

CASE 3

34 Y/O WOMAN

Brief history

- **Past history**

Arrhythmia

- **Chief complain**

Paradoxical hypertension, palpitation, headache

Imaging studies

Chest MRI (+C) (2017.06.30)

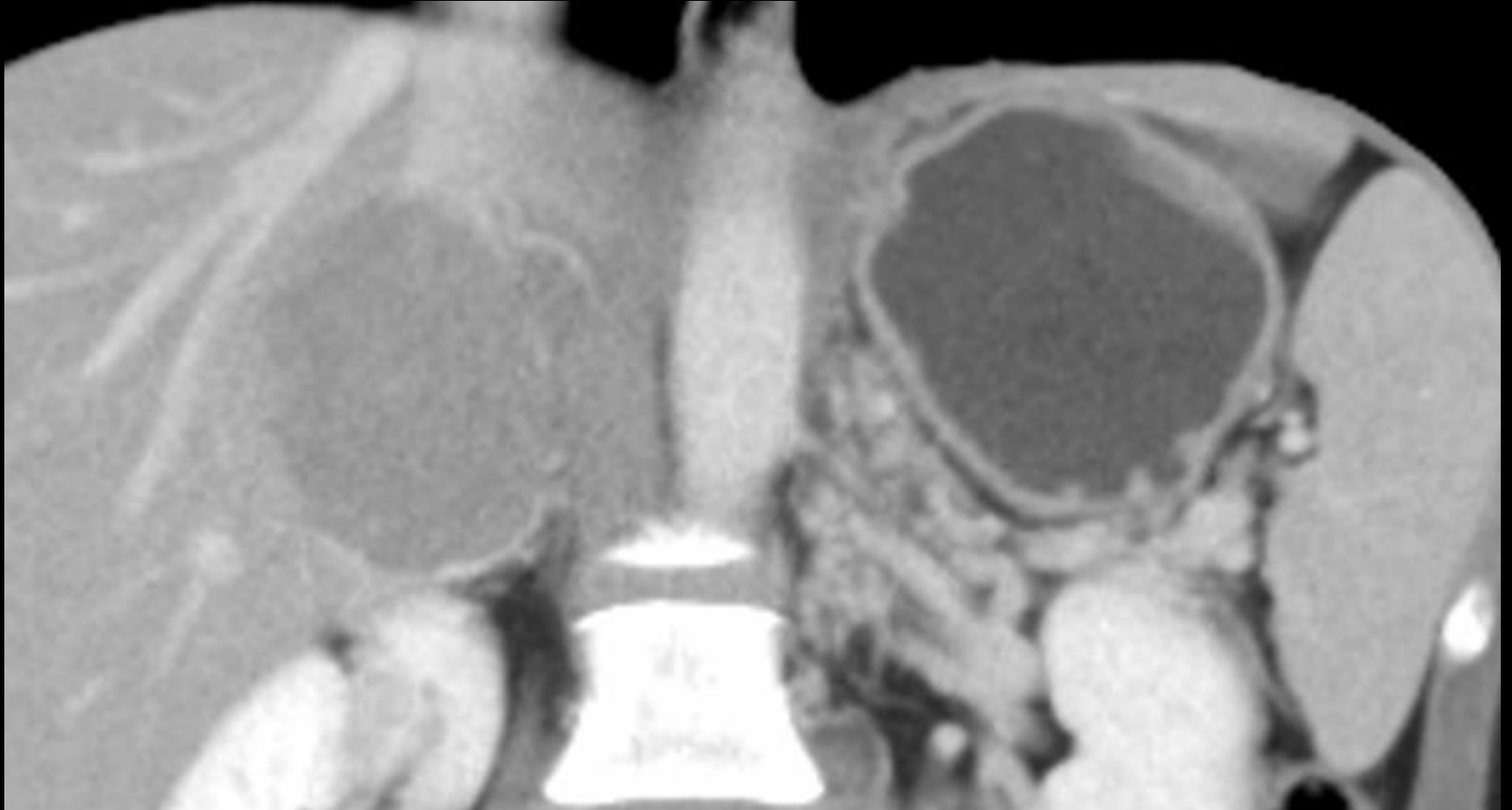
Adrenal CT (+C) (2019.06.15)

Chest MRI



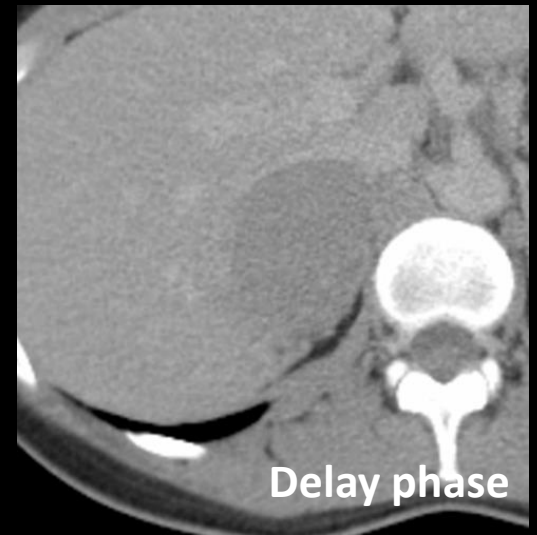
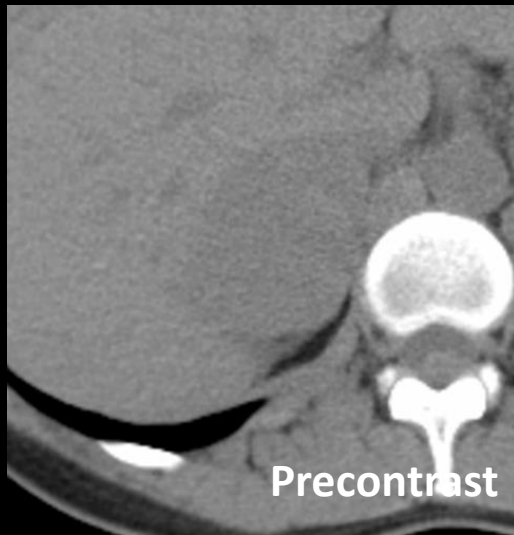
- ✓ A 2.3cm lesion at right adrenal gland

Adrenal CT



- ✓ A 5.3cm-sized enhancing tumor at the right adrenal gland

Adrenal CT



- ✓ A 5.3cm-sized enhancing tumor at the right adrenal gland

Differential Diagnoses

- **Pheochromocytoma**

→ Pathology report

Pheochromocytoma

Pheochromocytoma

- Rare catecholamine-secreting tumor arising from chromaffin cells of adrenal medulla
- “Rule of 10s”
 - 10% extraadrenal (paraganglioma)
 - 10% bilateral (suggesting hereditary disease)
 - 10% pediatric (also suggests hereditary disease)
 - 10% contain calcification
 - 10% malignant (higher for extraadrenal cases)
 - 25% familial (previously thought to be 10%)
- The majority of cases are sporadic

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Incidental mass > 1cm

Typically benign

- Lipid-rich adenoma
 <10HU or signal drop MR
- Myelolipoma
 macroscopic fat
- Cyst: water density
 no enhancement
- Benign calcification
 coarse, curvilinear, septal

Indeterminate 1-4cm
NCCT > 10HU

Washout or
signal drop

No washout
no signal drop

Lipid-poor adenoma

if > 4 cm probably adenoma
follow up 6 - 12 month

Indeterminate ≥ 4cm

- No cancer Hx:
 consider resection
- Cancer Hx:
 biopsy or PET-CT

Pheochromocytoma
Adrenal cortical carcinoma
Metastasis
Lipid-poor adenoma

Imaging F/U, Biopsy, PET/CT or
resection depending on clinical
scenario