



Basaloid squamous cell carcinoma of uterine cervix- A case report

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Abstract:

Basaloid squamous cell carcinoma of the uterine cervix is a rare malignant tumor of the uterine cervix. The characteristic microscopic features are nests, lobules, trabeculae and groups of round to oval basaloid tumor cells. These tumor cells are small with high nuclear cytoplasmic ratio and shows peripheral palisading. There may be areas of comedo type necrosis and areas showing typical squamous cell carcinoma differentiation. The most frequently involved sites are larynx, hypopharynx and tonsils. It can also affect external ear, nose, paranasal sinuses, oesophagus, anus, lung, uterine cervix and vagina. This is a case of basaloid squamous cell carcinoma of uterine cervix being reported here.

Key words: Basaloid squamous cell carcinoma, basaloid cells, squamous cell carcinoma.

Introduction:

The term basaloid squamous cell carcinoma was first described by Wain et al in 1986. They described this as a highly malignant variant of squamous cell carcinoma with a basaloid pattern [1]. Grossly the tumor shows ulcerative infiltrating growth pattern. Microscopically characterized by infiltrating growth pattern, with peripheral palisading of tumor cells and minimal stromal reaction [2]. Infiltrating growth pattern is in the form of nests, lobules, trabeculae and groups of small basaloid cells. These cells are ovoid and relatively uniform in size, with scant cytoplasm and a high nuclear cytoplasmic ratio, thus the tumor cells appear undifferentiated. Nucleus contains evenly distributed coarsely granular chromatin. Areas of

comedo necrosis is seen frequently. Tumor tissue also shows variable component of typical squamous cell carcinoma [3-5].

Case Report

A 55 year old woman was referred to a tertiary medical centre from a local hospital for vaginal bleeding of three months duration. Her past medical history was insignificant. Colposcopic examination showed a whitish mass confined to the posterior lip of cervix, with no evidence of invasion of vagina or fornix. Radiological investigations revealed no evidence of pelvic lymphadenopathy. The tumor was classified as clinical stage I b1. Total abdominal hysterectomy was done and specimen sent to the department

of pathology. On gross examination specimen measured 8.5x4x3.5cm and cut section revealed 1.5x1x0.6 whitish tumor mass presented in the posterior wall of the cervix.

Microscopic examination revealed variably sized nests, lobules and cords of basaloid type tumor cells. These cells are round to oval with relatively uniform size, have scant cytoplasm and a high nuclear cytoplasmic ratio, nucleus is round to oval with coarsely granular chromatin. Tumor cells showed peripheral palisading. There were areas of typical keratinizing squamous cell carcinoma and areas of prominent comedo type necrosis. In some areas abrupt keratinisation was seen, in the centre cells of tumor lobule. Stroma surrounding the tumor tissue was having dense hyalinised collagen stroma. Based on these features, the diagnosis was basaloid squamous cell carcinoma.

Discussion

Uterine cervix is a rare site for Basaloid variant of squamous cell carcinoma, usually affecting patients in their 6th and 7th decade of life. Though there are occasional reports mentioning younger patients [3,5]. Our patient was comparatively young being only 55 years old.

In our case microscopic picture was characteristic, by infiltrative growth pattern with prominent peripheral palisading and minimal stromal reaction. Infiltrative growth pattern is in the form of lobules, nests and cords of basaloid tumor cells with areas of comedo type necrosis and typical keratinizing squamous cell carcinoma differentiation. Within the tumor comedo type necrosis is a more frequent companion of the lesion, to the extent that some authors considered it to be "one of the main microscopic feature of the lesion" [5,6]. The characteristic focal keratinisation within the tumor lobule also supports the diagnosis [5,7].

The behaviour of this tumor is aggressive, as is also the case with the homonymous neoplasm in the upper aerodigestive tract. It is, therefore, very important to clearly separate this tumor from adenoid cystic carcinoma and adenoid basal carcinomas [8]. Other differential diagnosis includes squamous cell carcinoma, adenoid squamous carcinoma, adenosquamous carcinoma, mucoepidermoid carcinoma, small cell

neuroendocrine carcinoma and basosquamous cell carcinoma [4,5,9]

Above mentioned characteristic microscopic features helps us to differentiate this tumor from other listed entities. In case of difficulty multiple sections may be taken from the tumor to ensure accurate diagnosis. Otherwise for occasional cases immunohistochemistry may be helpful [5].

Conclusion

Basaloid squamous cell carcinoma is rare tumor type involving uterine cervix and it is highly aggressive tumor. So it must be differentiated from other tumors of cervix. In our case age group involved is comparatively young.

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Figure 1: Cut section showing tumor involving the cervix



Figure 2: Lobules of basaloid tumor cells with comedo necrosis (H&E, LP)

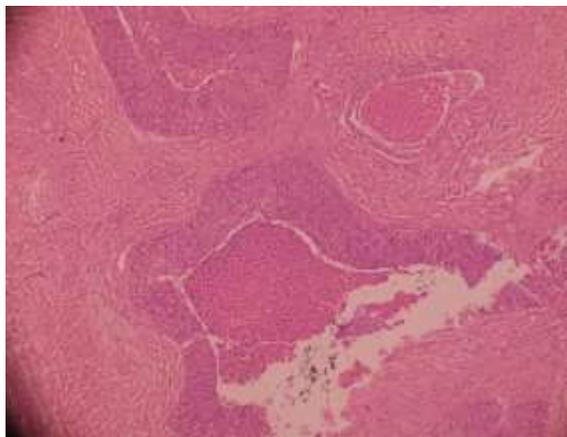


Figure 3: Tumor lobules with characteristic peripheral palisading (H&E,LP)

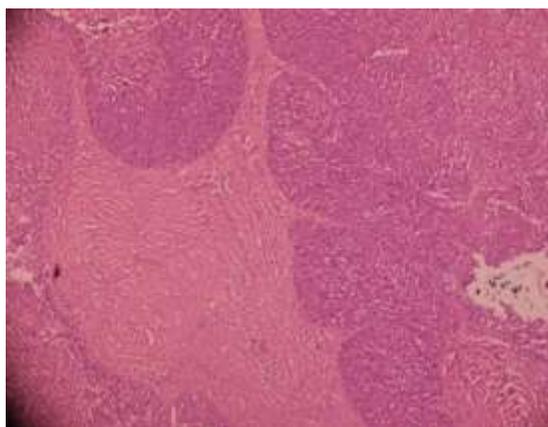
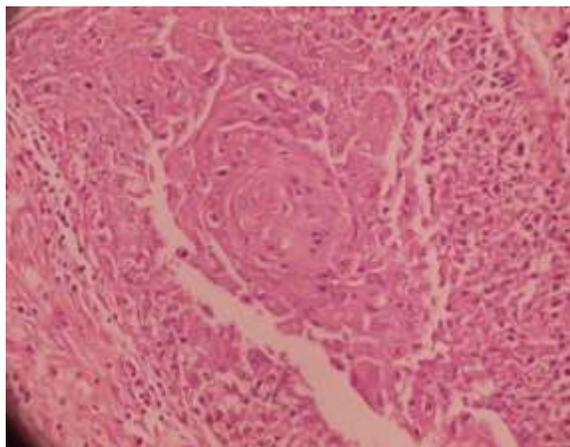


Figure 4: Basaloid tumor cells showing focal squamous differentiation (H&E,HP)



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