# Primary Retroperitoneal Tumors Presenting as Ruptured Aneurysms

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## Introduction

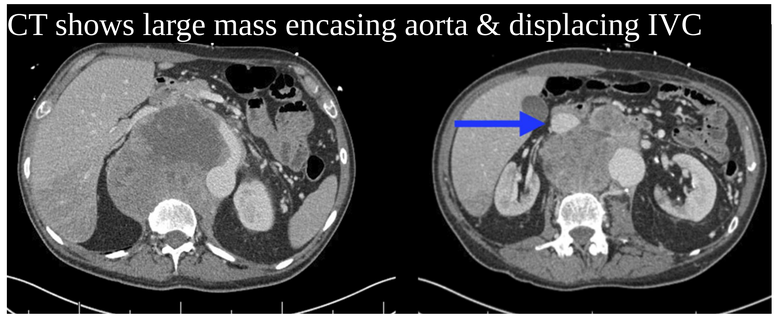
Retroperitoneal tumors represent a variety of rare lesions that can arise either from solid organs (kidney, pancreas, adrenals) or less commonly the mesenchymal soft tissue. Depending on histologic subtype, these malignancies often have a variable clinical presentation and prognosis.

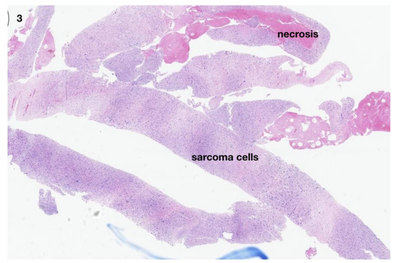
Herein, we present 2 cases: a patient with Stage 3 RP sarcoma eroding the para-visceral aorta causing rupture; a kidney transplant recipient with non-Hodgkin's lymphoma presenting as a ruptured right hypogastric arterial aneurysm.

## Case 1 – sarcoma causing aortic rupture

56 y/o male 20pkyr smoker, underwent open TAA repair w/ branched Coselli graft for rupture of para-visceral aorta w/ a 10×8×11 cm hematoma + small pseudoaneurysm arising from the posterior aortic wall near the SMA. He presented 7months later w/ 40lb weight loss and CTA w/ 14×12×10 cm mass involving the abdominal aorta and displacing the IVC. The patient then underwent a CT-guided core needle biopsy which demonstrated a necrotic high-grade sarcomatoid tumor. The Stage 3 mass was deemed unresectable due to extensive vascular involvement. The patient underwent palliative chemotherapy with ifosfamide. He presented 5 months later with a perforated appendicitis and sepsis. At the time he elected for comfort care and passed away.

CT shows large mass encasing aorta & displacing IVC

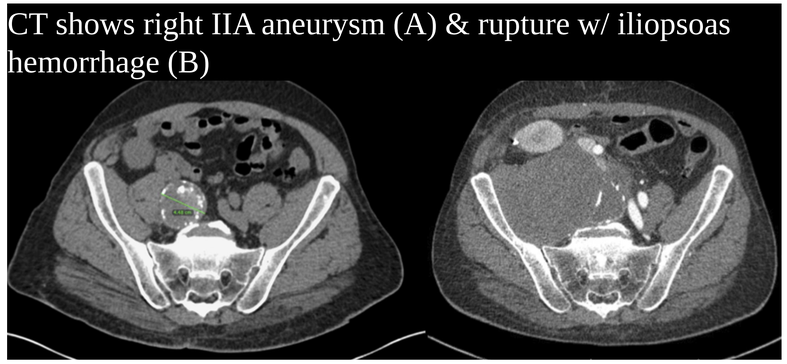




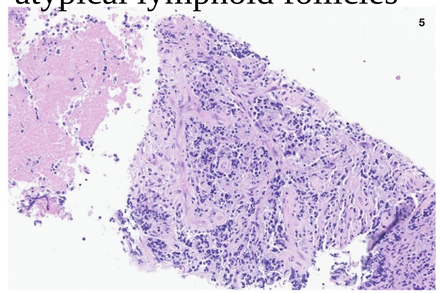

## Case 2 – DLBCL w/ IIA rupture

63 y/o male prior kidney transplant ~40 years ago w/ arterial anastomosis end-to-end to the right hypogastric artery w/ ligation of the distal hypogastric artery. He developed aneurysm of the remnant hypogastric artery ~4.7 cm, stable for 5 years, w/ acutely worsening right groin pain. CTA w/ 9×11×11cm right iliopsoas mass adjacent to the hypogastric aneurysm c/f contained rupture, an exploratory laparotomy was performed, aneurysm sac opened revealing white, granular, and pasty contents extending into iliopsoas muscle, no hematoma present. The aneurysm sac and psoas cavity were thoroughly debrided leaving a 4 × 5 cm cavity, pathology showed DLBCL, patient was seropositive for Epstein-Barr Virus. He completed 2 cycles of chemotherapy with plans for stem-cell transplant.

CT shows right IIA aneurysm (A) & rupture w/ iliopsoas hemorrhage (B)



atypical lymphoid follicles




## Conclusion

These unique pathologies present a challenge to the vascular surgeon in diagnosis and treatment. The diagnosis of these tumors begins with a high index of clinical suspicion, and contrast-enhanced cross-sectional imaging is the key in delineating anatomic details. Additionally, a multidisciplinary approach is paramount in the management of these patients.

## References

Alldinger I, Yang Q, Pilarsky C, Saeger HD, Knoefel WT, Peiper M. Retroperitoneal soft tissue sarcomas: prognosis and treatment of primary and recurrent disease in 117 patients. Anticancer Res. 2006;26:1577-1581.