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CASE REPORT

Primary Malignant Melanoma of the Uterine Cervix: a Case Report

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SUMMARY
FA 25-year-old female's laparoscopy revealed a soft, oval 4 cm lesion in anterior part of uterus between *plica vesicouterina* and the uterine cervix. Diagnosis of melanoma was made by histological and immunohistochemical method. Inferior median laparotomy with radical hysterectomy type II without ovarectomy was performed. The tumor was staged IVA of the International Federation of Gynecology and Obstetrics classification. The patient was B-RAF mutation negative. Treatment was initiated with chemotherapy.
Key words: primary malignant melanoma, primary mucosal melanoma, uterine cervix melanoma.

AIM OF THE DEMONSTRATION

Primary mucosal melanoma of the uterine cervix is extremely rare neoplasm with only 78 cases reported in the literature since 1889 till 2011 (Pusceddu *et al*., 2012). By this case we want to emphasize that malignant melanoma (MM) of the uterine cervix might be diagnosed also in a very young woman in contrast to scientific reports where it is mostly found in women with median age 59.0 years (Pusceddu *et al*., 2012).

CASE REPORT

A 25-year-old patient during the first episode of acute lower abdominal pain was admitted in the emergency department and treated symptomatically. Three days later patient once again turned to hospital with acute abdominal pain in her lower abdomen. During laparoscopy a soft, oval 4 cm lesion in anterior part of uterus between *plica vesicouterina* and the uterine cervix was discovered. After partial evacuation of the tumor, laparoscopy was converted to laparotomy to excise whole tumor and obtain tumor free resection margins. Extension of the tumor to the uterine cavity and internal cervical orifice was observed and additionally tumorous tissues were removed. Afterwards cervix was sutured.
Histological examination of the specimen revealed diffuse infiltration of epitheloid, spindle and nevoid shaped cells in the cervical stroma. Immunohistochemistry showed diffuse positive reaction to human melanoma black 45 (HMB-45) antigen, S-100 protein, vimentin. Ki-67 was about 12% melanoma (Fig.1). Epithelial and neuroendocrine markers were negative, which proved a diagnosis of malignant.
A comprehensive assessment for melanotic lesions in the uveal tract, skin and other mucosal sites was negative. A diagnosis of primary malignant melanoma of the uterine cervix was stated. Thereafter patient was referred to tumor board of National Oncology centre.
Inferior median laparotomy with radical hysterectomy type II without ovarectomy was performed at repeated surgery. During the exploration of abdominal cavity wide adhesions between omentum and anterior abdominal wall were noticed, therefore partial omentectomy was done. All together there were removed 17 lymph nodes from both pelvic sides and three enlarged lymph nodes were found in omentum. One micrometastasis was found in omental lymph node and another one in pelvic lymph node without penetration of the capsule. The malignant cells were not diagnosed in the mucosa of vagina. According to guidelines of International Federation of Gynecology and Obstetrics tumor was staged clinically as IVA based on the previous morphology that was obtained during the first laparotomy. The tumor was staged $pT_3N_1M_1$. The patient was B-RAF mutation negative, treatment with Roferon-A and Rigvir was initiated.

DISCUSSION

The incidence of genital tract MM is about 1.6 cases per 1 million females with less than 2% accounting for uterine cervix mucosal melanoma (McLaughin *et al*., 2005). Malignant melanoma of the uterine cervix is highly aggressive tumor with high risk of local recurrences and a risk of wide spreading of metastases that may appear even several years from initial diagnosis (Zamiati *et al*., 2001). The prognosis of primary cervical MM is usually poor. Overall survival in these patients varies, but usually is within the range between few months and 14 years (Pusceddu *et al*., 2012).
There are two theories for the presence of the melanocytes on the uterine cervix: 1) melanocytes migrate from neural crest to the uterine cervix or 2) melanocytes differentiate from the endocervical epithelium (Zamiati *et al*., 2001).
The treatment of choice is radical hysterectomy with pelvic lymphadenectomy and partial vaginectomy. However, standardized surgical approach in the uterine

cervix MM is not accepted worldwide. The radiation therapy is used in some cases but usually it is only palliative due to the fact that MM is radio-resistant tumor (Mousavi *et al.*, 2006). It is strongly recommended not to perform any surgical intervention in unknown lesion in case of any suspicion of malignancy before biopsy. Similarly in this case primary surgical approach with laparoscopic conversion to laparotomy and excision of cervical lesion was too invasive and could promote tumor dissemination (Tran *et al.*, 2008).

The therapeutic options for melanoma in last years have been changed considerably. Vemurafenib - the BRAF kinase inhibitor - and Ipilimumab - the anti-CTLA-4 antibody - prolong survival in patients with melanoma, and they are now considered as standard treatment options (Sosman *et al.*, 2012; Hodi *et al.*, 2010).

Conflict of interest: None

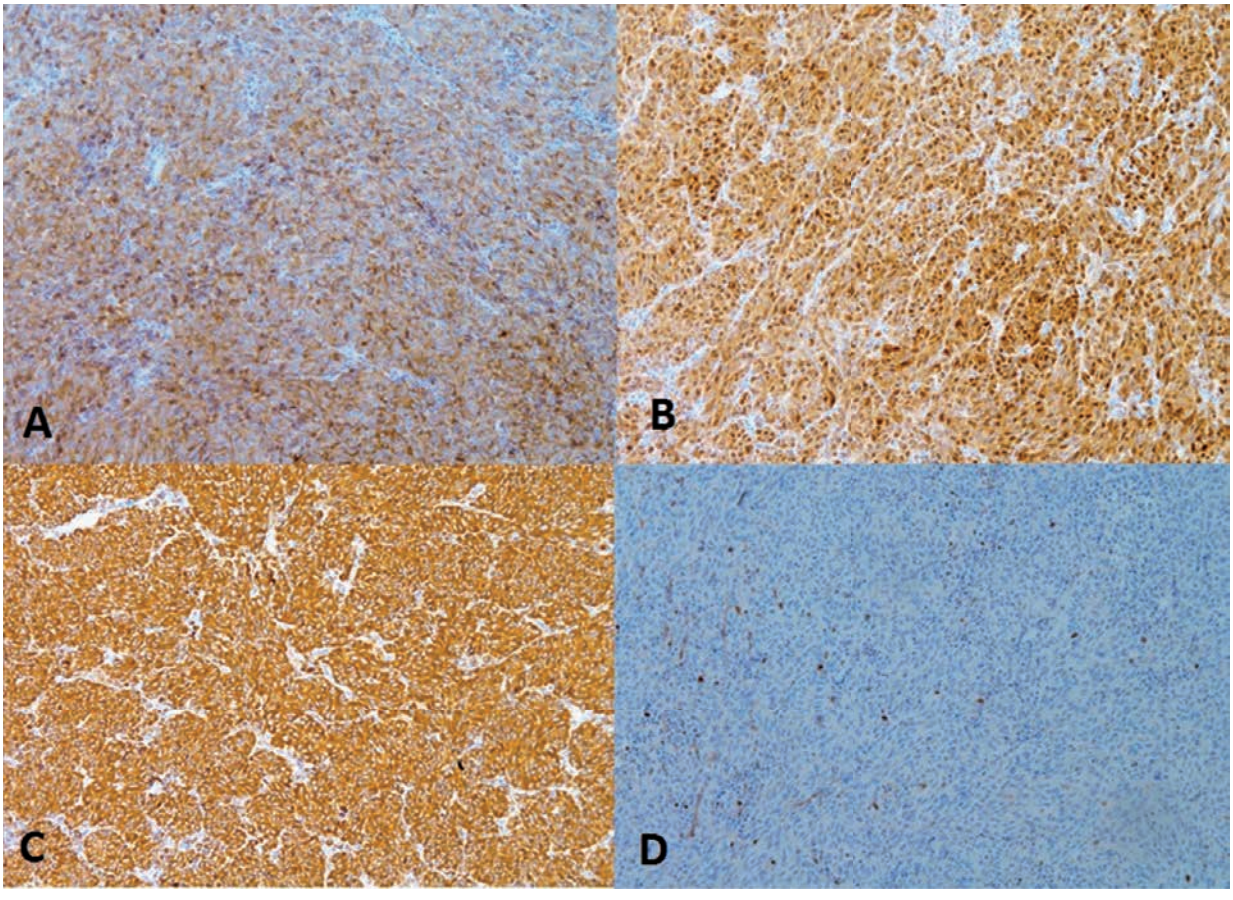

Fig. 1. Histological examination of the specimen
A – positive human melanoma black 45 (100x). B – positive antigen, S-100 protein (100x). C – positive vimentin (100x). D - Ki-67 about 12%

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