

A CASE REPORT: FUNCTIONING CYSTIC PHEOCROMOCYTOMA

Boysan S Nur¹, Kokdas Suleyman², Gungor Tuba³, Citil Rana⁴,

Citil Serdal⁵, Dagoglu Besra⁵, Caglar Serkan⁶

¹Department of Endocrinology, ²Department of General Surgery, ³Department of Anesthesiology,

⁴Department of Pathology, ⁵Department of Radiology, ⁶Department of Biochemistry

Kahramanmaras Necip Fazil City Hospital

Introduction

- Cystic adrenal neoplasms are uncommon; defined with foci of tumor presented in the cyst wall.
- Adrenal cortical adenoma, adrenal cortical carcinoma and pheocromocytoma may be associated.
- Abdominal pain, gastrointestinal symptoms and a palpable mass are the most emerging complaints.
- We report a case of functioning cystic pheocromocytoma.

Case Report

Medical history

- A 44-year-old man had an abdominal pain on the right side.
- He had a mild hypertension.

Radiology

- Abdominal ultrasonography showed a nodular cystic lesion measured 4 cm in diameter with thin septas and thickened wall in the right adrenal.
- Computed tomography confirmed hypodense lesion measured as 78x48 mm in diameter and 40 HU in density (Figure 1A).
- Magnetic resonance imaging demonstrated non-suppressed lesion in fat-suppressed sequence (Figure 1B).

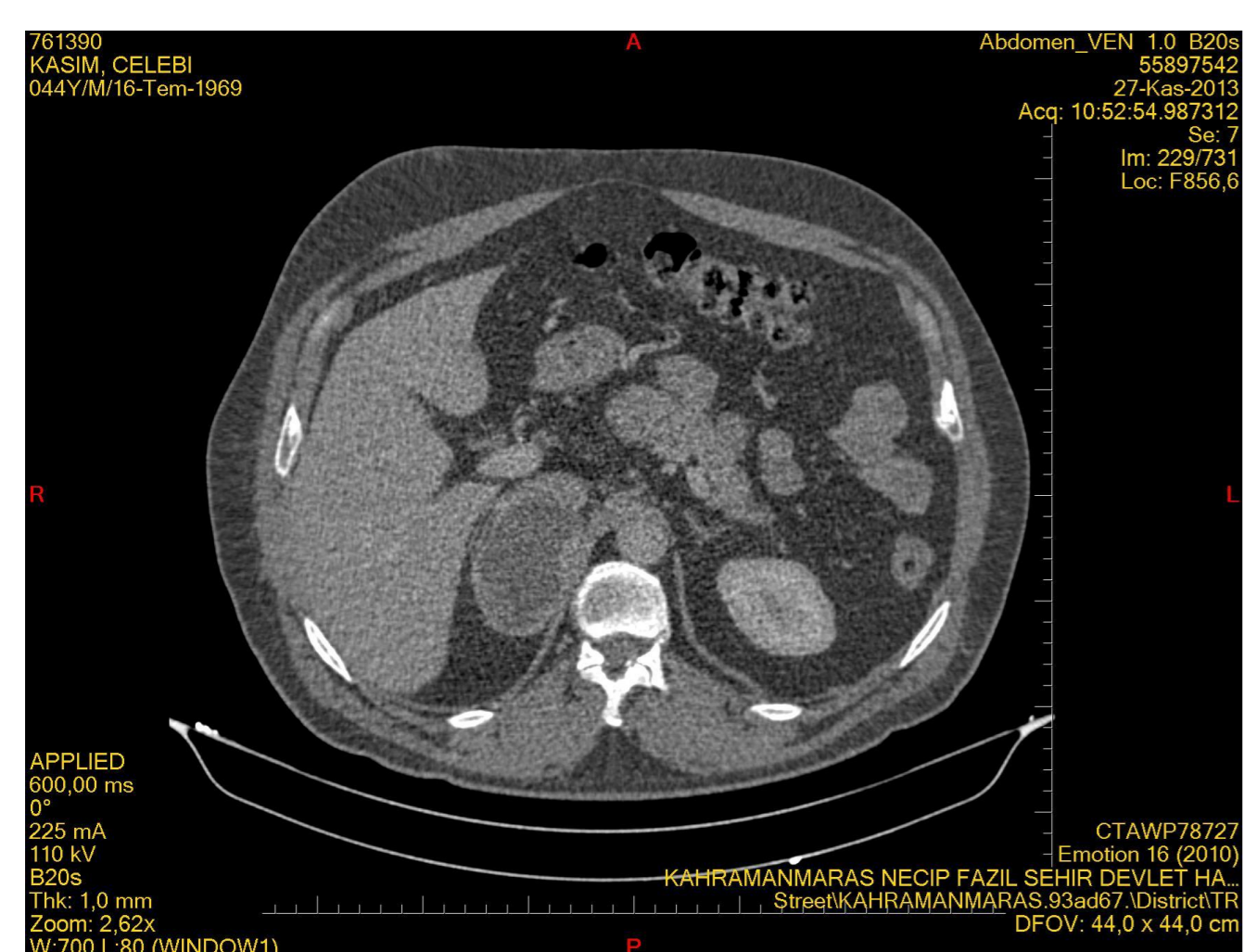


Figure 1A



Figure 1B

Laboratory

ACTH	12	pg/mL
Cortisol	13.44	µg/dL
Urine cortisol	850.4	µg/day
1 mg Dex. Sup.	0.452	µg/dL
Plasma Renin Activity	11.8	ng/mL/hour
Aldosterone	14.61	ng/dL
VMA	46.8	mg/day
Urine metanephrines	368.7	µg/day
Urine normetanephrines	495.9	µg/day

Nuclear Medicine

- Iodine-123 MIBG images showed right adrenal lesion accumulation

Preoperative management

- Amlodipin and doxazosin were begun before 2 weeks
- Hydration was begun before 3 days.

Operation

- He underwent right adrenalectomy with minimal invasive-laparoscopic surgery (Figure 2).
- Anesthetic induction was performed with fentanyl, propofol, vecuronium and lidocaine.
- During manipulation of adrenal lesion three hypertensive attacks occurred; infusion of nitroglycerine, nitroprusside and diltiazem were given.

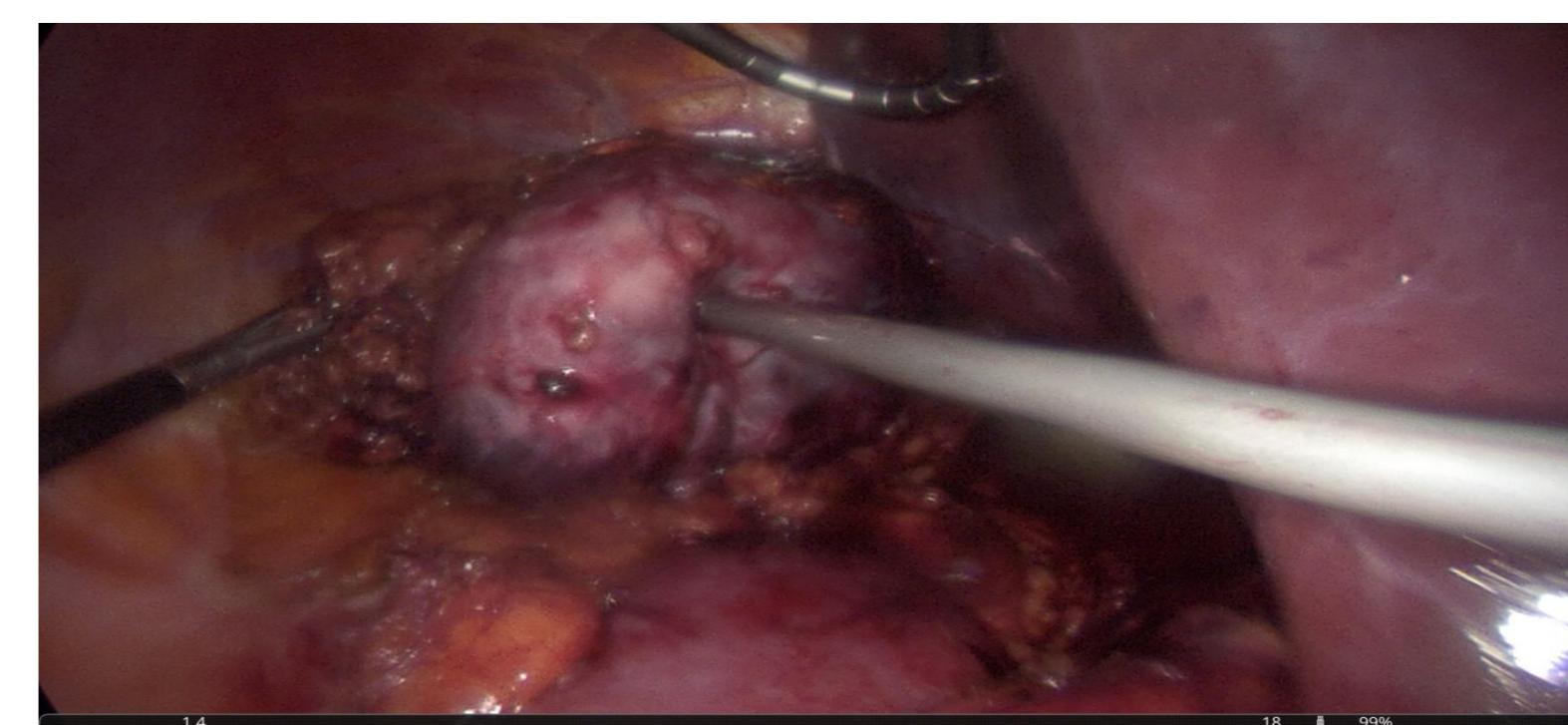


Figure 2

Pathology

- Cystic structure with fibrotic wall; surrounded with solid areas of thin septas and alveolar tumoral tissue (Figure 3A-B).
- Tumoral tissue was diffuse and strongly staining with chromogranin –A (Figure 3C).
- Ki-67 staining was 0.1%.



Figure 3A

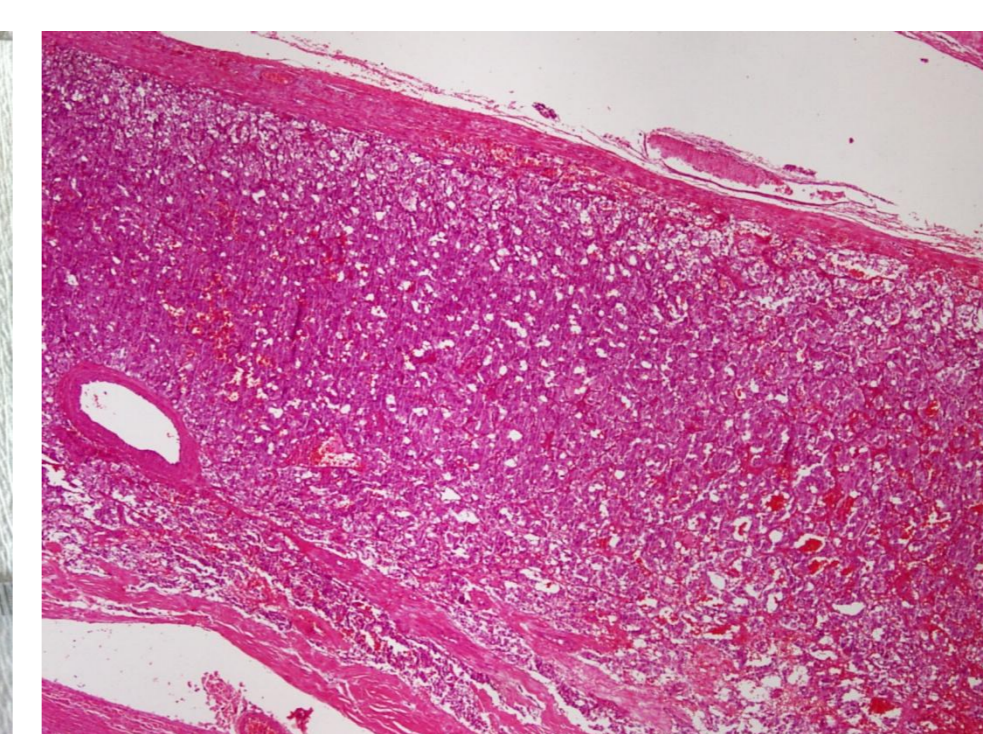


Figure 3B

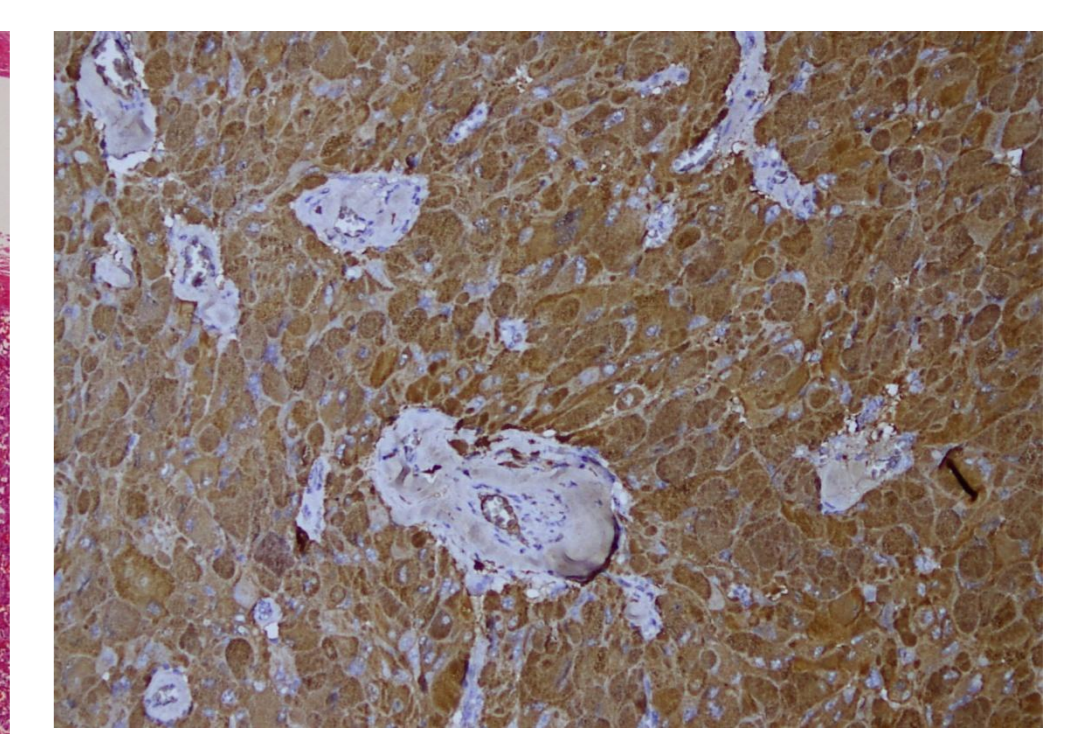


Figure 3C

Clinical course

- Postoperative he was normotensive.

Conclusion

- Adrenal cysts may be incidental or symptomatic.
- Pseudocysts, endothelial cysts, epithelial cysts and parasitic cysts are defined.
- The explanation for the cystic change was marked haemorrhage or degeneration ; must be distinguished from tumoral necrosis.
- We report a case of cystic pheocromocytoma who was symptomatic and biochemically functioning.