Dr. D. Y. PATIL VIDYAPEETH, PUNE
(DEEMED UNIVRSITY)

A CASE OF INCIDENTALOMA

CLINICAL MEET

THE DEPARTMENT OF GENERAL MEDICINE

CASE STUDY

A 61 year old woman who was a known case of type 2 diabetes, hypertension, ischemic heart disease presented to the casualty with complaints of

- ***CHEST PAIN*** since 1 day

Acute in onset, radiating to the epigastric region

Sharp, constricting in nature , moderate to severe in intensity

Associated with ***palpitations*** on and off

- ***BREATHLESSNESS*** since 1 month

Gradual in onset, progressive in nature

Not associated with fever/cough

Aggravated on exertion since 8 days

(NYHA grade 2)

- History of ***episodic headache*** x 1 month

Moderate to severe in intensity

Pulsatile in nature

Associated with vomiting 2-3 episodes/day

Associated with ***sweating*** on and off

- History of ***decreased urinary output*** x 2 days

MEDICATION HISTORY

- She was a known case of hypertension x 6 years
  - on beta blockers and calcium channel blockers

- She was also a known case of type 2 diabetes since 6 years
  - on oral hypoglycemic agents

- She was a known case of coronary artery disease on dual antiplatelet therapy and statin.

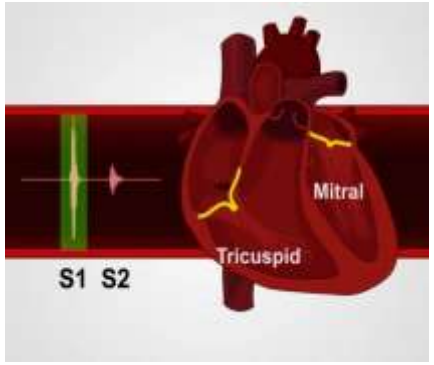
CLINICAL EXAMINATION:

- PR- 110/min regular, normovolemic, no radio radial/radio femoral delay
- BP- 150/70 mm hg in supine position of right upper limb
- SpO2- 95% in room air
- RR- 16/min thoraco-abdominal
- JVP was normal
- Patient was

❖ afebrile
❖ pallor
❖ icterus
❖ cyanosis
❖ clubbing
❖ lymphadenopathy
❖ pedal edema

ABSENT

SYSTEMIC EXAMINATION



- **CARDIOVASCULAR EXAMINATION**: Within normal limits

- **RESPIRATORY SYSTEM EXAMINATION**: Within normal limits

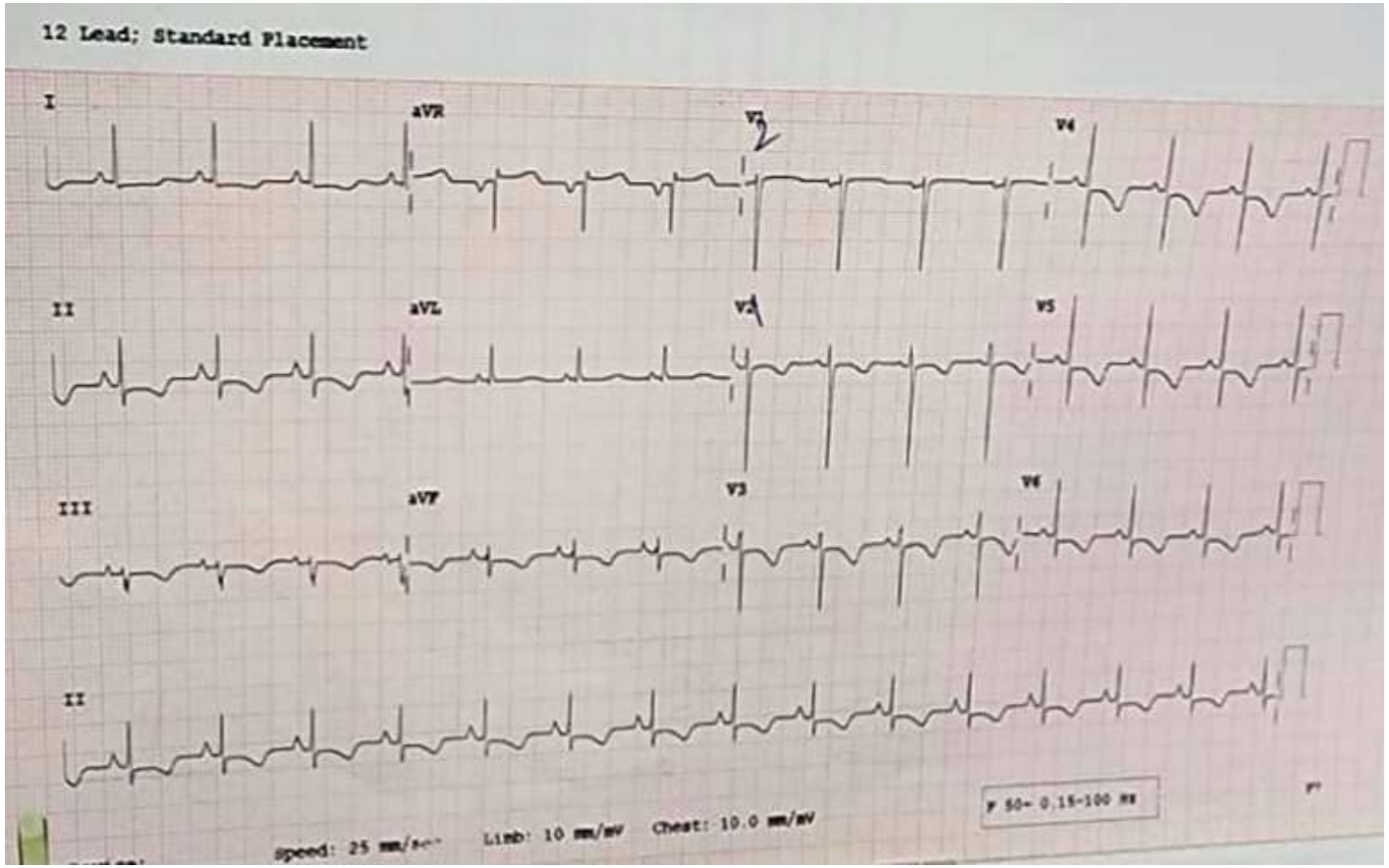
- **CENTRAL NERVOUS SYSTEM EXAMINATION**: conscious and oriented to time, place and person

- **ABDOMINAL EXAMINATION**: Within normal limits

DIFFERENTIAL DIAGNOSIS

- Acute coronary syndrome
- Acute pulmonary embolism
- Hypoglycemia

INVESTIGATIONS



- **ECG**: Sinus tachycardia
  T wave inversions in leads I,II,III, avF, V2-V6

- **2D ECHO**: EF -60%
  No RWMA,
  No MS/MR
  No AS/AR,
  No TR, No PAH
  Moderate concentric LVH
  IVC - >50% collapsible

LABORATORY INVESTIGATIONS: DAY1

	PATIENT VALUES	NORMAL VALUES
UREA	56 MG/DL	17-49 MG/DL
CREATININE	2.09	0.74- 1.35 MG/DL
TROP I	79.6 PG/DL	<10 PG/DL
CKMB	27 U/L	<35U/L
NTPROBNP	13827 PG/ML	<125 PG/ML
HEMOGLOBIN	11.6 G/DL	12.8-16 G/DL
WBC	10,200/ML	4000-9100 /ML
PLATELETS	4,40,000/ML	1,50,000 – 4,10,000 /ML
SODIUM	134 MMOL/L	135-145 MMOL/L
POTASSIUM	3.92 MMOL/L	3.5-5.01 MMOL/L
PT/INR	11.3S /0.94S	8.95-14.27S /0.85-1.15S

LFT- Within normal limits, TFT- within normal limits, Random blood sugars- 136, D Dimer-normal
URINE R/M: proteins – trace, glucose-1+, pus cells 6-8 , Chest X ray- within normal limits

INITIAL MANAGEMENT

- Cardiology referral was obtained and the patient was started on
  - INJ. UNFRACTIONATED HEPARIN 5000 IU IV 1-1-1
  - Dual antiplatelet therapy and statins were continued
  - T. AMLODIPINE 5mg OD
  - T.NICORANDIL 5MG 1-0-1
- As advised TROP I was repeated after 6hrs :

The TROP I turned out to be 69.6 PG/DL and was in the declining trend

- Patient was treated for acute coronary syndrome and acute kidney injury
- Further we planned a screening ultrasound abdomen and pelvis for the same.

USG ABDOMEN & PELVIS

A well defined heterogeneously hypodense lesion of size 32 x 29 mm seen in right supra renal region indenting over right lobe of liver.

LABORATORY INVESTIGATIONS: DAY 3

	PATIENT VALUES	**NORMAL VALUES**
UREA	40 MG/DL	17-49 MG/DL
CREATININE	1.02	0.74- 1.35 MG/DL
TROP I	43 PG/DL	<10 PG/DL
CKMB	27 U/L	<35U/L
NTPROBNP	9834 PG/ML	<125 PG/ML

CECT ABDOMEN & PELVIS :

A well defined iso-hypodense suprarenal lesion of size 4.5 x 4 x 3.5cm was noted arising from right adrenal, located superior and anterior to the upper pole of right kidney, posterior to the IVC. Right adrenal gland is not seen separately from the lesion. This lesion is encased by right suprarenal artery and IVC compressed and displaced anteriorly.

LABORATORY INVESTIGATIONS

LABS:	RESULTS	NORMAL RANGE
24 hr urinary VMA (mg/ml)	19.56	(<8.0)
24 hr urinary metanephrine µg/L	381	(<350)
Serum Cortisol(8 am) µg/dl	18.6	(3.7- 19.4)
Dihydroepiandrosterone µg/dl	53.5	(29.7- 182.2)

FINAL DIAGNOSIS

Acute coronary syndrome with right adrenal mass which was

Suggestive of pheochromocytoma

REVISED TREATMENT

- Tab. PRAZOSIN 2.5MG P/O 1-0-1 was started and titrated up to 5MG P/O 1-0-1
- Tab. NICORANDIL and AMLODIPINE were withheld
- After achieving adequate alpha blockade patient was started on Tab. METOPROLOL EXTENDED RELEASE 12.5 MG P/O 1-0-0
- For diabetes, patient was started on Human Actrapid Insulin and Glargine.

REFERRALS OBTAINED

Medical Oncology opinion was taken

PET CT scan was advised

showed no metastases

Surgical opinion was obtained

Patient was advised for Right adrenalectomy

Patient refused to undergo surgery

DISCUSSION

- An adrenal incidentaloma is a mass lesion greater than 1cm in diameter serendipitously found on radiological examination. About 5% of adrenal incidentalomas are detected by CT or MRI, turn out to be pheochromocytomas upon endocrinologic evaluation. Sporadic cases may be seen in older patients.
- Pheochromocytomas are usually diagnosed in the 4th decade but in our case she presented in the 6th decade of life and pheochromocytoma could have been the non atherosclerotic cause of the acute coronary syndrome.
- The symptoms of pheochromocytoma may be masked when they coexist with acute coronary syndrome as presented in the case.

TAKE HOME MESSAGE

Every hypertensive patient should be screened for uncommon causes like pheochromocytoma.

REFERENCES

1) Aygun N,Uludag M. Pheochromocytoma and Paraganglioma: From Epidemiology to Clinical Findings.Sisli Etfal HastanTip Bul. 2020 Jun 3;54:159-168.doi:10.14744/SEMB.2020.18794. PMID: 32617052; PMCID: PMC7326683.
2) Susheela AT, Eldib H, Vinnakota D, Bial A, Ali S, Koh H, Lavery B, Gorbien M. Recurrent Pheochromocytoma in an Elderly Patient. Medicina (Kaunas). 2020 Jun 26;56:316. doi: 10.3390/medicina56060316. PMID: 32604789; PMCID: PMC7353891.
3) Harrison’s Principles of Internal Medicine 21st edition

THANK YOU