# Vascular: Case 2

## **Prompt**

Here is a young male with labile hypertension up to 171 mmHg systolic and significantly raised serum normetanephrine levels. Generate a radiology report from these imageological examinations.







GPT-4V

Study: Cross-sectional imaging of the abdomen and pelvis.

Findings:

**Coronal and Sagittal Views:** There is an identifiable mass lesion with heterogeneous attenuation within the region of the left adrenal gland. The lesion's exact size cannot be determined from the provided images.

No evident invasion into adjacent structures or nearby vascular involvement from the displayed images.

The right adrenal gland appears unremarkable in the provided cuts.

## The kidneys show no obvious abnormalities in the images provided.

The rest of the visible intra-abdominal organs, including the liver, spleen, pancreas, and bowel, appear unremarkable in the given views.

**Axial View:** The aforementioned mass in the left adrenal gland is seen more distinctly in this plane, though exact measurements are not provided. The mass shows both hypoattenuated and hyperattenuated regions, suggesting a heterogeneous nature. Surrounding fat planes appear preserved, with no clear signs of invasion.

#### Impression:

Findings are consistent with a left adrenal mass, raising the suspicion of a pheochromocytoma, given the clinical context of labile hypertension and elevated serum normetanephrine levels. The mass appears well-circumscribed and non-invasive in the provided images. Differential diagnosis includes adrenal adenoma, though clinical correlation makes a functional tumor like pheochromocytoma more likely.

### **Prompt**

Generate a radiology report from these imageological examinations.

## **GPT-4V**

#### Findings:

## Coronal Plane:

The liver, spleen, and both kidneys appear grossly within normal limits with no visible focal lesions or abnormalities.

The abdominal aorta and its branches appear patent without evidence of aneurysm or dissection.

## No visible lymphadenopathy is observed in the abdominal or retroperitoneal regions.

Bowel loops appear unremarkable without signs of obstruction or inflammation.

#### Sagittal Plane:

The lumbar spine vertebral bodies appear to be in alignment without evidence of fractures or significant degenerative changes. Anterior and posterior abdominal wall structures are grossly intact.

No visible masses or cysts are observed in the visualized portions of the pancreas.

#### **Axial Plane:**

The cross-section through the abdomen demonstrates the intra-abdominal organs in their respective anatomical locations. No significant free fluid or air is observed in peritoneal cavity. No apparent gallstones in the visualized portions of the gallbladder. **Impression:** No acute intra-abdominal pathology is identified in the provided images.

## Reference answer

### **Primary Findings:**

- An enhancing ellipsoid mass is located adjacent to the aortic bifurcation.
- The lesion measures approximately 33 x 23 x 20 mm.

#### **Solid Organs:**

- The liver, spleen, pancreas, gallbladder, biliary tree, adrenals, and kidneys appear unremarkable.
- Bowel loops are normal with no evidence of pneumoperitoneum or free intraperitoneal fluid.

#### **Additional Findings:**

- No lymphadenopathy is identified.
- Mild linear atelectasis or parenchymal scarring is noted at the left lung base.
- There are no suspicious osseous lesions.

Abdominal and pelvic CT imaging and subsequent 68Ga DOTATATE PET/CT scan identified an ellipsoid mass suggestive of an Organ of Zuckerkandl paraganglioma, confirmed by an MRI scan.