Case Report

Incidental finding of lymphoepithelial like carcinoma uterine cervix in abnormal uterine bleeding - A case report

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Abstract

The lymphoepithelial like carcinoma is a rare tumour of uterine cervix. Despite the rarity of this tumour, morphologically it resembles the nasopharyngeal tumour. It differs from the usual squamous cell carcinoma of the cervix in its morphology and clinical behaviour and shows a better prognosis than the more common squamous cell carcinoma of the cervix. We report a case of lymphoepithelial like carcinoma of the cervix, diagnosed on the basis of histopathology and immunohistochemistry-cytokeratin (CK) in a 39 year old female who presented with abnormal uterine bleeding.
Keywords: Cervical carcinoma, lymphoepithelial like carcinoma, histopathology, cytokeratin.

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INTRODUCTION

Lymphoepithelial like carcinoma (LELC) are distinctive subset of squamous cell carcinoma of cervix that are typically well circumscribed and composed of undifferentiated cells surrounded by dense stromal inflammatory infiltrate (J Kurman). Lymphoepithelioma, originally described as a neoplasm of the nasopharynx, is also identified in the uterine cervix and has shown a better outcome than the usual squamous cell carcinoma (SCC) of the cervix because of lack of lymph node metastasis.

CASE REPORT

A 39 year old woman native of Madurai at Tamil Nadu was admitted at the gynaecology ward with history of abnormal uterine bleeding for five months. The general physical and systemic examination was normal. Total abdominal hysterectomy with bilateral salphingo oophrectomy was done. We received total abdominal hysterectomy specimen measuring 9 cm x 5 cm x 4.5 cm. Cut surface revealed a polypoid grey white growth measuring 1.5 cm x 1 cm seen at ectocervix just below the endocervical junction (Figure 1). Histopathological examination revealed sheets of undifferentiated carcinomatous cells surrounded by dense infiltration of lymphocytes, eosinophils and plasma cells (Figure 2)

Figure 1: Grossly normal uterine dimensions with polypoid growth in ectocervix. A small circumscribed fibroid also madeout.

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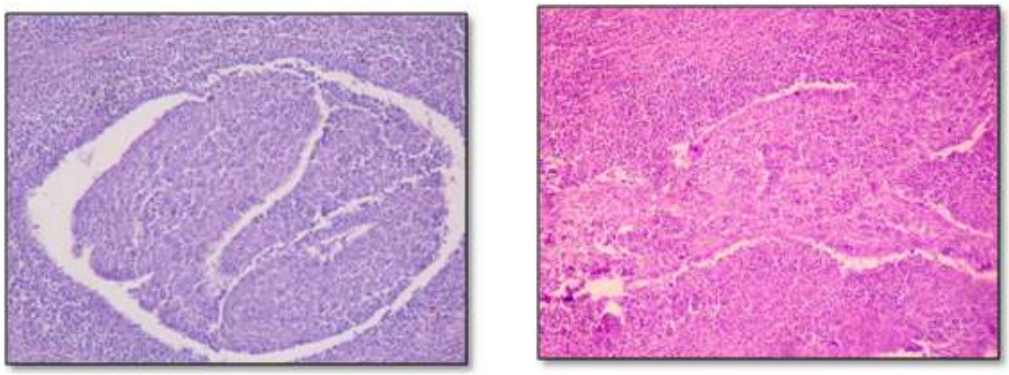

Figure 2: Microscopically neoplastic undifferentiated cells in syncytial nests, surrounded by dense lymphoplasmacytic infiltrate (HandE stain, 10x)

Microscopically the tumour cells appear large, arranged in syncytial growth pattern with scant ill defined cytoplasm, oval with large round vesicular nuclei with prominent nucleoli. The tumour is surrounded by dense stromal inflammatory infiltrate comprising of matured lymphocytes, admixed with plasma cells and histiocytes (Figure 3). Sections studied from endometrium show glands in proliferative phase. Myometrium, parametrium, both ovaries and fallopian tubes were histologically normal. On the basis of the histopathological examination, the diagnosis of LELC of the uterine cervix was made. Finally we confirmed the diagnosis of LELC by immunohistochemistry using cytokeratin, which showed strong positivity for epithelial cells (Figure 4).

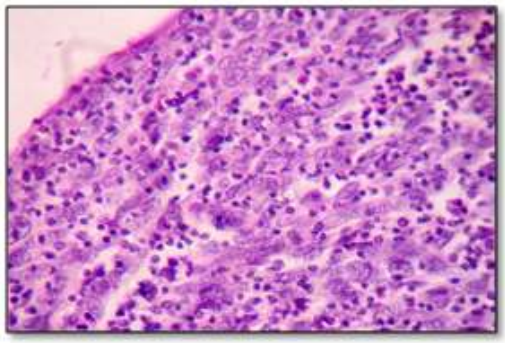

Figure 3: Tumour cells consists of vesicular nuclei, prominent nucleoli, moderate amount of cytoplasm and indistinct cell border, with numerous dense stromal inflammatory infiltrate [H and E stain, 40x]

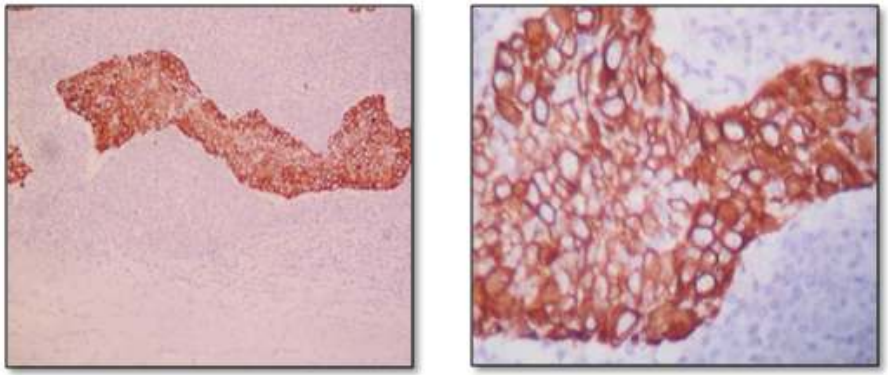

Figure 4: The tumour cells are positive with immunostaining with cytokeratin 7

DISCUSSION

LELC of the uterine cervix is a rare variant of SCC. It was reported by hamazaki *et al*, in 1968[2]. In the female genital tract, LELC has been reported in the vulva, vagina, uterine cervix and endometrium[3]. LELC of the uterine cervix is uncommon. LELC represents only 0.7 % of all primary cervical malignancies in the western countries but up to 5.5% of cervical cancer in some series from Asia[1]. LELC typically affects the younger population of women. It may grossly range from no visible cervical lesion to large exophytic cervical mass[5]. The possible association of the tumour with either Ebstein Barr Virus (EBV) or Human Papilloma Virus (HPV) remain controversial[4]. The EBV has been suggested as a potential causative agent and has been detected in 75% of cervical LELC cases in Asian women[1]. Two specific EBV variants, the Taiwan and CAO strains have been isolated in patients with lymphoepithelial like carcinoma in Taiwan and the people`s Republic of china, respectively[6]. A possible role for the HPV in the

pathogenesis of cervical LELC has also been suggested[1]. Histopathologically, the tumour cells have syncytial growth, with poorly defined cell borders and moderate amount of pale eosinophilic cytoplasm. The nuclei are large and uniform with vesicular chromatin prominent nucleoli[8]. The nests of undifferentiated cells are surrounded by a marked chronic inflammatory infiltration composed of lymphocytes, plasma cells, and eosinophils[1]. LELC can be mistaken for either glassy cell carcinoma (or) true lymphoproliferative disorder[1]. The differential diagnosis includes non keratinizing SCC with prominent stromal inflammation with eosinophilia, glassy cell carcinoma, malignant lymphoma (especially lymphoepitheloid – Lennert's lymphoma), and metastatic Schmincke – Regaud tumour[7]. LPD can be easily differentiated from LELC by LCA, Cytokeratin and EMA[1]. In our case the tumour cells are strongly positive with Cytokeratin. This is treated by surgical treatment and the prognosis is good. Radiation therapy also appears to be effective in eradicating localized, low stage diseases (radio sensitive)[5] In conclusion, cervical LELC is rare but a distinct clinico pathological entity that warrants a high index of suspicion amongst clinicians and pathologists. Immunohistochemistry plays an important role in confirmation of the diagnosis.

REFERENCES

1. Robert J.Kurman, Lora Hedrick Ellenson, Brigitte M.Ronnett, Blausteins pathology of female, Genital Tract 6th 2011 page 286. Agnieszka K. Witkiewicz. Thomas C.Wright. Alex Franczy. *et al* (2011).Carcinoma and other tumours of the cervix page 272.
2. Hamazaki M, Fujita H, Arata T, Takata S, Hamazaki M. Medullary carcinoma with lymphoid infiltration of the uterine cervix. Jpn J Cancer Clin 1968;14:787-92.[diff journ in pubmed]
3. Coleman RL, Lindberg G, Muller CY, Miller DS, Hameed A. Ectopic Production and Localization of [beta]-Human Chorionic Gonadotropin in Lymphoepithelioma-Like Carcinoma of the Cervix: A Case Report. Int J Gynecol Pathol 2000; 19:179-82.
4. Rosai and Ackermans, Surgical pathology, 10th edition-volume 2
5. Kim ML, You HJ, Yoon ES, Sim SH, Koo BS, Joo WD, *et al*. A case of lymphoepithelioma-like carcinoma of the uterine cervix. Korean J Obstet Gynecol. 2007; 50:207-11.
6. Tseng CJ, Pao CC, Tseng LH, Chang CT, Lai CH, Soong YK, *et al*. Lymphoepithelioma-like carcinoma of the uterine cervix: association with Epstein-Barr virus and human papillomavirus. Cancer 1997; 80:91-7.
7. Reich O, Pickel H, Pürstner P. Exfoliative Cytology of a Lymphoepithelioma like Carcinoma in a Cervical Smear: A Case Report Acta Cytol 1999; 43:285-8.
8. Maheshwari A, Wuntkal R, Gupta S, Kane SV, Tongaonkar HB. Lymphoepithelioma like carcinoma of uterine cervix: a case report. Indian journal of medical and paediatric oncology 2006; 27:34-6.

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