## **LETTER**

## Pancreatic Adenocarcinoma with Supraclavicular Lymph Node Metastasis: Is This the Virchow's Node?

Muhammad Wasif Saif<sup>1</sup>, Susan Hotchkiss<sup>2</sup>, Marianne Brennan<sup>2</sup>, Kristin Kaley<sup>2</sup>

<sup>1</sup>Columbia University College of Physicians and Surgeons at New York Presbyterian Hospital. New York, NY, USA. <sup>2</sup>Yale University. New Haven, CT, USA

Dear Sir.

We read with interest the case series of isolated supraclavicular lymph node metastasis in pancreatic adenocarcinoma published in November 2010 edition of JOP. J Pancreas (Online) by Soman *et al.* [1].

Supraclavicular lymph nodes are a common site of metastases in breast cancer, lung cancer, gastroesophageal cancer and lymphoma [2]. Supraclavicular lymph node metastases in pancreatic cancer are uncommon. As mentioned by the authors, liver and peritoneal cavities are the most common sites, followed by lungs, bones and brain [1, 3]. Rare sites of metastases may involve kidney, adrenal gland, muscle, skin, heart, pleura, stomach, umbilicus, appendix, spermatic cord and prostate have also been reported in pancreatic cancer [4, 5, 6, 7, 8, 9, 10, 11, 12, 13].

We will like to present one more case of a patient with pancreatic cancer who developed metastasis in left

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Correspondence Muhammad Wasif Saif

Columbia University; College of Physicians and Surgeons and the Herbert Irving Cancer Center; 177 Fort Washington Avenue, Suite 6-435; New York, NY 10032; USA

Phone: +1-212.305.4954; Fax: +1-212.3050.3035

E-mail: mws2138@columbia.edu

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supraclavicular lymph node metastasis. The previous cases and our case bring up the question: is this a Virchow's node?

Our first patient was a 56-year-old Caucasian female with medical history of insulin dependent diabetes and hypothyroidism who was initially diagnosed with locally advanced pancreatic adenocarcinoma involving the celiac axis and superior mesenteric artery after being worked up for abdominal pain and weight loss. She received gemcitabine plus oxaliplatin (GemOx) chemotherapy regimen [14]. After 16 cycles (4 months), she developed a mass in the left supraclavicular area. A PET scan was requested but denied by the insurance. A CT scan was performed that confirmed an enlarged lymph node. Fine needle aspiration was performed and the pathology was consistent with her primary pancreatic adenocarcinoma. She received palliative external beam radiation therapy to the lymph node with improvement in pain. Two weeks after finishing the radiation therapy, her chemotherapy was changed to 5flourouracil. Unfortunately, later she developed pulmonary metastases.

We have updated the Table 1 with our case, now totaling 10 cases of patients with pancreatic cancer who developed supraclavicular lymph node metastasis. We agree with authors that though supraclavicular lymph nodes represent an uncommon site of metastases, but carry clinical significance both in changing therapy and may be in prognosis; however,

Table 1. Summary of literature review of supraclavicular metastasis in pancreatic cancer

Authors	Number of cases of supraclavicular metastasis	Cytological/histologic confirmation	Method of detection	Change in management	Side of metastasis
Nishiyama et al., 2005 [15]	1	Yes	PET	Yes	NS
Farma et al., 2008 [16]	2	1 yes; 1 no	PET/CT	Yes	1 left; 1 NS
Matsuda et al., 2008 [17]	1	NS	NS	NS	Left
Park et al., 2009 [18]	2	NS	PET/CT	NS	NS
Soman et al., 2010 [1]	3	Yes	PET	Yes	Left
Saif et al. (present study)	1	Yes	CT	Yes	Left

NS: not specified

due to small number of cases, no clear association can be assessed at present PET/CT can provide valuable information in the detection and follow up of these patients [19]. This issue underscores its significance in patients where such imaging and awareness about uncommon sites can prevent a patient from unnecessary surgery, which also has economic impact.

Conflict of interest The authors have no potential conflict of interest

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