IMMUNOHISTOCHEMICAL DETECTION OF UTERINE CERVICAL LYMPHOEPITHELIOMA-LIKE CARCINOMA (LELC)

IMUNOHISTOHEMIJSKA DETEKCIJA LYMPHOEPITHELIOMA-LIKE CERVIKALNOG KARCINOMA (LELC)

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Abstract

Lymphoepithelioma-like carcinomas (LELCs) have been reported outside the nasopharynx in many sites. Although this distinct neoplasm is a very rare variant of squamous cell carcinoma accounting for only 0.7% of all uterine cervix primary malignant neoplasms, it has become a well-known entity. It has been proposed that cervical LELC may be related to Epstein-Barr virus (EBV) infection, since it occurs in LELC, arising at other locations. This relation is suggested, but still controversial. Until now, EBV genome has only been demonstrated in Asian patients with cervical LELC, whereas no reports were submitted about a connection between LELC and EBV in Caucasians, but sporadic appearances of Human Papilloma Viruses (HPV). We report a case of LELC of the uterine cervix in a 64-year-old Caucasian woman from Serbia detected immunohistochemically.

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INTRODUCTION

Lymphoepithelioma-like carcinomas (LELCs) have been reported in many sites, including nasopharynx, where it usually occurs, salivary gland, thymus, stomach and uterine cervix. (1,2,3,4). Fortunately, these lesions are responsive to treatment, and patients typically have a favorable prognosis. We report a case of LELC of the uterine cervix detected immunohistochemically.

CASE REPORT

In this paper, we discuss the case of a 64-year-old Caucasian woman, who presented with pelvic pain, who had postcoital bleeding of some months duration. Medical history was noncontributory, cervical cytologic test results were reported as negative 2 years before. At gynecologic examination, there was a fungating tumor, 2 cm in diameter, that occupied the posterior lip of the cervix. Laboratory findings were within normal limits. A biopsy was performed and histopathology revealed invasive lymphoepithelioma-like carcinoma.

Microscopic examination of the biopsy specimen disclosed a poorly differentiated nonkeratinizing carcinoma composed of cohesive nests surrounded by prominent lymphoplasmacytic infiltrate. No adjacent carcinoma in situ was identified. The depth of invasion was more than 1,5 cm (figure 1A). Small foci of nonkeratinizing carcinoma appeared in the stroma, surrounded by marked inflammatory reaction. There was no evidence of glandular differentiation, keratinization or intercellular bridges (figure 1B). Cells were large and had indistinct cell margins (syncytial-like pattern). Nuclei were vesicular and contained 1 or 2 prominent nucleoli and peripheral chromatin (figure 1C). Immunohistochemistry was performed on paraffin-embedded sections. The tumor cells were strongly positive for Anti-Epithelial
Membrane antigen (EMA). p63 protein as homologue of the p53 protein, being a powerful marker for squamous differentiation, was diffusely expressed, which excluded a glandular or neuroendocrine differentiation. Anti-p53 protein was expressed as well. Tumor cells also expressed a high proliferative rate i.e. Ki 67(MIB 1) of more than 80% positive tumor nuclei. Neoplastic cells were negative for HMB45 and Desmin. The inflammatory background contained many Leukocyte Common Antigen (LCA) positive cells.

Immunohistochemical detection of the Anti-EBV latent membrane proteine was positive (figure 2).

**DISCUSSION**

Lymphoepithelioma carcinoma of the uterine cervix is a rare entity outside the nasopharynx with only a few reports concerning the clinical outcome following treatment (1,2). It is an uncommon neoplasm that usually occurs in Asian patients (3), whereas 73% of the Taiwanese women studied...
Lymphoepithelioma-like karcinoma (LELC) je opisan na brojnim lokalizacijama pored nazofarinksa. Iako ova jedinstvena neoplazma predstavlja jedan veoma redak oblik skvamocelularnog karcinoma koja se sreće u samo 0,7% svih slučajeva primarnih malignih neoplazija materice, reč je o jednom u međuvremenu dobro poznatom entitetu. Pretpostavlja se da postoji povezanost između cervikalnog LELC i infekcije Epstein-Barr-ovim virusom (EBV) jer se pojavljuje u slučajevima LELC sa incidencijom na drugim lokacijama. Dotična udruženost je nasumična, premda joj uvek kontroverzna. Do sada je EBV-ov genom bio dokazan kod azijatskiх pacijentkinja sa cervikalnim LELC, dok ne postoje izvješća o povezanosti LELC-a i EBV-a kod belkih, gde se nalazi samo na sporadično prisustvo Human Papilloma Virus-a (HPV). Naš izvješće tiče se jednog imunohistokemijskih dokazanih slučaja LELC kod jedne 64-godišnje belkine srpskog porekla.

Morfološki je to bio nediferentovani karcinom pružen intenzivnim limfoplazmatičnim infiltratom. Imunohistohemijski, tumor je ekspresirao epitelne markere. Tuđuna je bio nediferentovani karcinom pružen intenzivnim limfoplazmatičnim infiltratom. Imunohistohemijski, tumor je ekspresirao epitelne markere.

REFERENCES