

Remission of a Renal Artery Stenosis after Laparoscopic Removal of an Extra Adrenal Paraganglioma

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A 44-year-old hypertensive man was referred to our department for an infradiaphragmatic right-sided suprarenal mass. Biological examinations were compatible with a pheochromocytoma. A computed tomography (CT) scan revealed a 28 × 23 mm mass located upper an ipsilateral renal artery stenosis (Figure 1). The tumor was resected by a laparoscopic transperitoneal approach. On histopathological examination the diagnosis of extra adrenal paraganglioma was confirmed.

The postoperative course was uneventful. One month later, the control CT scan demonstrated complete restoration of the diameter of the right renal artery (Figure 2).

The association between pheochromocytoma and a renal artery stenosis is a rare condition.^(1,2)

If stenosis is mainly due to a local compression by the tumor, in a few cases it can only be explained by the mechanism of an arterial vasospasm due to the local catecholamine secretion.

In the treatment sequences, in order to avoid the therapeutic pitfalls, a high degree of suspicion is necessary.⁽¹⁻³⁾ In the case of simultaneous occurrence of pheochromocytoma and renal artery stenosis, the surgical resection of the tumor must be performed in the first step because the renal artery stenosis may regress spontaneously after surgery. Endovascular or open surgical revascularization for the renal artery stenosis is reserved only for persistent or recurrent stenosis.⁽³⁾

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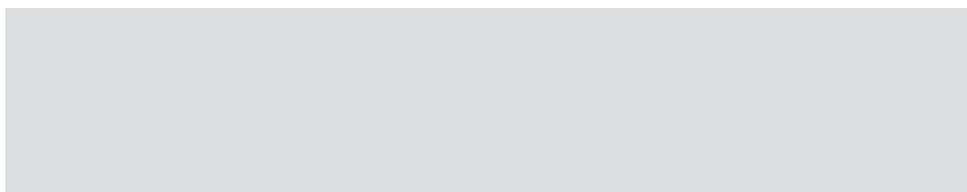


Figure 1. A computed tomography scan shows a 28 × 23 mm mass located upper an ipsilateral renal artery stenosis.

Figure 2. One month later, the control computed tomography scan demonstrates complete restoration of the diameter of the right renal artery

REFERENCES

1. Vaze D, Trehan A, Saxena A, Joshi K, Narasimhan KL. Extraadrenal pheochromocytoma with renal artery "pseudostenosis"—an important pitfall. *Urology*. 2012;80:925-7.
2. Gill IS, Meraney AM, Bravo EL, Novick AC. Pheochromocytoma coexisting with renal artery lesions. *J Urol*. 2000;164:296-301.
3. Chandra V, Thompson GB, Bower TC, Taler SJ. Renal artery stenosis and a functioning hilar paraganglioma: a rare cause of renovascular hypertension—a case report. *Vasc Endovascular Surg*. 2004;38:385-90.