

The histological study revealed a cystic formation with a papillary solid nodule. Upon sectioning, the lesion was found to be compact and elastic, with the observation of prostatic tissue and seminal vesicle at the periphery. The microscopic study showed the tumor to contain stromal and glandular areas with a layered architecture – the diagnosis being phyllodes tumor. There was no evidence of aggressive behavior, and the lesion was thus regarded as being of low grade. Immunohistochemistry proved negative for both PSA and prostatic acid phosphatase (PAP) – thus reinforcing an origin in the seminal vesicle.

One year after surgery, the patient is asymptomatic, with no evidence of residual tumor or disease relapse in the imaging studies.

Phyllodes tumors are neoplasms with an epithelial and a stromal component¹ that often develop within the sinus. They rarely develop in the prostate, and about 15 cases involving a seminal vesicle origin have been published to date. These tumors often manifest with lower urinary tract symptoms, hematuria, hematospermia or the presence of a mass at rectal exploration.¹⁻³ The imaging study findings are typical but not pathognomonic of the disease.⁴

Surgical resection is the indicated treatment. There is evidence that even in the least aggressive presentations, disease relapse is the rule,¹ with some documented cases of the development of sarcoma,^{1,5} local invasion and pulmonary metastasis^{1,2,6,7} – fundamentally in the high grade lesions (with hypercellularity, nuclear atypias, mitotic activity or an increased stromal/epithelial ratio)¹ – even after radical surgery. Since no lymphatic metastases have been reported, lymphadenectomy has not been indicated.⁸

The roles of radiotherapy and chemotherapy^{2,4,7} remain to be defined, despite the existence of a case of remitting lung metastases.⁷

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Renal artery pseudoaneurysm after partial nephrectomy. Diagnosis, treatment and literature review

Pseudoaneurisma de arteria renal tras nefrectomía parcial laparoscópica. Diagnóstico, tratamiento y revisión bibliográfica

Dear Editor,

Between May 2006 and December 2008, we performed 9 laparoscopic partial nephrectomies (LPNs) in our Department. We report the case of a 61-year-old male incidentally diagnosed with a 2.5-cm tumor located in the lower pole of the right kidney.

LPN was performed with a duration of surgery of 220 min., an ischemia time of 32 min., and a bleeding volume of 200 ml. Resection was performed with a cold scalpel, and leaving a 1-cm safety margin. Posteriorly, the urinary tract and surgical bed were sutured with polyglactin 3-0, adding Floseal® to the resection bed and placing a Surgicel® membrane.

Parenchymal suturing was carried out with polyglactin 1-0 sutures and Hemo-locks® to maintain tension.

The histopathological diagnosis was clear cell carcinoma with areas of papillary growth, corresponding to Fuhrman grade II. The tumor measured 2.7 cm in size, and the surgical margins, capsule and perirenal adipose tissue were free of tumor invasion.

After surgery the patient presented mild hematuria which intensified 24 hours later, coinciding with the start of walking – requiring continuous lavage and the transfusion of two red cell concentrate units. The patient was discharged on the fourth postoperative day without a catheter.

Figure 1 – CT following the appearance of hematuria in the patient subjected to LPN, showing a 2,5-cm collection in the right kidney which: A) takes up contrast in the arterial phase, B) but not in the excretory phase.

Figure 2 – Arteriography of the right renal artery, showing a saccular image at third bifurcation level, corresponding to the PRA.

Four days after discharge, he developed hematuria and suffered loss of consciousness. Computed tomography (fig. 1) revealed a 2.5-cm saccular image in the right kidney, showing contrast uptake in the arterial phase but not in the excretory phase, suggestive of the presence of a pseudoaneurysm of the renal artery (PRA).

Arteriography in turn revealed contrast leakage at the third bifurcation of the renal artery, giving rise to a collection fistulizing to the urinary tract. Selective coil embolization was carried out (fig. 2), with resolution of the fistula.

PRA is a rare complication described after percutaneous renal operations (renal biopsy, nephrostomy and percutaneous nephroureterolithotomy), renal trauma, ureteroscopic lithotripsy, and even renal transplantation.

Such aneurysms are infrequent after open partial nephrectomy, with an incidence of 0.43-7.9%.^{1,2} Following LPN, a total of 21 cases of PRA have been reported to date in the literature (listed and reviewed in table 1). Singh-Gill³ published a PRA incidence of 1.7% after LPN.

Some authors are of the opinion that the sectioned vessels are more easily identified and sutured after an open partial nephrectomy than with the laparoscopic technique.⁴

A number of theories regarding the origin of PRA have been proposed:³

- Intraoperative bleeding of the sectioned artery is not observed because it is partially ligated, the blood pressure is low, or due to arterial spasm.⁵ When patient activity increases, the thrombus obstructing the artery is degraded, and bleeding occurs.
- Suboptimal approximation suturing of the renal parenchyma, lacking the required tension.
- Reabsorption of the suture applied to the tumor bed⁶ – the time to appearance of the pseudoaneurysm corresponding to the time to suture reabsorption.

The bleeding artery leaks into a closed cavity located in the resection bed, thus conforming the pseudoaneurysm. The associated hematuria in turn would be related to opening of the pseudoaneurysm into the urinary tract,² usually between the 2-4 postoperative week.

Nadu⁷ reported a PRA incidence rate of 7.5% for central tumors (invading the renal parenchyma in depth, and reaching contact with or invading the collector system and/or renal sinus) and 0% for peripheral tumors. This author suggested that LPN for central tumors should be carried out in centers with an interventional radiology department. However, in our review, most PRA appear in LPN for peripheral tumors.

There are different techniques for improving hemostasis and preventing PRA formation following LPN:

- Careful suturing of the surgical bed.^{5,8}
- Application of hemostasis-favoring agents to the surgical bed (FloSeal® and/or Surgicel®), as a complement to correct hemostatic suturing.^{5,6}
- Improvement of surgical bed suture using Lapra-Ty clips or a suture traction system.⁵
- Declamping of the pedicle after first suture of the resection bed, in order to identify the non-sutured vessels that cause the bleeding.⁴
- Pulmonary hyperinsufflation after declamping of the pedicle, in order to increase central venous pressure and thus better detect the presence of bleeding.⁵

In relation to the 21 published cases of PRA after LPN, the mean tumor size was 2.8 cm (range 1.5-5), and 19 corresponded to renal cell carcinoma (RCC), while two were renal angiomyolipomas (AML). In turn, 12 were right-side tumors and 6 left-side tumors. The mean ischemia time

Table 1 – Review of all the cases published in the international literature

Article	Age	Sex	Path	Tumor size	Location	Side	Ischemia time	Suture	Margins	Days	Clinical manifestations	Diagnosis	Artery, order	Size PRA	[] Hem	Tr
Moore et al	53	M	RCC Pap.	NA	Perif	L	NA	NA	NA	NA	Hematuria	CT	NA	≈4	NA	Coils
Singh ³	60	M	RCC Clear	NA	Perif	R	NA	NA	NA	NA	Hematuria	CT	NA	2	NA	Coils
	59 (34-80)	M	RCC	2.6	Invasion	R	31	B: 2-0 Polyglactin+ P: 0 Polyglactin over cellulose.	Neg	11	Hematuria	Angiography	3rd	NA	7	Coils
				Mean 1.8												
	"	M	RCC	5	"	R	31	FloSeal® in 2 cases	Neg	15	Abdominal pain Weakness	Angiography	3rd	NA	9	Coils
	"	M	RCC	2.2	"	R	33	"	Neg	8	Bleeding difficulty	Angiography	4th	NA	3	Coils
	"	F	RCC	3	"	R	30	"	Neg	14	Bleeding peri JP	Angiography	3rd	NA	NA	Coils
	"	F	RCC	4	"	R	45	"	Neg	12	Flank pain	Angiography	4th	NA	6	Coils
	"	F	AML	4.6	"	R	39	"	Neg	10	Orthostatic hypotension	Angiography	3rd	NA	5	Coils
Wright ⁴	63	M	RCC Pap: pT1 G2/4	1.5	Perif ^a (Sup)	L	45	B: 2-0 Glycolide/lactide P: 0 Glycolide/lactide over cellulose	Neg	9 and 11	Flank pain Hematuria	CT	Segmental	3	NA	Coils
											Flank pain					
Negoro ^{8,a}	59	F	RCC Cl.: pT1 G2/4	1.6	Perif (Sup)	R	23	0 Glycolide/lactide over cellulose FloSeal®	Neg	9	Fatigue, diarrhea Flank pain	CT	Sub-segmental	NA	NA	Coils
	36	F	RCC Cl.: pT1a G2/4	3.3	Perif (Med)	R	68 ^b	B: 3-0 Vicryl P: 2-0 Polysorb	NA	NA	Microhematuria Hematuria and acute urinary retention	CT; Doppler US	Segmental middle	3	0	Coils
Hayn et al	58	M	RCC Cl.: pT1a G3/4	2	Perif (Inf)	L	NA	NA	Neg	90	Hematuria Flank pain Dizziness, dyspnea	CT; Doppler US; Arteriography	NA	≈1 and ≈3	0	Coils
	49	F	AML	2.5	Perif (Post)	R	40	Coag. with argon B: 4-0 Vicryl FloSeal® P: 2-0 Vicryl LapraTy for B and P	Neg	24	Flank pain Hematuria	CT	3rd	1.6	>1	Coils
Uberoi ⁶	41	M	RCC Pap	1.5	Perif (Anterior-central)											Coils
Cohenpour et al	56	M	RCC Cl.	1.5	Perif (Inf)	R	33 ^b	B: Polyglactin 2-0+Surgicel® P: Polyglactin 0	Neg	21	Hematuria	MR-angio	Segmental inferior	3	NA	Coils
					Invades 1 cm							Arteriography+corticoids				
Shigeta et al	68	M	RCC	NA	NA	L	NA	NA	NA	14	Hematuria	CT	NA	2.5	NA	Coils
	57	M	RCC Pap: pT1a G2/4	2.7	Perif (Med-Inf)	L	49 ^b	B: Polyglactin 3-0 P: Polyglactin 2-0		42	Flank pain	CT	NA	NA	NA	Coils

Table 1 (continued)

Article	Age	Sex	Path	Tumor size	Location	Side	Ischemia time	Suture	Margins	Days	Clinical manifestations	Diagnosis	Artery, order	Size PRA	[] Hem	Tr
Nadu ⁷	NA	NA	NA	Mean 3.2	C	NA	Mean 37	B: 3-0 Polyglactin P: 2-0 Polyglactin with clips. Human thrombin	Neg	7	Hematuria Shock?	NA	NA	NA	NA	Coils
	NA	NA	NA	"	C	NA	"	"	Neg	8	Hematuria+acute urinary retention?	NA	NA	NA	NA	Coils
	NA	NA	NA	"	C	NA	"	"	Neg	22	Hematuria	NA	NA	NA	NA	Coils
	NA	NA	NA	"	C	NA	"	"	Neg	45	Hematuria	NA	NA	NA	NA	Coils
Our case	61	M	RCC: pT1 G2/4	3	Perif (Inf)	R	32	B: 3-0 Vicryl+ Surgicel® P: 1 Vicryl with clips	Neg	1 and 8	Hematuria Syncope	CT	3rd	3rd, 5	2	Coils

All dimensions are in cm, ischemia time is in minutes, and time to hematuria or clinical manifestations of PRA in days. C: central; RCC: renal cell carcinoma; AML: renal angiomylipoma; Cl: clear; R: right; F: female; L: left;

B: surgical bed; M: male; NA: not available; P: renal parenchyma; Pap: papillary; Perif: peripheral; []: red cell concentrates.

^aLaparoscopic partial nephrectomy with extraperitoneal approach.

^bUreteral catheter irrigation with indigo carmine-colored normal saline at 4°C during the operation to cool the renal parenchyma and to confirm aperture of the collector system.

was 37.6 minutes (range 23-68). The initial manifestations were hematuria (77%), flank pain (41%) and, less frequently, weakness, dyspnea, orthostatic hypotension, dizziness or syncope. The mean time to appearance of hematuria after LPN was 19.7 days (range 1-90).

The diagnosis of PRA is based on clinical suspicion following the observation of hematuria with or without flank pain between 2-4 weeks after LPN, and requires a CT study with contrast in the arterial, venous and excretory phases. This is the diagnostic technique of choice (used in 61% of the published cases), while arteriography was performed in 44.4% of the cases, and MR-angiography was performed in one patient with allergy to contrast medium. CT usually shows a saccular image in the zone of the surgical bed that takes up contrast in the arterial phase but not in the venous or excretory phases.

It may be difficult to distinguish between PRA and urinoma on the CT scan.⁹ This explains the importance of performing CT in different phases, with an arteriogram of the renal artery, which can show contrast leakage generally at the level of the third-fourth bifurcation, giving rise to a saccular image of a size similar to that visualized on CT.

The treatment of choice for PRA in a hemodynamically stable patient is arteriography with selective embolization of the bleeding artery using coils. This technique results in minimal renal parenchymal loss;¹⁰ the complications rate is low compared with surgical maneuvering; and the success rate is over 80%.⁸ This was the treatment of choice in all the reviewed cases, and proved definitive in all instances. Imaging studies are advised to confirm resolution of the pseudoaneurysm.⁴

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Melanoma of male urethra: A clinical case

Melanoma de uretra masculina: caso clínico

Dear Editor,

We report the case of a 71-year old male presenting with urethral bleeding for the previous 10 days and the appearance of a pigmented lesion seen through the urinary meatus. There were no other associated clinical manifestations. Physical examination, including the palpation of inguinal lymph node chains, complete blood count and the blood biochemistry findings proved strictly normal. Cystoscopy revealed the presence of a nodular, friable and gray-colored lesion measuring about 17 × 7 mm in size, located in the fossa navicularis, and which was subjected to biopsy. The pathology report described a proliferation of polygonal cells with spherical and hyperchromatic nuclei that stained positively for HMB45, melanin A, vimentin and S100, with negativity for keratin. These observations were consistent with primary urethral melanoma. A thoracoabdominal and pelvic CAT scan indicated no lymph node or visceral metastatic involvement. At this point partial amputation of the penis was carried out, with tumor-negative resection margins. The bilateral sentinel node technique proved negative, as a result of which lymphadenectomy was not carried out. The results of the urethral biopsy were confirmed in the surgical resection piece.

During the follow-up of this patient, PET-CAT was performed 6 months and one year after surgery, with normal findings. Six months later, the patient presented with pain and abdominal bloating for the past two weeks, with signs of ascites at exploration. Thoracoabdominal CT confirmed the presence of ascitic fluid, as well as thickening of the peritoneum and mesenterium, and the presence of a retroperitoneal adenopathic mass, bilobular liver metastases measuring up to 6 cm in size, multiple lung nodules and bilateral pleural effusion (fig. 1). The blood tests in turn showed an LDH concentration of 833 IU/l. Paracentesis was performed, with the obtainment of serohematic fluid. With a diagnosis of metastatic melanoma recurrence, palliative chemotherapy was started with intravenous dacarbazine at a dose of 250 mg/m² during 5 days. Three weeks later

the patient developed hemorrhagic ascites and multiorgan failure, with pancytopenia secondary to palliative intravenous dacarbazine chemotherapy – leading to the death of the patient a few days later, despite the pharmacological and supportive treatment provided.

Urethral melanoma is a very infrequent variant of melanoma, particularly in the male, and has a very poor prognosis due to the aggressive nature of the disease and the fact that the diagnosis is generally established in advanced stages. Due to the difficulties in accessing these lesions, the secondary preventive measures adopted in application to this type of neoplasm are not useful. Approximately one-third of all patients have lymph node involvement at the time of diagnosis, with an overall survival after 5 years of less than 30%.^{1,2} The Breslow classification in application to these tumors is insufficient, due to the increased aggressivity of the disease with respect to skin melanomas. As a result, in clinical practice they are classified as follows: stage I-II for localized disease; stage III in the presence of regional (inguinal) lymph node involvement; and stage IV for metastatic disease.² As regards treatment, only stage I-III disease is potentially curable provided surgery is as aggressive as possible (total or partial penectomy with lymphadenectomy in the case

Figure 1 – Abdominal computed axial tomography views showing liver metastases, ascitic fluid and retroperitoneal nodules.