Virchows Arch (1995) 427:111–112

LETTER TO THE EDITOR

K. Küchemann

A rare case of pigmented paraganglioma

Dear Sir,

In a recent case report published in the January issue of *Virchows Archiv* [1], Hofmann and associates describe a melanotic paraganglioma, which seems to be the fourth case of such a tumour appearing in the literature and the first occurring in the posterior mediastinum. Although retroperitoneal paragangliomas along the paraaortic region are well known, we are not aware of any report of a *melanotic* paraganglioma in this location. We have recently seen such a case, which is histologically identical to the one described by Hofmann and associates and appears to be the first case of a *melanotic* paraganglioma derived from the extraadrenal retroperitoneal paraganglion system.

A 45-year-old woman had had recurrent attacks of pain in the right mid-lower abdomen for the previous 4–5 years. A coloscopy in the autumn of 1994 was negative. Ultrasonography was unremarkable. In January 1995, abdominal computed tomography and i.v. urography revealed a renal calculus in the right kidney. At this time, a large cystic structure was identified in the vicinity of the left kidney and also documented by subsequent ultrasound examination. Laboratory tests were within normal limits. There were no signs of excess catecholamine secretion, and the blood pressure was 110/70 mmHg. Gynaecological examination was negative except for a cystic structure in the right ovary. An exploratory laparotomy was carried out on January 24. A large paraaortic, cystic, extremely vascular and easily bleeding tumour was found closely adherent to the left ureter and extending close to the lower pole of the left kidney. The tumour was removed, and a tentative diagnosis of retroperitoneal paraganglioma was established on frozen section. Several enlarged lymph nodes in the vicinity of the mass were negative. The postoperative course was uneventful, and the patient was discharged on 2 February 1995.

Grossly the specimen consisted of soft haemorrhagic, dark red to black, tumour tissue resembling a large blood clot, weighing 85 g and measuring 10×5×5 cm. Histological examination revealed highly vascularized tumour tissue focally resembling a haemangioma (Fig. 1). Perivascular tumour cells exhibited round to oval, sometimes hyperchromatic nuclei with occasional pseudo-inclusions. Some large pleomorphic nuclei were seen, but mitotic figures were rare. The slightly granular eosinophilic cytoplasm contained a large amount of frequently coarsely granular and/or dusty pigment often obscuring cellular details. The Prussian blue reaction for haemosiderin was negative. The Fontana-Masson stain revealed numerous positive granules (Fig. 2). Immunohistology showed positive staining for neuron-specific enolase, synaptophysin and chromogranin (Fig. 2), while S-100 protein identified only characteristic sustentacular cells.

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Reference

1. Hofmann WJ, Wöckel W, Thetter O, Otto HF (1995) Melanotic paraganglioma of the posterior mediastinum. Virchows Arch 425:641–646

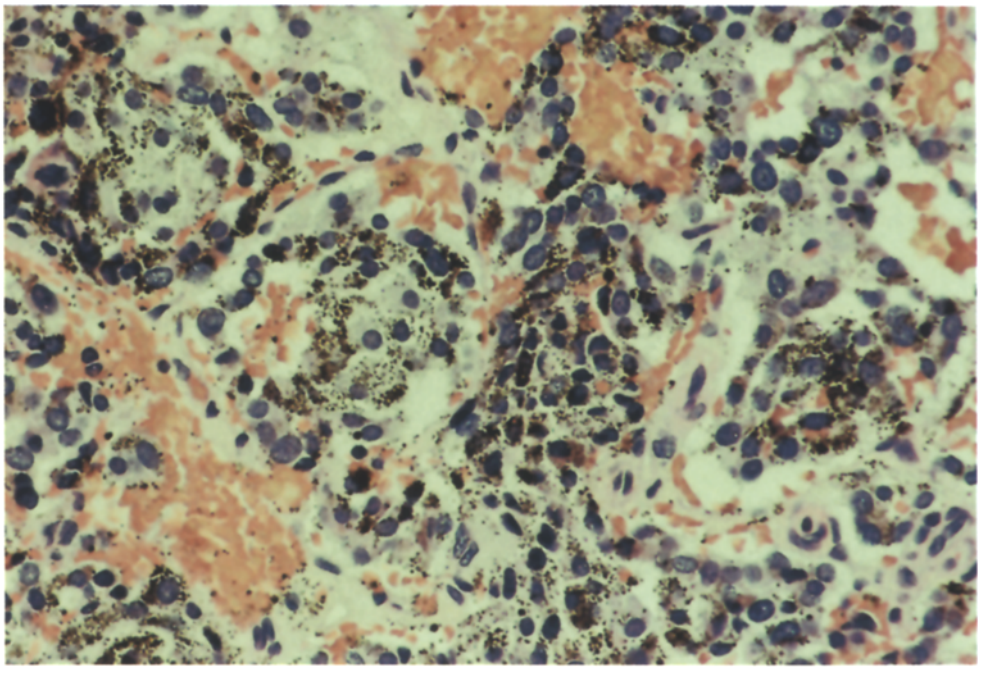

Fig. 1 Tumour showing richly vascular pattern and numerous pigment granules. H&E stain

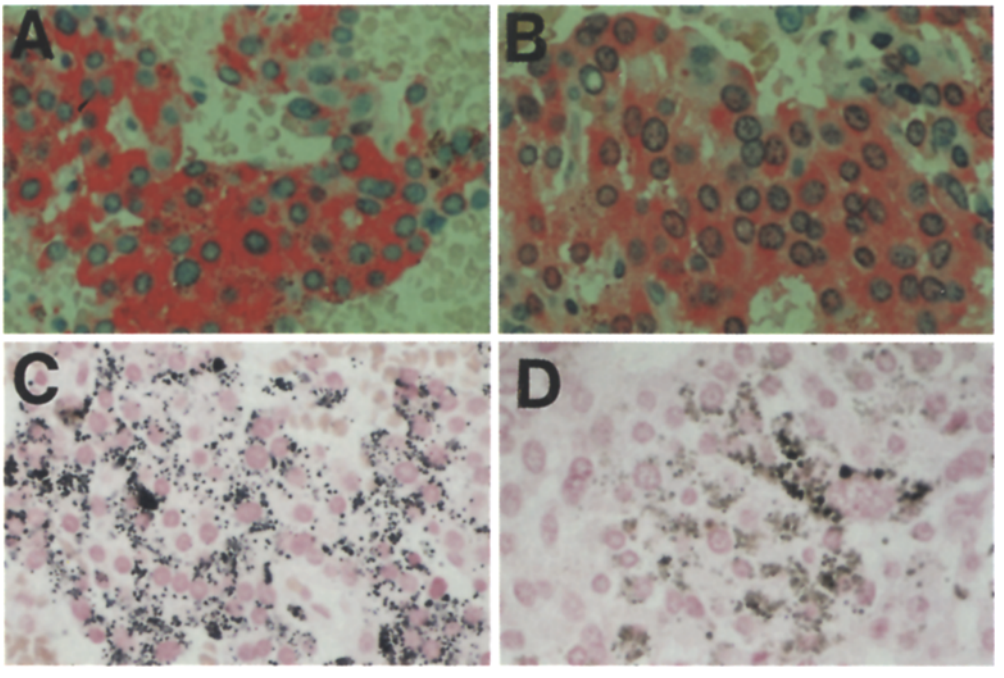

Fig. 2 **A** Chromogranin A, **B** NSE, **C** Fontana-Masson, **D** Prussian blue