## Correspondence

### Localized pleural metastatic adenosarcoma of the uterine cervix mimicking a malignant solitary fibrous tumour: CD10 has no value in differential diagnosis

*Sir*: We read with interest the recent work by McCluggage *et al.*<sup>1</sup> reporting the diagnostic utility of CD10 expression in distinguishing endometrial stromal lesions from other potential mimics, such as uterine smooth muscle neoplasms. CD10 is a cell-surface neutral endopeptidase detected in a variety of normal and neoplastic conditions.<sup>2.3</sup>

However, to the best of our knowledge, CD10 expression has never been investigated in solitary fibrous tumours. We report a large, localized pleural metastatic adenosarcoma of the uterine cervix, that radiologically and morphologically mimicked a malignant solitary fibrous tumour, and evaluate the diagnostic utility of CD10 in this specific setting.

The patient, a 57-year-old woman, presented with dyspnoea, non-productive cough, right-sided chest pain and fever. A careful search of the clinical history revealed that the patient had undergone total hysterectomy with bilateral adnexectomy for adenosarcoma of the uterine cervix (FIGO stage Ib), performed 13 years before at another hospital. Physical examination on admission revealed a mild respiratory distress. Routine laboratory studies were unremarkable. Chest radiographs and computed tomography (CT) scan



Figure 2. The pleural lesion is composed of round to ovoid tumour cells (H&E, left), displaying strong cytoplasmic positivity with CD10 (right).

(Figure 1) showed a diffuse atelectasis of the middle and inferior lobes of the right lung, due to the presence of a large, solitary, pleural-based intrathoracic mass that infiltrated the neighbouring structures of the posterior mediastinum. An extensive work-up (total body CT scan and abdomino-pelvic ultrasonography) excluded lesions in other organs. A thoracoscopic biopsy was performed. The patient is alive with progressive local disease 4 months after surgery.



Figure 1. Chest computed tomography scan shows a large, solitary, pleural-based mass causing atelectasis of the right lung.

![](_page_0_Picture_11.jpeg)

Figure 3. A solitary fibrous tumour diffusely stained with CD10.

Macroscopically, the biopsy consisted of firm, whitish tissue, 50 mm across, with small dispersed gelatinous areas. Histologically, the lesion was composed of densely cellular areas alternating with hypocellular myxoid zones. Tumour cells were small, round to ovoid, with scant, pale to slightly eosinophilic cytoplasm (Figure 2, left). Nuclei were oval to fusiform with open chromatin and variably distinct nucleoli. Mitotic rate was greater than 5 mitoses per 10 high power fields (HPF). Scattered atypical multinucleated cells and numerous small to medium-sized vessels, which did not display haemangiopericytoma-like growth pattern, were noted throughout the tumour. Necrosis was absent. Immunohistochemically, tumour cells were diffusely positive for CD34, bcl-2, oestrogen and progesterone receptors and CD10 (clone 56C6) (Figure 2, right), focally positive for desmin, but negatively stained with pan-cytokeratin (MNF116), S100 protein, muscle-specific actin and h-caldesmon. A review of the cervical adenosarcoma previously excised revealed that the stromal sarcomatous component of the latter displayed the same morphology and immunophenotype of the pleural lesion. To evaluate the possible role of CD10 expression in distinction between a metastatic adenosarcoma and a primary malignant solitary fibrous tumour, we performed CD10 immunostaining on a small series of bona fide pleural solitary fibrous tumours (four benign and one malignant), all obtained from our files. Interestingly, three solitary fibrous tumours (including the malignant one) showed a strong and diffuse staining (Figure 3), while focal immunoreactivity was observed in the remaining two.

It is worth noting that CD34 and oestrogen and progesterone receptors also have little value in distinction between adenosarcoma/endometrial stromal neoplasms from solitary fibrous tumours, being frequently expressed in both.<sup>4, 5</sup> Despite these findings, we interpreted the pleural tumour as an unusual metastasis from the cervical neoplasm rather than a primary malignant solitary fibrous tumour, because the pleural and the cervical lesions shared the same morphology and immunophenotype, and because of the known propensity of uterine adenosarcoma to recur or metastasize many years after surgery.<sup>6</sup>

In conclusion, we described an uncommon pleural metastasis from an adenosarcoma of the uterine cervix, clinically, morphologically and immunohistochemically bearing a close resemblance to a primary malignant solitary fibrous tumour. Finally, we first report that solitary fibrous tumour is frequently immunoreactive for CD10. If confirmed in larger series, this finding suggests that CD10 plays no significant role in

discriminating solitary fibrous tumour from uterine stromal neoplasms.

#### ACKNOWLEDGEMENT

This work was funded by Ministero dell' Istruzione, Universita' e Ricerca (MIUR).

#### G Rossi A Cavazza<sup>1</sup> L Longo<sup>2</sup> A Maiorana

Department of Morphological Sciences, Section of Pathology, University of Modena and Reggio Emilia, <sup>1</sup>Section of Pathology, Hospital S. Maria Nuova, Reggio Emilia,

and <sup>2</sup>Civic Hospital of Pavullo, AUSL Modena, Modena, Italy

- 1. McCluggage WG, Sumathi VP, Maxwell P. CD10 is a sensitive and diagnostically useful immunohistochemical marker of normal endometrial stroma and of endometrial stromal neoplasms. *Histopathology* 2001; **39**; 273–278.
- Chu PG, Arber DA. Paraffin-section detection of CD10 in 505 nonhematopoietic neoplasms. Frequent expression in renal cell carcinoma and endometrial stromal sarcoma. *Am. J. Clin. Pathol.* 2000; 113; 374–382.
- Chu PG, Arber DA, Weiss LM, Chang KL. Utility of CD10 in distinguishing between endometrial stromal sarcoma and uterine smooth muscle tumors: an immunohistochemical comparison of 34 cases. *Mod. Pathol.* 2001; 14; 465–471.
- Lindenmayer AE, Miettinen M. Immunophenotypic features of the uterine stromal cells. CD34 expression in endocervical stroma. *Virchows Arch.* 1995; 426; 457–460.
- Carneiro SS, Scheithauer BW, Nascimento AG *et al.* Solitary fibrous tumor of the meninges: a lesion distinct from fibrous meningioma. A clinicopathologic and immunohistochemical study. *Am. J. Clin. Pathol.* 1996; 106; 217–224.
- 6. Clement PB, Scully RE. Mullerian adenosarcoma of the uterus: a clinicopathologic analysis of 100 cases with a review of the literature. *Hum. Pathol.* 1990; **21**; 363–381.

# Intraductal papilloma of the parotid gland in a child

*Sir*: Intraductal papillomas of the salivary glands are rare tumours mainly arising in minor salivary glands in adults. We report a case of intraductal papilloma of the parotid gland in a young boy.

An 8-year-old otherwise healthy boy presented with a 3-month history of a swelling at the right angle of the jaw. The mass was painless and had slowly increased in size. Fine-needle aspiration of the mass was performed twice and revealed only cystic fluid. As the cyst