

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. There-

fore, 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.

References

1. Yang F, Jin C, Long J et al. Solid pseudopapillary tumor of the pancreas: a case series of 26 consecutive patients. *Am J Surg* 2009; 198: 210-215.
2. Goh BK, Tan YM, Cheow PC et al. Solid pseudopapillary neoplasms of the pancreas: an updated experience. *J Surg Oncol* 2007; 95: 640-644.
3. Tien YW, Ser KH, Hu RH, Lee CY, Jeng YM, Lee PH. Solid pseudopapillary neoplasms of the pancreas: is there a pathologic basis for the observed gender differences in incidence? *Surgery* 2005; 137: 591-596.
4. Choi JY, Kim MJ, Kim JH et al. Solid pseudopapillary tumor of the pancreas: typical and atypical manifestations. *Am J Roentgenol* 2006; 187: 178-186.
5. Tipton SG, Smyrk TC, Sarr MG, Thompson GB. Malignant potential of solid pseudopapillary neoplasm of the pancreas. *Br J Surg* 2006; 93: 733-737.

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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

and safety of the addition of bevacizumab to carboplatin plus paclitaxel (CPB) chemotherapy [3]. Although the study did not achieve progression free survival (PFS) advantage as the primary end point, adding bevacizumab to carboplatin plus paclitaxel (CP) showed 3-month OS advantage over the to CP arm. In a multicenter, single-arm, open-label phase II study, bevacizumab plus fotemustine as first-line treatment in metastatic melanoma patients, PFS and OS were 8.3 and 20.5 months, respectively [4]. Grignol et al. reported that administration of bevacizumab with interferon alpha led to a clinical response in 24% of patients with stage IV melanoma and stabilization of disease in another 20% of patients with median PFS and OS of 4.8 and 17 months, respectively [5]. Bevacizumab with erlotinib and bevacizumab with everolimus combinations have synergistic activity against melanoma and can be novel treatment regimens for metastatic melanoma, but no well-designed trials exist to prove therapeutic activity of erlotinib and everolimus as first-line treatment in metastatic melanoma.

In the first-line treatment of metastatic melanoma, dacarbazine/temozolomide, ipilimumab±dacarbazine and vemurafenib in BRAF600E mutation-bearing patients can be used safely due to the more or less clear data of these regimens, but there is no well-designed randomized clinical trial of CP to use in untreated metastatic melanoma as first-line.

CP combination is not standard choice of treatment for metastatic melanoma and the optimal combination dose is not known. In phase II-III studies CP combination was generally used and accepted as second-line treatment [3].

In the absence of data from randomized clinical trials, it is unclear which chemotherapeutic schedule is better to be combined with bevacizumab. As a result, larger phase III studies are needed to observe benefit of bevacizumab, if any. Hence, it is not possible to state bevacizumab is a new a treatment approach in metastatic mel-

anoma. Also, the results of ongoing studies of adding bevacizumab to dacarbazine or to ipilimumab in patients with unresectable/metastatic melanoma are eagerly awaited.

References

1. Nikolaou VA, Stratigos A, Flaherty KT, Tsao H. Melanoma: new insights and new therapies. *J Invest Dermatol* 2012; 132 (3 Pt 2): 854-863.
2. Birck A, Kirkin AF, Zeuthen J, Hou-Jensen K. Expression of basic fibroblast growth factor and vascular endothelial growth factor in primary and metastatic melanoma from the same patients. *Melanoma Res* 1999; 9: 375-381.
3. Kim KB, Sosman JA, Fruehauf JP et al. BEAM: A Randomized Phase II Study Evaluating the Activity of Bevacizumab in Combination With Carboplatin Plus Paclitaxel in Patients With Previously Untreated Advanced Melanoma. *J Clin Oncol* 2012; 30: 34-41.
4. Del Vecchio M, Mortarini R, Canova S et al. Bevacizumab plus fotemustine as first-line treatment in metastatic melanoma patients: clinical activity and modulation of angiogenesis and lymphangiogenesis factors. *Clin Cancer Res* 2010; 16: 5862-5872.
5. Grignol VP, Olencki T, Relekar K et al. A phase 2 trial of bevacizumab and high-dose interferon alpha 2B in metastatic melanoma. *J Immunother* 2011; 34: 509-515.

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Rituximab-related cryptogenic organizing pneumonia and late onset neutropenia in a patient with non-Hodgkin lymphoma: Report of two rare complications and review of the literature

Dear Editor,

Rituximab is a chimeric anti-CD20 monoclonal antibody and it has been used for the treatment of lymphomas either alone or combined with chemotherapy. Rituximab is a well tolerated agent, except allergic reactions which are usually associated with the first infusion. Late onset neutropenia (LON) and cryptogenic organizing pneumonia (COP) are rare complications of rituximab.

A 53-year-old male patient with diffuse large B cell lymphoma limited to the right iliac bone (stage IE) was admitted to our clinic in October 2007. Eight cycles of R-CHOP were administered (day 1: rituximab 375 mg/m², cyclophosphamide 750 mg/m², vincristine 1.4 mg/m² [maximum 2 mg], doxorubicin 50 mg/m² and methylprednisolone 100 mg/day for 5 days) and involved field radiotherapy (RT) was delivered after chemotherapy. Two months after the last dose of rituximab the patient was admitted to our clinic with dyspnea. Physical examination revealed bilateral rales in the lungs. Erythrocyte sedimentation rate and CRP were 96 mm/hour and 15.24 mg/dl, respectively. In thoracic CT patchy, ground-glass appearance and consolidation areas were seen in both lungs. Fiberoptic bronchoscopic examination showed normal bronchial mucosa.

Bronchoalveolar lavage (BAL) was negative for acid-fast stain. Cytological examination of BAL showed spumy macrophages and rare polymorphonuclear leukocytes were seen, while viral inclusions were not detected. Empirical antibiotic treatment with ceftriaxone and clarithromycin was started but the patient's clinical course didn't improve. The diagnosis of interstitial pneumonia and COP were made, so 1 mg/kg prednisolone i.v. was started. Significant clinical improvement was achieved with corticosteroid therapy. The patient was admitted to our clinic for reevaluation 4 weeks later. He had no significant symptoms and his general health status was good. Lung infiltration was almost completely resolved in chest X-ray (Figure 1) and CT. Laboratory examinations were as follows: hemoglobin 11.7 g/dl, white blood cell 3.700/mm³, neutrophils 400/mm³, lymphocytes 2100/mm³, and platelets 184,000/mm³. Bone marrow biopsy showed hypocellularity without any specific changes or lymphoma involvement. In flow cytometric analysis, decreased levels of B lymphocytes and significantly increased levels of active T lymphocytes were detected. Restaging including imaging procedures showed that the patient was still in complete remission for non-Hodgkin's lymphoma. Laboratory and clinical findings known to cause neutropenia could not be