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LETTERS TO THE EDITOR

Nasopharyngeal carcinoma with synchronous breast cancer; possible role of Epstein-Barr virus infection in the carcinogenesis of both cancers

Dear Editor,

It is well known that Epstein - Barr virus (EBV) infection plays a role in the etiology of some cancers [1]. After finding this relation, it was also hypothesized that EBV act as cofactor with diet, estrogens and other hormones in the initiation and promotion of some types of breast cancer [2]. Although EBV has been detected in some breast cancers, no certain association between EBV and breast cancer has been demonstrated. Yet, the case described below with synchronous breast and nasopharyngeal carcinomas lends support to the possible association between EBV infection and breast cancer.

A 43-year-old postmenopausal woman presented to the otorhinolaryngology outpatient clinic with headache, hearing loss and a nasopharyngeal mass. Biopsy of the mass showed an undifferentiated epidermoid carcinoma. After physical examination another mass was detected in her right breast. Core biopsy from the breast mass was reported as invasive ductal and lobular carcinoma. No distant metastasis was detected after staging. Her serology for the EBV capsule antigen IgG was positive. According to these findings, the patient was considered as T4N2M0 nasopharyngeal cancer and T2N0M0 breast cancer. Docetaxel-cisplatin-5-fluorouracil chemotherapy, effective for both cancers, was initiated.

It is well known that some of the viruses have a role in the development of some cancers. EBV is the first human tumorigenic virus, directly involved in cancer pathogenesis [1,3]. The strong association between EBV and Burkitt's lymphoma, Hodgkin's lymphoma, non-Hodgkin's lymphoma, and nasopharyngeal carcinoma are well known entities [1]. The role of viruses in the pathogenesis of breast cancer has not been adequately considered [4]. Findings about a possible relationship between EBV and breast cancer are controversial. Some of the studies have reported an EBV incidence in breast cancer tissue as high as 21-51%, but some investigators have failed to show EBV in breast cancer tissue samples [1]. The epidermal growth factor receptor (EGFR) family-mediated signaling pathway has a crucial role in breast cancer and overexpression of EGFR family members (HER1, HER2, HER3, HER4) are observed in some of the breast cancers. In a study designed to explore the involvement of EBV in breast cancer, overactivation of the HER2/HER3 signaling axis in EBV-infected breast cancer cells was demonstrated [5].

The finding of EBV infection in our breast cancer patient supports the hypothesis of an association between EBV and breast cancer. However, future research is necessary for the explanation of possible association between EBV infection and breast cancer.

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Solid pseudopapillary tumor of the pancreas: a case series of 7 patients

Dear Editor,

Solid pseudopapillary tumors (SPTs) are unusual neoplasms of the pancreas that mostly occur in young women. Their prognosis is better than pancreatic adenocarcinoma and surgical excision is usually curative. Even in the presence of metastatic disease, the clinical course is usually protracted, and 5-year overall survival is more than 90% [1-3]. However, despite their relatively low malignant potential, approximately 15% of the patients with SPTs develop metastatic disease. Therefore, the importance of accurate diagnosis of these special types of pancreatic tumors is obvious.

This study reports a retrospective cohort of 7 patients with a pathological diagnosis of SPT. All patients, 6 of whom were females, had solitary tumors. Median age of the subjects was 36 years (range 14-49) and median tumor size 9 cm (range 3-15) (Table 1). Their fasting blood glucose and tumor marker levels were within normal ranges. One patient had a history of oral contraceptive use. Computerized tomographic features were also similar in all patients: solid or

Table 1. Patient baseline characteristics

Patient No.	*Age (years)/Sex*	*Complaint*	*Tumor localization*	*Size (cm)*	*Surgical treatment*
1	14, F	Abdominal pain, palpable mass	Pancreatic tail	10	Distal pancreatectomy
2	25, F	Abdominal pain	Pancreatic tail	9	Distal pancreatectomy
3	39, F	Abdominal pain	Pancreatic head	6	Whipple procedure
4	49, M	Abdominal pain, constipation	Pancreatic tail	9	Distal pancreatectomy
5	36, F	Abdominal pain	Pancreatic head	3	Enucleation
6	39, F	Abdominal pain, palpable mass	Pancreatic body and tail	15	Distal pancreatectomy
7	22, F	Abdominal and back pain	Pancreatic body	4	Enucleation

cystic-solid, usually well-encapsulated and circumscribed masses with heterogeneity and calcification in some patients. No patient had distant metastases. Curative resections (distal pancreatectomy in 4 patients, enucleation in 2, Whipple operation in 1) were possible in all of them (Table 1). Microscopically, focal hemorrhage and necrosis could often be demonstrated, with uniform polyhedral cells arranged around delicate, often hyalinized fibrovascular stalks with small vessels. Immunohistochemical evaluation revealed vimentin positivity for all patients. Also, one patient was positive for progesterone, neuron specific enolase and CD10. None of the patients received any postsurgical adjuvant therapy and all patients were alive at the last follow-up (median 26 months, range 17-34).

SPTs are rare exocrine tumors of the pancreas, accounting for 1-2% of all pancreatic tumors. Presenting features of SPTs are generally nonspecific and patients usually present with abdominal discomfort and pain as well as palpable masses. Recently, the number of cases reported in the literature has been rising [1-3]. As STPs develop predominantly in young women, it has been suggested that this condition might be influenced by sex hormones, although the results have been inconclusive [3]. All of our patients had abdominal pain in addition to palpable masses in 2 patients during physical examination. It is of note that one patient had a history of oral contraceptive use. Despite the advances in diagnostic methods, preoperative diagnosis of SPT is still difficult. At present, no specific tumor markers are available. Furthermore, neither characteristic findings from imaging examinations nor malignancy criteria have been established yet [4]. None of the preoperative features including age, sex, tumor size, elevated CEA and elevated CA19-9 levels are predictive of a malignant SPT [1,3,5]. Although surgical resection is the mainstay of current treatment strategy, there are no standard treatment recommendations as the surgical approach depends fundamentally on the location, size, and nature of the tumor. Consistent with other reports, our study demonstrated that SPT rarely gives rise to lymph node metastases. Therefore, formal lymphadenectomy is not required. There is no clear data supporting a role for either chemotherapy or radiotherapy.

In conclusion, SPTs are rare neoplasms of the pancreas. This diagnosis should always be considered in young women presenting with a large heterogeneous solid-cystic pancreatic mass. Due to the long-term survival of the patients with SPT, even in patients with metastases, aggressive resection should always be attempted.

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Can bevacizumab be a new treatment approach in metastatic melanoma?

Dear Editor,

No really effective chemotherapy exists for metastatic melanoma. Treatment of advanced melanoma remains unsatisfactory, because no therapy has demonstrated to affect overall survival (OS), with the exception of a recent immunotherapy study based on the administration of the ipilimumab and vemurafenib in BRAF600E mutation patients [1]. Malignant melanoma is a highly vascular tumor in which vascular endothelial growth factor (VEGF) is strongly expressed and seems to play an important role in disease progression. Also, increased serum VEGF levels correlate with worse outcome [2]. On these grounds, blocking VEGF signaling may control the growth of melanoma lesions. Bevacizumab is a monoclonal antibody that selectively binds to VEGF and blocks receptor binding, thus bevacizumab could be an effective treatment approach.

Bevacizumab Advanced Melanoma (BEAM) study was a phase II, multicenter, randomized, double-blind, placebo-controlled trial. In this recently published study, Kim et al. discuss the efficacy