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European Journal of Cardio-thoracic Surgery 21 (2002) 1126–1129

EUROPEAN JOURNAL OF  
CARDIO-THORACIC  
SURGERY

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## Letters to the Editor

Letter to the Editor

### Ectopic ACTH-producing tumors of the chest and octreotide scintigraphy

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Received 5 February 2002; accepted 13 February 2002

We read with interest the paper by Dell'Asta et al. [1].

In 1995 we published an article in which we pointed out the importance of <sup>111</sup>In-DTPA-Pentetreotide scintigraphy (Octreoscan) in the preoperative diagnosis of ACTH-producing bronchial carcinoid [2]. Neuroendocrine tumors (of which spectrum bronchial carcinoid are comprised [3]) of the lung and the thymus are most frequently responsible for ectopic ACTH-producing tumors. They express tissue receptors for somatostatin (sst<sub>1</sub>–sst<sub>5</sub> subtype receptors) well detected by polymerase chain reaction (PCR) technique. The current generation of somatostatin analogs (octreotide, lanreotide) binds with high affinity to sst<sub>2</sub> receptor subtype, with lower affinity to sst<sub>3</sub> and sst<sub>5</sub>, and do not bind sst<sub>1</sub> and sst<sub>4</sub> [4].

In vivo expression of sst<sub>2</sub> receptors is provided by Octreoscan: thus tumors expressing high quantity of these receptors became a potential target for octreotide or lanreotide.

Octreoscan is effective in diagnosing neuroendocrine tumors of the lung (and of the thymus), their eventual metastases to mediastinal lymph nodes and their local or distant recurrences. Distant metastases or recurrences are often discovered in the absence of symptoms with higher accuracy than traditional radiological procedures [5].

We have recorded a recurrence of a radically resected ACTH-producing typical bronchial carcinoid in the mediastinum, promptly discovered by Octreoscan. The patient decided not to be submitted to re-intervention, and he received medical therapy with octreotide, with a good control of the symptoms. Positive Octreoscan can, in fact, influence a medical therapy with octreotide or lanreotide, in case of metastatic neuroendocrine tumors [5]. For example, with prolonged circulating half-life and non-toxic side-effects octreotide is an excellent somatostatin analog for medical application. Recently, radiometabolic treatment

with octreotide was proposed in patients with metastatic neuroendocrine tumors: this procedure can be used in selected cases in which surgery is not feasible. Surgery remains, in fact, the treatment of choice in these patients, but not always possible.

We agree with the authors [1] in their diagnostic protocol for neuroendocrine ACTH-producing tumors, and we emphasize the utility of Octreoscan in the preoperative study and follow-up for all neuroendocrine neoplasm of the chest.

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PII: S1010-7940(02)00109-4

### Reply to the Letter to the Editor

#### Reply to Filosso et al.

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Received 11 February 2002; accepted 13 February 2002

In their letter to the Editor, Filosso et al. emphasize the role of <sup>111</sup>In-pentetreotide scintigraphy (Octreoscan) in the