

Intestinal obstruction and bowel perforation as a presenting feature of a pheochromocytoma

Izaskun Olaizola¹, Estela Elias², Ana Chacón¹, Nerea Egaña¹, Ismene Bilbao¹, Cristina García¹, Maite Aranburu¹,
Tomás Matteucci², Alfredo Yoldi¹, Miguel Goena¹.

¹Servicio de Endocrinología y Nutrición, Hospital Universitario Donostia, ²Servicio de Endocrinología y Nutrición, Hospital de Bidasoa

INTRODUCTION

Pheochromocytomas are a rare catecholamine secreting tumours that can present in multiple ways. The classic triad of symptoms consists of episodic headache, sweating, and tachycardia. Most patients do not have the three classic symptoms. Sustained or paroxysmal hypertension is the most common sign. Among less common symptoms and signs constipation has been described and few cases of megacolon, intestinal pseudo-obstruction and pheochromocytoma have been published.

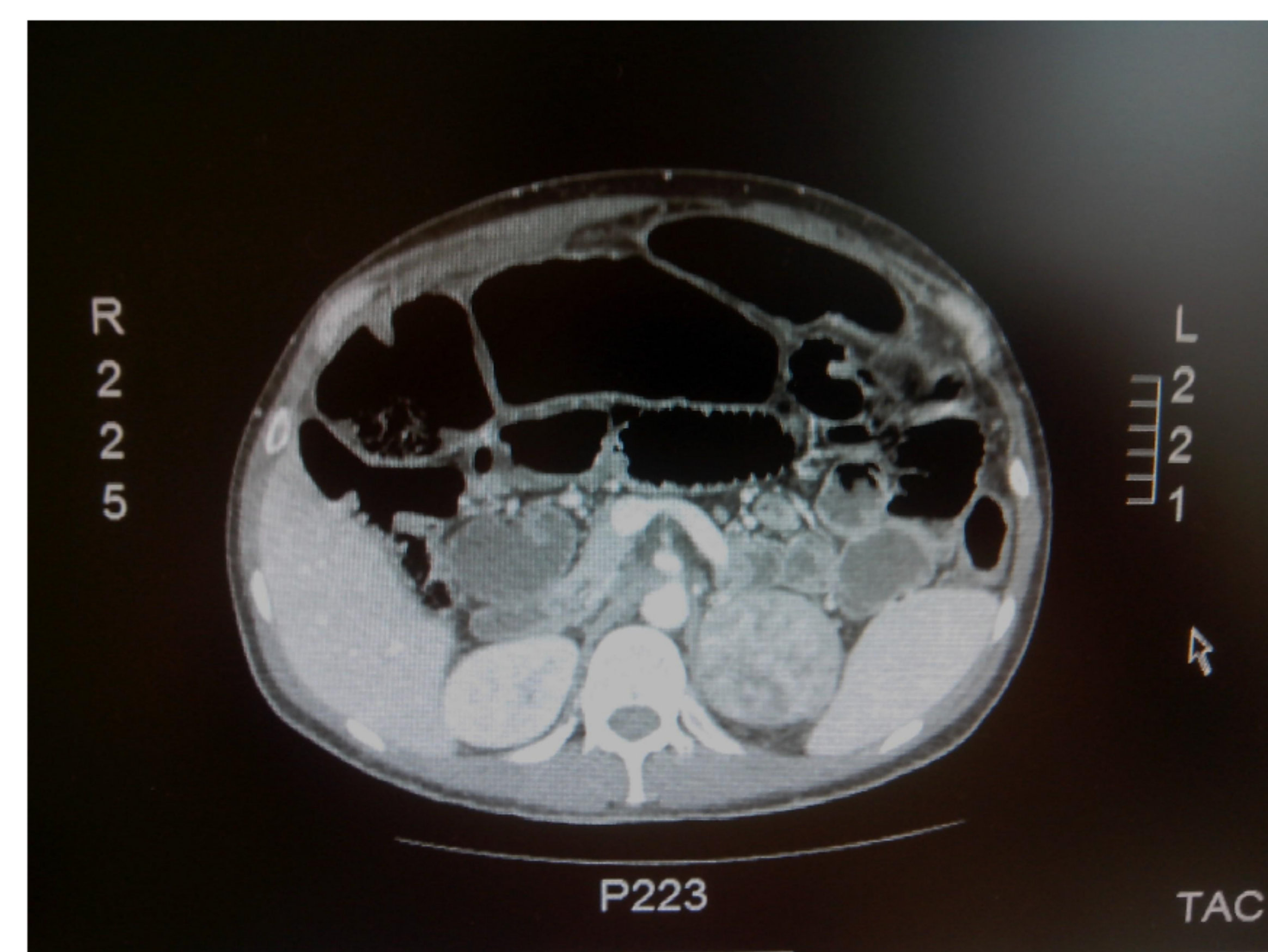
CASE REPORT

A 39 year-old man, with previous medical history of schizophrenia, autism and pulmonary tuberculosis with a partial left lobectomy, complained of abdominal pain of 3 days.

An **abdominal X-ray** demonstrated dilated loops of small and large bowel with air-fluid levels in the upright position, abundant faecal remainders in the large bowel and faecaloma.

Large bowel obstruction was suspected presenting an unfavorable evolution despite medical treatment.

CT scan showed small and large bowel obstruction secondary to an intestinal malrotation with signs of sigmoid colon and rectum suffering and a left adrenal heterogeneous incidentaloma of 6 cm. No mesenteric or retroperitoneal pathologically enlarged lymphadenopathy was observed.



An **urgent surgical intervention** was performed showing small bowel obstruction secondary to internal hernia secondary to dolichomegacolon and large bowel perforation with loculated abscess, performing sigmoidectomy, terminal colostomy and abscess exeresis.

In the immediate postoperative presented hypotension that was treated with intravenous noradrenaline.

The **functionality** of the adrenal incidentaloma was studied showing urinary metanephrines consistent with pheochromocytoma.

He had normal blood pressure but tachycardia (110-120 beats/min).

Treatment with diltiazem was first started in order to control cardiac frequency. Afterwards, **phenoxybenzamine** was started and propranolol some days after that, tapering down diltiazem dosage until it was stopped.

Left adrenalectomy was performed confirming the diagnosis of pheochromocytoma.

One year after the surgery he has not presented new episodes of bowel obstruction and urinary metanephrines are negative.

Genetic testing is negative (VHL, SDHB, SDHD, SDHC, SDHAF1, SDHAF2, TMEM127, MAX genes).

Calcitonine and calcium concentrations are normal. He does not present neurofibromatosis type 1 signs or symptoms.

24h urine collected twice:
normetanefrina 2184 and 1731 mcg/24h (0-527)
metanefrina 7015 and 6683 mcg/24h (0-302)
3-metoxitiramina 636 and 701 mcg/24h (0-434)

CONCLUSIONS

Intestinal obstruction is an important clinical condition that can present in association of pheochromocytoma. Due to the risk of intervention in a patient previously not treated with alpha-blockade, if an adrenal incidentaloma is observed in a patient with intestinal obstruction, pheochromocytoma should be ruled out in order to prevent complications in the event that surgery is needed.