18th International Conference of the Research Institute of Ophthalmology

RIO 2026

22 -23 JANUARY 2026

ROYAL MAXIM PALACE KEMPINSKI, CAIRO

Not your classic hypertensive retinopathy

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Ophthalmology resident in Cairo University

Kasr Al-Ainy

Patient

- 20 years old
- Female
- Single
- Medically free
- No habits of special importance

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Presentation

- She presented to the ER with severe **headache, blurring of vision and arthralgia**
- Her blood pressure was **220/120**

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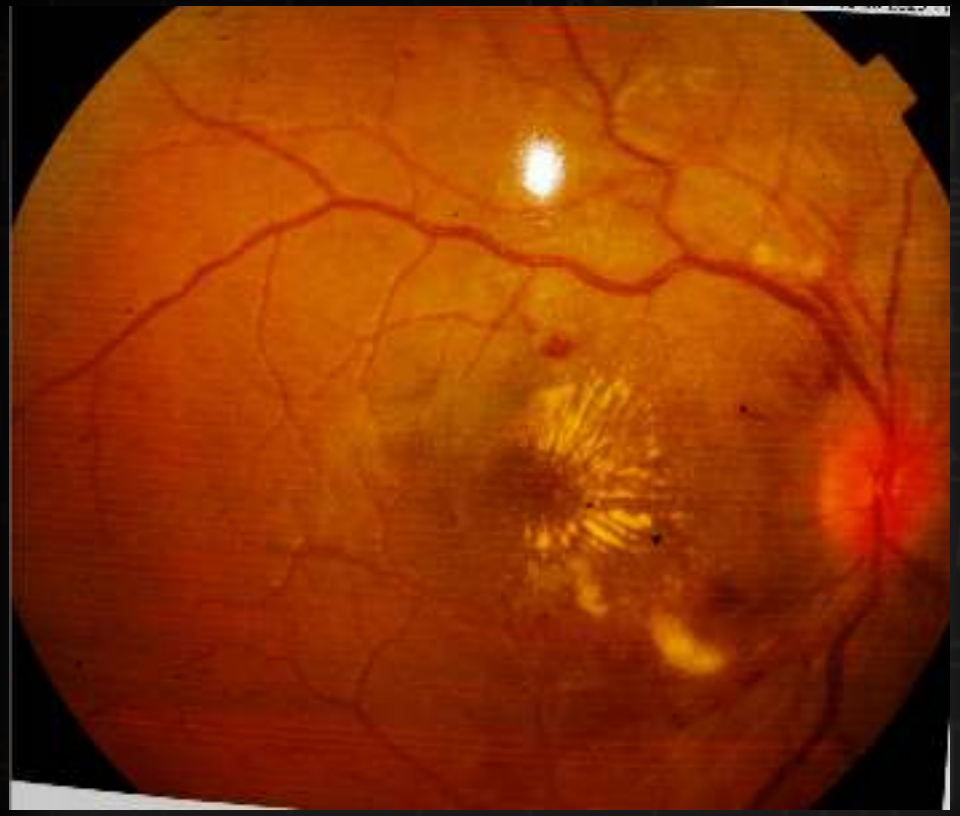
Examination

	OD	OS
Refraction	+1.5/-0.5x100	+2.25/-1x20
BCVA	0.3	0.2
Pupil	RRR	
EOM	Free	
Anterior segment	NAD	
Posterior segment	• Grade IV papilledema • Peripapillary hemorrhages • Macular star • Cotton wool spots	• Grade IV papilledema • Peripapillary hemorrhages • Macular star • Cotton wool spots (more severe than OD)

Bilateral fundus photo and perimetry were ordered for follow up

OD



OS

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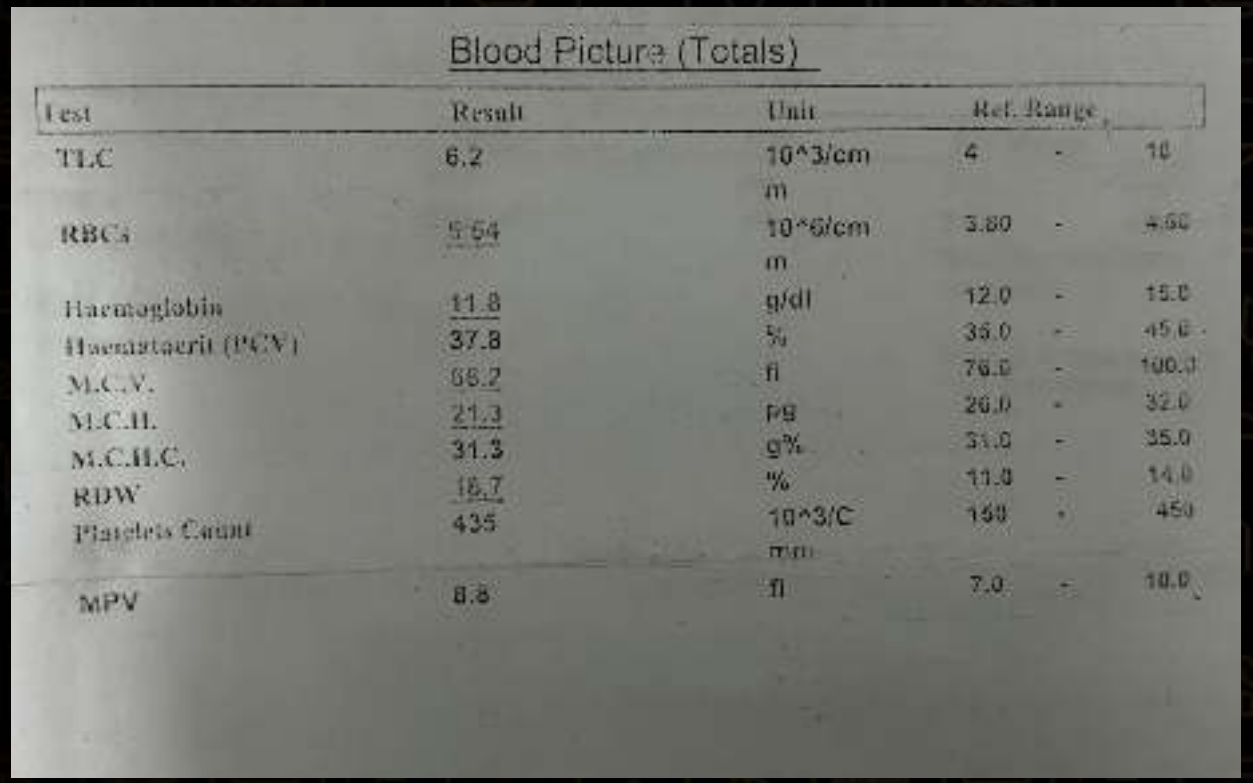
- Patient was admitted in internal medicine department for investigating the cause for her hypertension as it wasn’t controlled by medications

Investigations

- Full labs were ordered ; showing anemia



Blood Picture (Totals)

Test	Result	Unit	Ref. Range		
TLC	6.2	10^3/cmm	4	-	10
RBCs	5.54	10^6/cmm	3.80	-	4.80
Haemoglobin	11.8	g/dl	12.0	-	15.0
Haematocrit (PCV)	37.8	%	36.0	-	45.0
M.C.V.	68.2	fl	76.0	-	100.0
M.C.H.	21.3	Pg	26.0	-	32.0
M.C.H.C.	31.3	g%	31.0	-	35.0
RDW	16.7	%	11.0	-	14.0
Platelets Count	435	10^3/Cmm	150	-	450
MPV	8.8	fl	7.0	-	10.0

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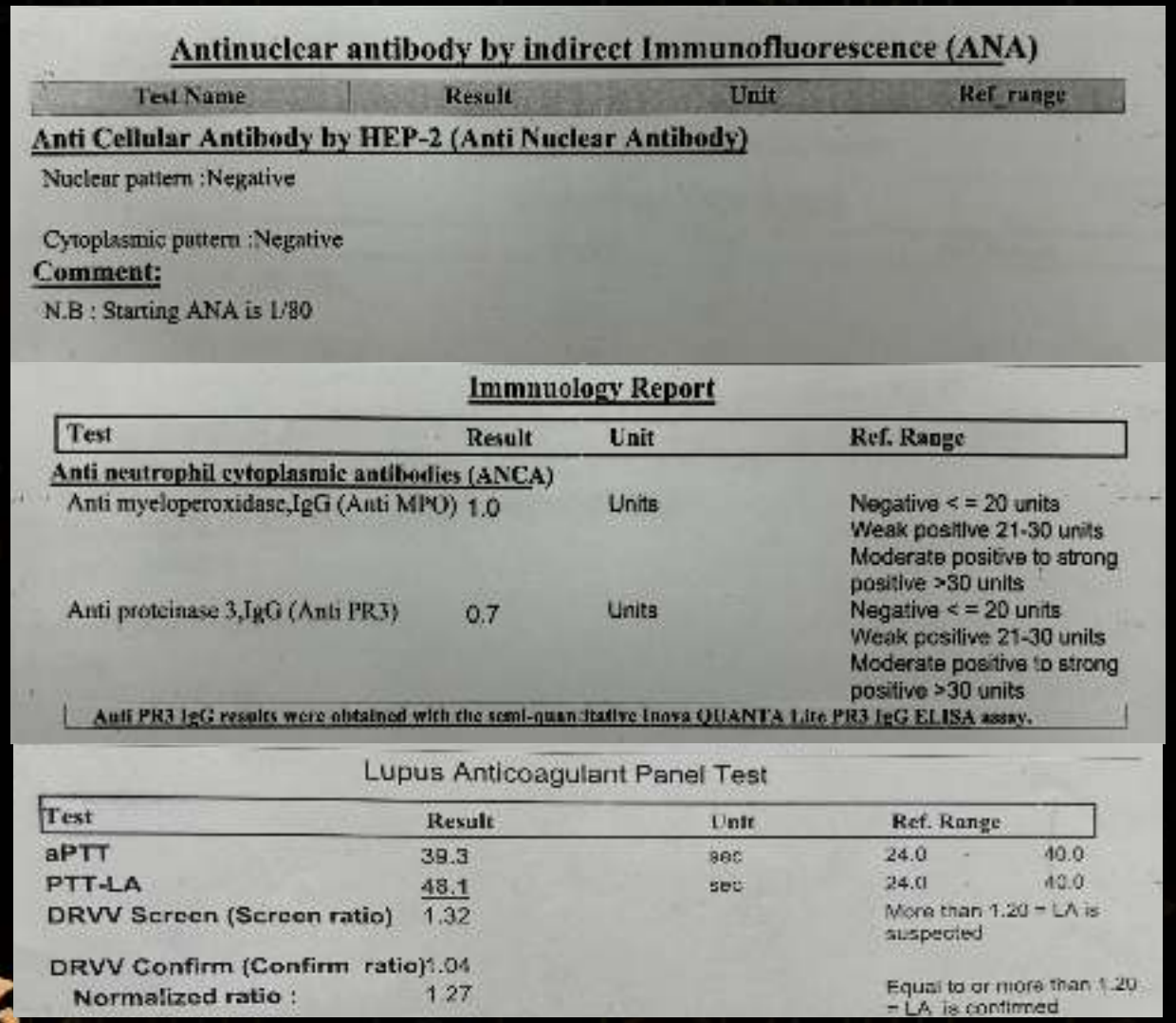
- Autoimmune profile was ordered



Antinuclear antibody by indirect Immunofluorescence (ANA)

Test Name	Result	Unit	Ref. range

Anti Cellular Antibody by HEP-2 (Anti Nuclear Antibody)

Nuclear pattern :Negative

Cytoplasmic pattern :Negative

Comment:

N.B : Starting ANA is 1/80

Immnuology Report

Test	Result	Unit	Ref. Range
Anti neutrophil cytoplasmic antibodies (ANCA)			
Anti myeloperoxidase,IgG (Anti MPO)	1.0	Units	Negative < = 20 units Weak positive 21-30 units Moderate positive to strong positive >30 units
Anti proteinase 3,IgG (Anti PR3)	0.7	Units	Negative < = 20 units Weak posilive 21-30 units Moderate positive to strong positive >30 units

Anti PR3 IgG results were obtained with the semi-quantitative Inova QUANTA Lite PR3 IgG ELISA assay.

Lupus Anticoagulant Panel Test

Test	Result	Unit	Ref. Range
aPTT	39.3	sec	24.0 - 40.0
PTT-LA	48.1	sec	24.0 - 40.0
DRVV Screen (Screen ratio)	1.32		More than 1.20 = LA is suspected
DRVV Confirm (Confirm ratio)	1.04		
Normalized ratio :	1.27		Equal to or more than 1.20 = LA is confirmed

It came out negative

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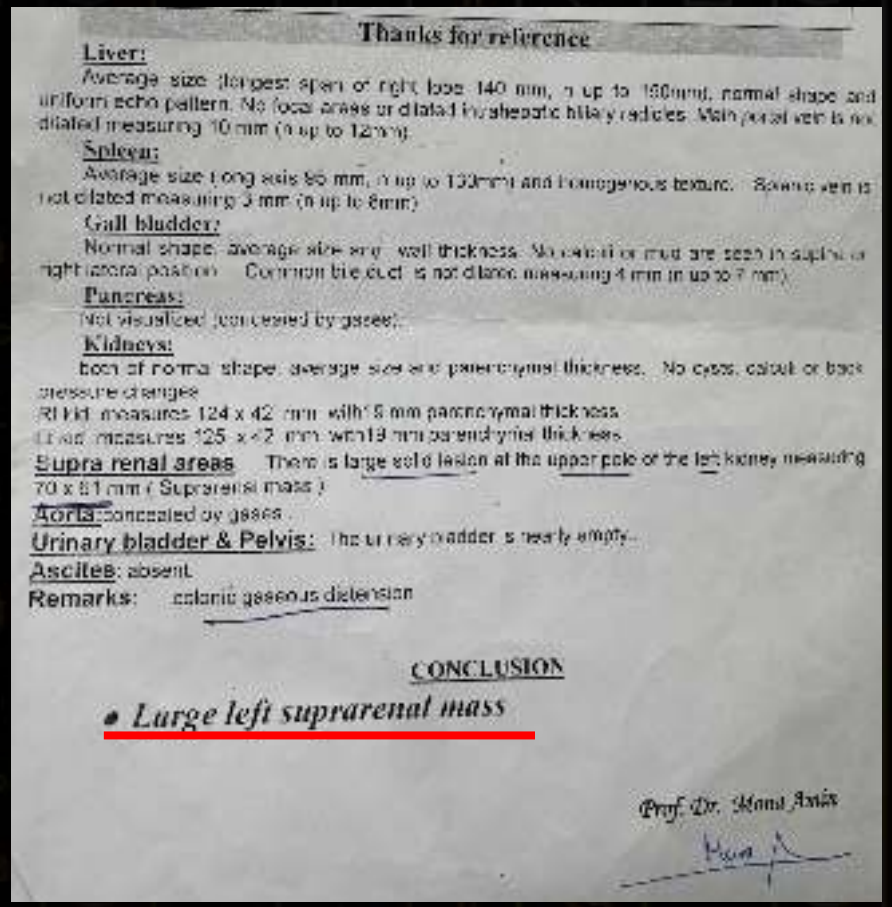
- Abdominal US was ordered



Thanks for reference

Liver:
Average size (largest span of right lobe 140 mm, ↑ up to 150mm), normal shape and uniform echo pattern. No focal areas or dilated intrahepatic biliary radicles. Main portal vein is not dilated measuring 10 mm (↑ up to 12mm).

Spleen:
Average size (long axis 95 mm, ↑ up to 130mm) and homogeneous texture. Splenic vein is not dilated measuring 3 mm (↑ up to 8mm).

Gall bladder:
Normal shape, average size, wall thickness. No calculi or mud are seen in supine or right lateral position. Common bile duct is not dilated measuring 4 mm (↑ up to 7 mm).

Pancreas:
Not visualized (concealed by gases).

Kidneys:
Both of normal shape, average size and parenchymal thickness. No cysts, calculi or back pressure changes.
Rt kid. measures 124 x 42 mm with 15 mm parenchymal thickness.
Lt kid. measures 125 x 42 mm with 19 mm parenchymal thickness.

Supra renal areas There is large solid lesion at the upper pole of the left kidney measuring 70 x 61 mm (Suprarenal mass).

Aorta: concealed by gases.

Urinary bladder & Pelvis: The urinary bladder is nearly empty.

Ascites: absent.

Remarks: colonic gaseous distension

CONCLUSION

- *Large left suprarenal mass*

Prof. Dr. Mona Amin

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Multislice chest and abdomen CT was done

Multislice non contrast CT scan of the chest with multiplanar reformatting revealed:

Metastatic workup for left suprarenal lesion.

- Right lower lobe patchy ground glass opacity.
- No pulmonary consolidative patches, cavitary lesions, masses or bronchiectatic changes.
- No sizable metastatic pulmonary nodules.
- No CT evidence of sizable mediastinal lymph node enlargement.
- No pleural or pericardial collections.
- No gross cardiomegaly.
- *Thyroid hypodense nodules are noted, for US correlation*

OPINION:

- **No sizable pulmonary metastatic deposits.**
- **Right lower lobe patchy ground glass opacity, for clinical correlation and follow-up.**

URO-GENITAL IMAGING UNIT

MULTIPHASIC CT SCAN OF THE URINARY TRACT REVEALED:

☒ Referral data :- patient presenting with left suprarenal mass for assessment.

☒ Finding :-

OPINION:

- Left suprarenal hypodense lesion showing fine enhancing septae as described the possibility of being adenomatous should be considered , however the large size and attenuation value still raise the possibility of neoplasm , further assessment by Ct guided biosy is still recommended and /or post contrast MRI assessment.

Dr.Lena shaheen, MSc
Dr. Manal Halim. MD

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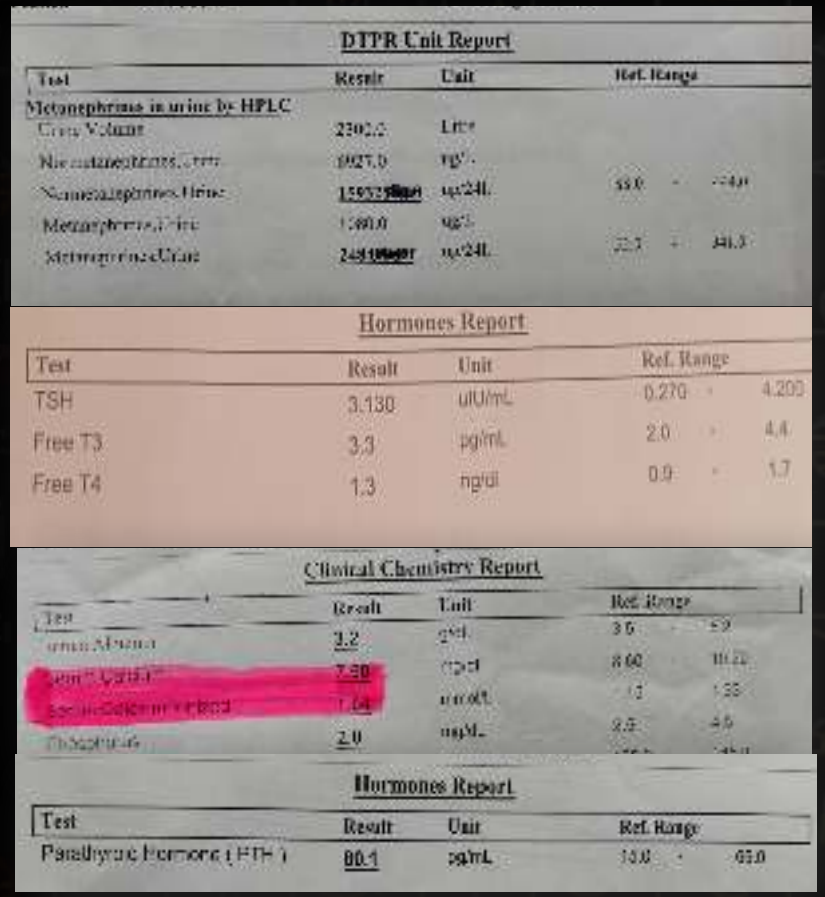
Further labs were ordered



DTPR Unit Report

Test	Result	Unit	Ref. Range
Metanephrines in urine by HPLC			
Urine Volume	2302.2	Litre	
Normetanephrines, Urine	1927.0	ug/L	
Normetanephrines Urine	[redacted]	ug/24L	55.0 - [redacted]
Metanephrines, Urine	1380.0	ug/L	
Metanephrines Urine	[redacted]	ug/24L	72.2 - 341.3

Hormones Report

Test	Result	Unit	Ref. Range
TSH	3.130	uIU/mL	0.270 - 4.200
Free T3	3.3	pg/mL	2.0 - 4.4
Free T4	1.3	ng/dl	0.9 - 1.7

Clinical Chemistry Report

Test	Result	Unit	Ref. Range
Urine Albumin	3.2	g/dL	3.0 - 5.2
[redacted]	7.20	mg/dL	8.60 - 10.20
[redacted]	1.64	mmol/L	1.2 - 1.35
[redacted]	2.0	mg/dL	2.5 - 4.5

Hormones Report

Test	Result	Unit	Ref. Range
Parathyroid Hormone (PTH)	80.1	pg/mL	10.0 - 65.0

↑ Urinary metanephrines

Normal Thyroid function

↓ Serum Calcium

↑ Parathormone

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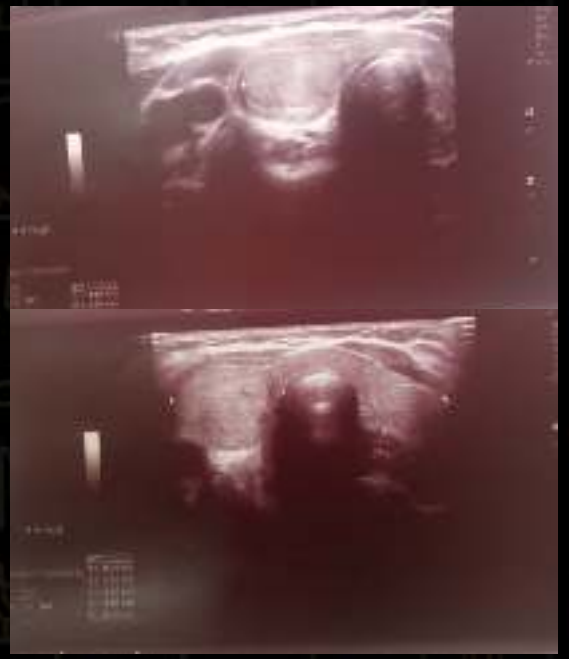
Thyroid US

- No enlarged cervical lymph

OPINION:

- **Bilateral thyroid lobes hypoechoic nodules as described (TIRADs IV) as well as right thyroid lobe hyperechoic nodule (TIRADs III).**

DR/ NAGLAA MAHMOUD, MSC



ENDOCRINOLOGY REPORT

Thyroid Hormones:			Reference Range :
▲ Calcitonin	: 105.90	High	(N. up to 6.4) pg/mL

Explains the hypocalcemia

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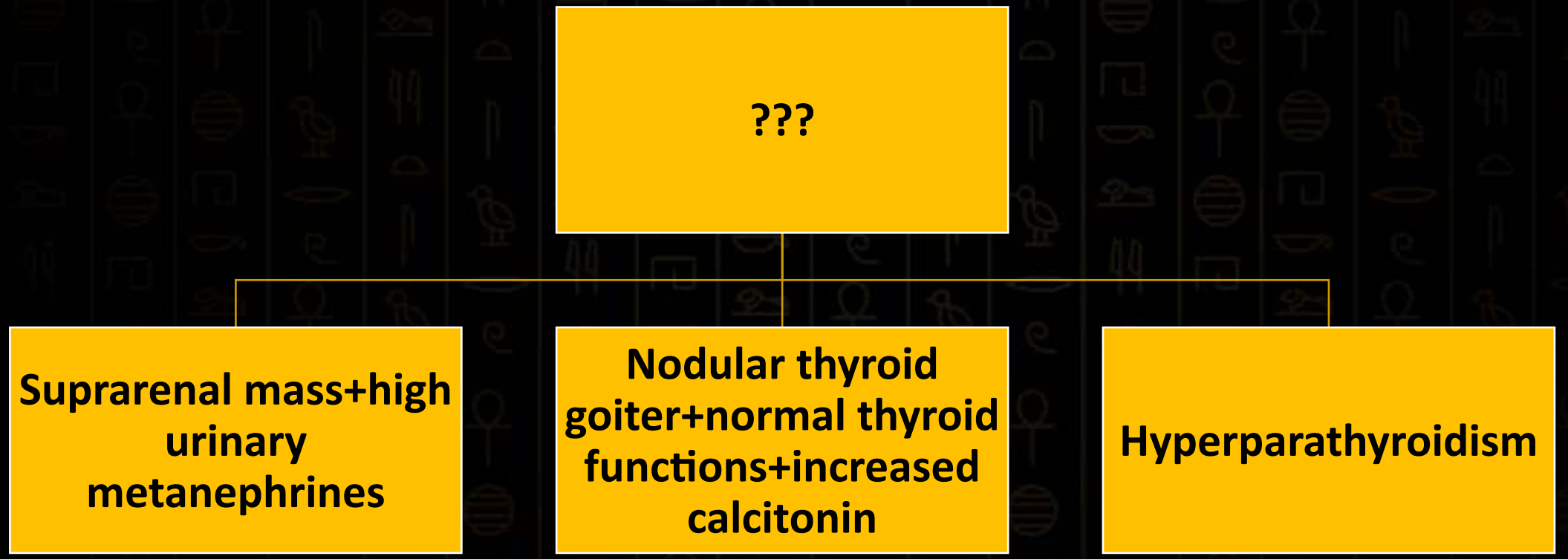
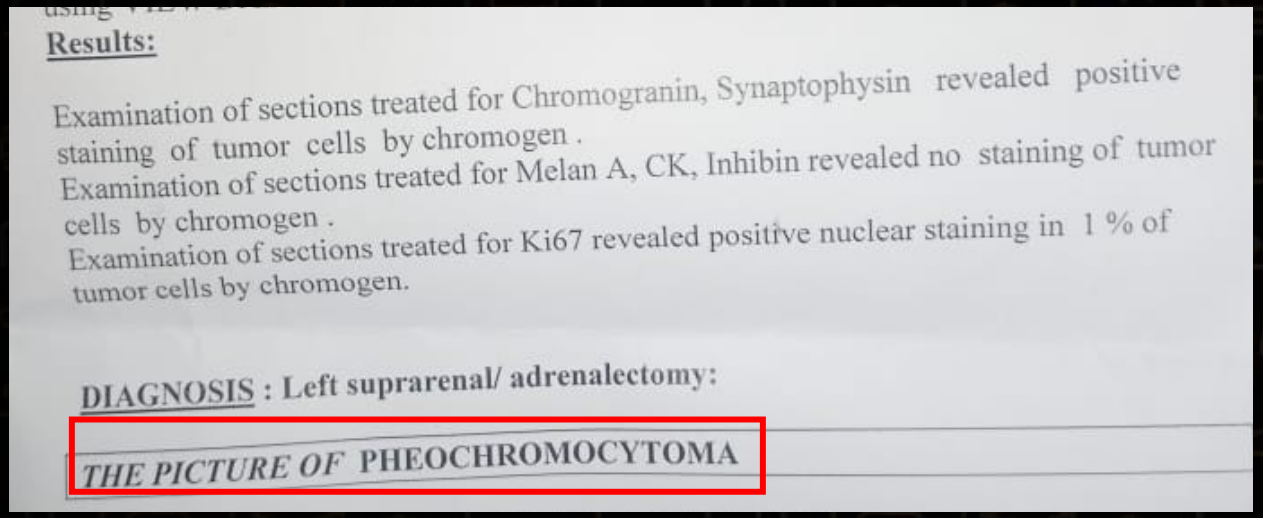
Recap



- Decision for adrenalectomy was done first



Results:

Examination of sections treated for Chromogranin, Synaptophysin revealed positive staining of tumor cells by chromogen .
Examination of sections treated for Melan A, CK, Inhibin revealed no staining of tumor cells by chromogen .
Examination of sections treated for Ki67 revealed positive nuclear staining in 1 % of tumor cells by chromogen.

DIAGNOSIS : Left suprarenal/ adrenalectomy:

***THE PICTURE OF* PHEOCHROMOCYTOMA**

Blood pressure improved dramatically post operative

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Fundus photo one month post op

OD

OS

Vision improved to 6/9 bilaterally

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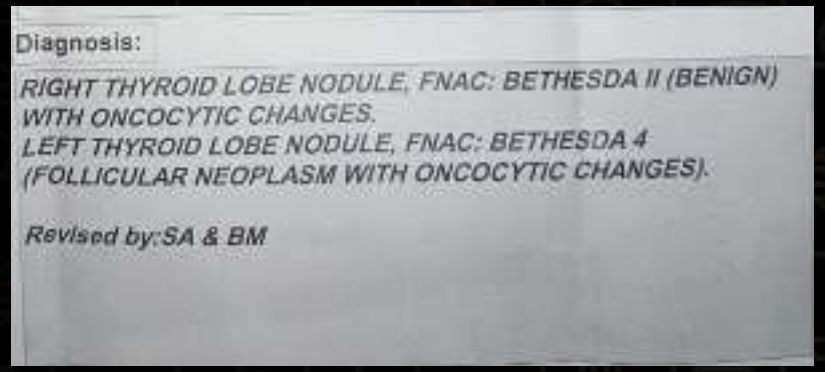
Thyroid mass

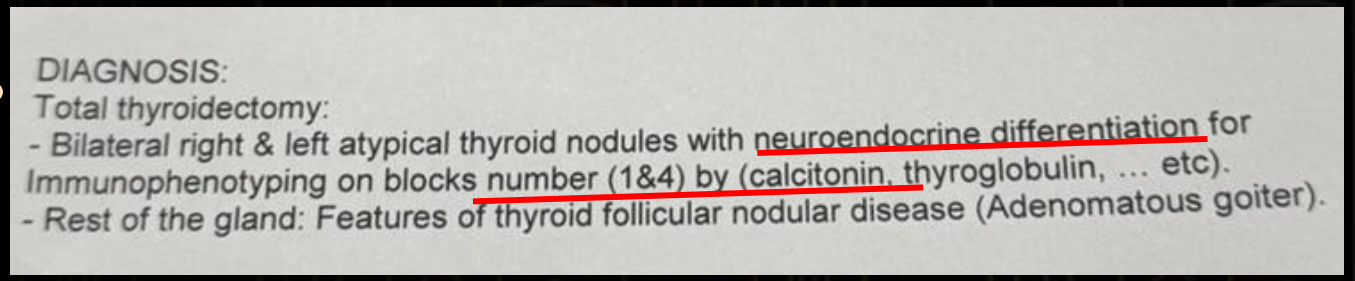
- FNAC was done one month post adrenalectomy



Diagnosis:

RIGHT THYROID LOBE NODULE, FNAC: BETHESDA II (BENIGN) WITH ONCOCYTIC CHANGES.
LEFT THYROID LOBE NODULE, FNAC: BETHESDA 4 (FOLLICULAR NEOPLASM WITH ONCOCYTIC CHANGES).

Revised by:SA & BM

- 

DIAGNOSIS:
Total thyroidectomy:
- Bilateral right & left atypical thyroid nodules with neuroendocrine differentiation for Immunophenotyping on blocks number (1&4) by (calcitonin, thyroglobulin, … etc).
- Rest of the gland: Features of thyroid follicular nodular disease (Adenomatous goiter).

It was diagnosed as medullary thyroid carcinoma

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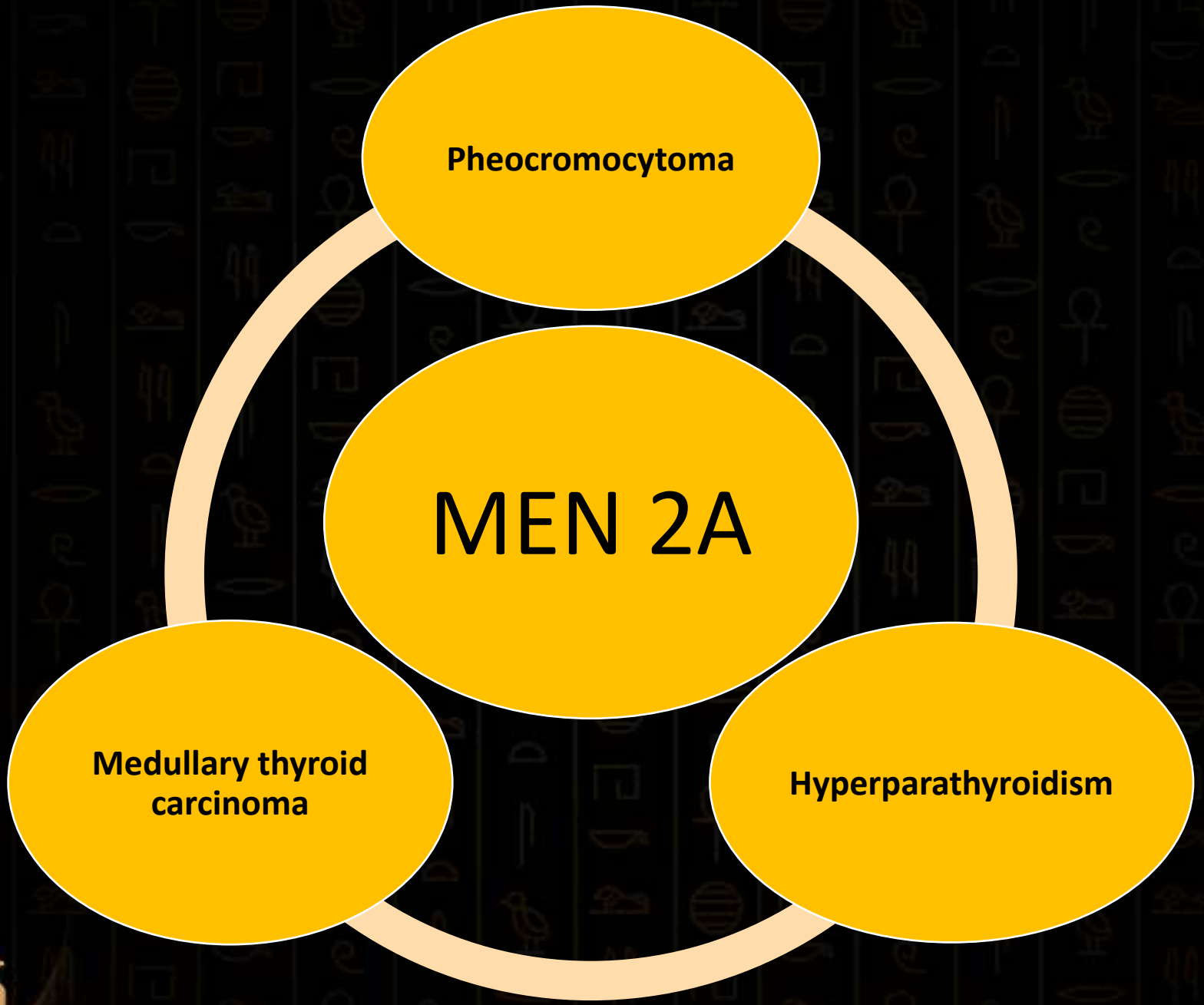
Pheocromocytoma
MEN 2A
Medullary thyroid carcinoma
Hyperparathyroidism

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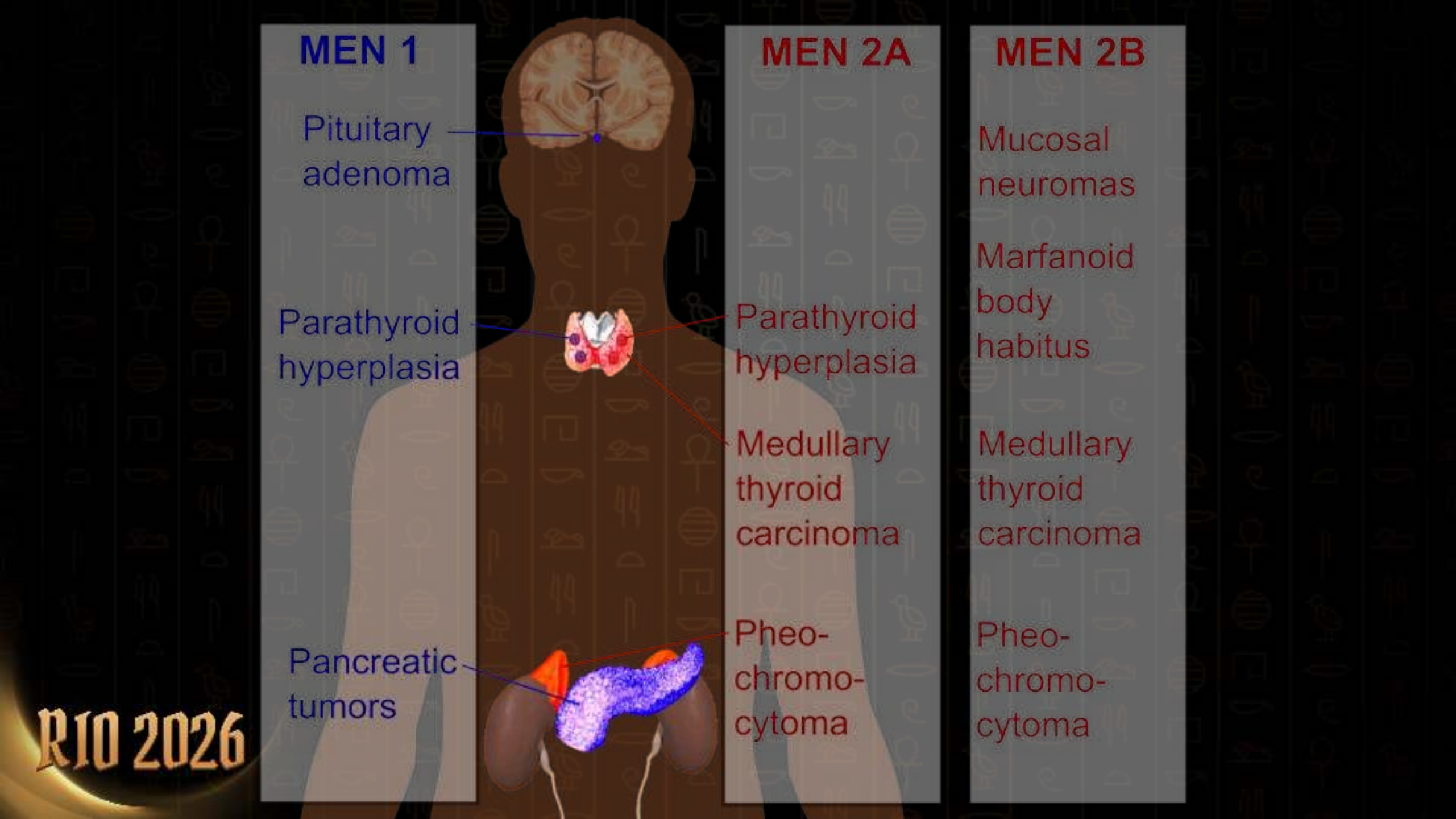
MEN 1
Pituitary adenoma
Parathyroid hyperplasia
Pancreatic tumors
MEN 2A
Parathyroid hyperplasia
Medullary thyroid carcinoma
Pheo-chromo-cytoma
MEN 2B
Mucosal neuromas
Marfanoid body habitus
Medullary thyroid carcinoma
Pheo-chromo-cytoma
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Back to our patient

She follows up in general surgery and was sent to do a metastatic workup. She did radical neck dissection

She follows up in ophthalmology OPC every two months for regular fundus examination

She was sent for genetic testing along with her family members

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THANK YOU

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