodiagnosis of adenocarcinoma (Fig. 3).

Discussion

Almost half of the glandular cancer encountered in the uterine cervix originate in the cervix, the other most commonly endometrial adenocarcinoma, involve the cervix by metastatic spread or direct extension.

Adenocarcinoma derived from the endocervical epithelium constitute roughly 3 to 20 per cent of all cancers of the cervix. (Abad *et al*, 1969, Mayer *et al*, 1976, Hurt *et al*, 1977, Grundsell *et al*, 1979, Koss 1979.) The biological behaviour of the entity is much more aggressive than that of epidermoid carcinoma, and distant metastases can be encountered at initial stages.

It may occur in any age group from 10-91 years (Saigo *et al*, 1984) and even observed in a six months old female (Pollack and Taylor, 1947).

The most frequent complaint observed

is abnormal vaginal bleeding sometimes associated with foul smelling discharge. On physical examination there could be no lesion or minimal to grossly visible one. Two of the three cases of our study revealed cervical growth.

In cervical smears cancer cells often occur in clusters, round or papillary configuration or in rosette like pattern. Elongated columnar cells are seen with hyperchromasia, irregular nuclei and enlarged nucleoli.

Differential diagnosis has to be made from mucoepidermoid carcinoma, metastatic adenocarcinoma and endometrial adenocarcinoma. In cases of adenocarcinoma of endocervix, the tumor cells are primarily seen in cervix while in case of endometrial adenocarcinoma are found in vagina. Secondly, tall columnar malignant cells if detected on search go in favour of lesion being adenocarcinoma of endocervix.

The present study and the available literature (de Brux, 1960; Hopman 1960, Nuovo, 1960; Boddington *et al*, 1976, Saigo *et al*, 1985) indicate that the cytodiagnosis of cervical adenocarcinoma specially in asymptomatic patients is convincing to compare its usefulness with squamous carcinoma.

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See Figs. on Art Paper 1