

# Case presentation

TALEGHANI HOSPITAL ۱۳۹۹/۱۰/۱۵

# Patient history

- ❖ ۲۲ years old man
- ❖ Born & live in Tehran
- ❖ Source of history: patient ,reliable
- ❖ Chief complaint :weight gain

# PI:

- ❖ 22 years old man with diagnosis of MEN1 in his father complain of 26 kg weight gain in 2 years ago
- ❖ He noticed some changes in the hand & foot size (increased shoes size)
- ❖ Headache +, visual impairment –
- ❖ Oily skin +, increased sweating –
- ❖ Snoring +
- ❖ Induced galactorrhea
- ❖ Libido change?
- ❖ No beard growth, no male pattern hair growth on the body (he mention starting testicular growth at 13 y/o that was arrested in 16 y/o)
- ❖ Skin thinning –
- ❖ Easy bruising -
- ❖ Muscle weakness –

# First evaluation in milad hospital(١٣٩٨/٨/١٩)

Ca:١١/٥ mg/dl	IGF١: ٥٥٨ ng/ml(٤٢٥)	FBS:٩٠ Insulin:٢٤ micu/ml
Ph:٣/٤ mg/dl	Prolactin:١١٥ ng/ml	
٢٥ OH VITD:١٤/٧ ng/ml	Cortisol ٨ am:١٠/٢ DST:١,٧ micg/dl	
PTH:٩٥/٩ pg/ml	TSH:١/٤ miu/ml T٤:٥/٧ micgr	
Urine calcium : ٤٤٨ mg/٢٤ hr	Testosterone:٠/٤ ng/ml LH:٢ IU/L,FSH:١ IU/L	

# Radiologic evaluation

- ❖ Chest ,abdominopelvic CT scan : NL
- ❖ Brain CT: hypophyse diameter: 20 mm , hypo dens area 12/7 mm in favor of mass lesion.
- ❖ Brain MRI: 33\*23\*17 mm solid heterogeneous mass with enhancement in sellae with supra sellar extension
- ❖ Abdominal sonography :
  - ❖ fatty liver grade 1
  - ❖ Hydronephrosis in left kidney, 3 stones

Thyroid sonography :normal size thyroid lobes, 7\*4 mm & 3\*2 mm solid heterogeneous nodule in right & left thyroid lobes

# treatment

- ❖ TSS (1398/11)
- ❖ Pathology :pituitary adenoma
- ❖ Total thyroidectomy?(MNG)+ parathyroidectomy (1398/12)
- ❖ He was discharged with:
  - ❖ Hydrocortisone:25 mg
  - ❖ Levothyroxine 700micgr/week
- ❖ Symptomatic hypocalcemia in 6 months after surgery(3 admissions)

# Follow up

- ❖ Complain of fatigue, weight gain
- ❖ Headache -,visual disturbance –
- ❖ Induced galactorrhea+
- ❖ Oily skin+
- ❖ Snoring+
- ❖ hypoglycemia –
- ❖ Dyspepsia -,GERD -

# FOLLOW UP

LAB DATA (११/१) ▶

Ca:१/१ mg/dl	IGF1:१३१ ng/ml(१२१)
Ph:१/१ mg/dl	Fast state GH:०/१ ng/ml
PTH:१ pg/ml	Prolactin:>१०० ng/ml
२१ OHVITD:१३ ng/ml	Testosterone:३/१ ng/ml
alb:१/१ gr	T4:१/१ micgr/dl

# MRI



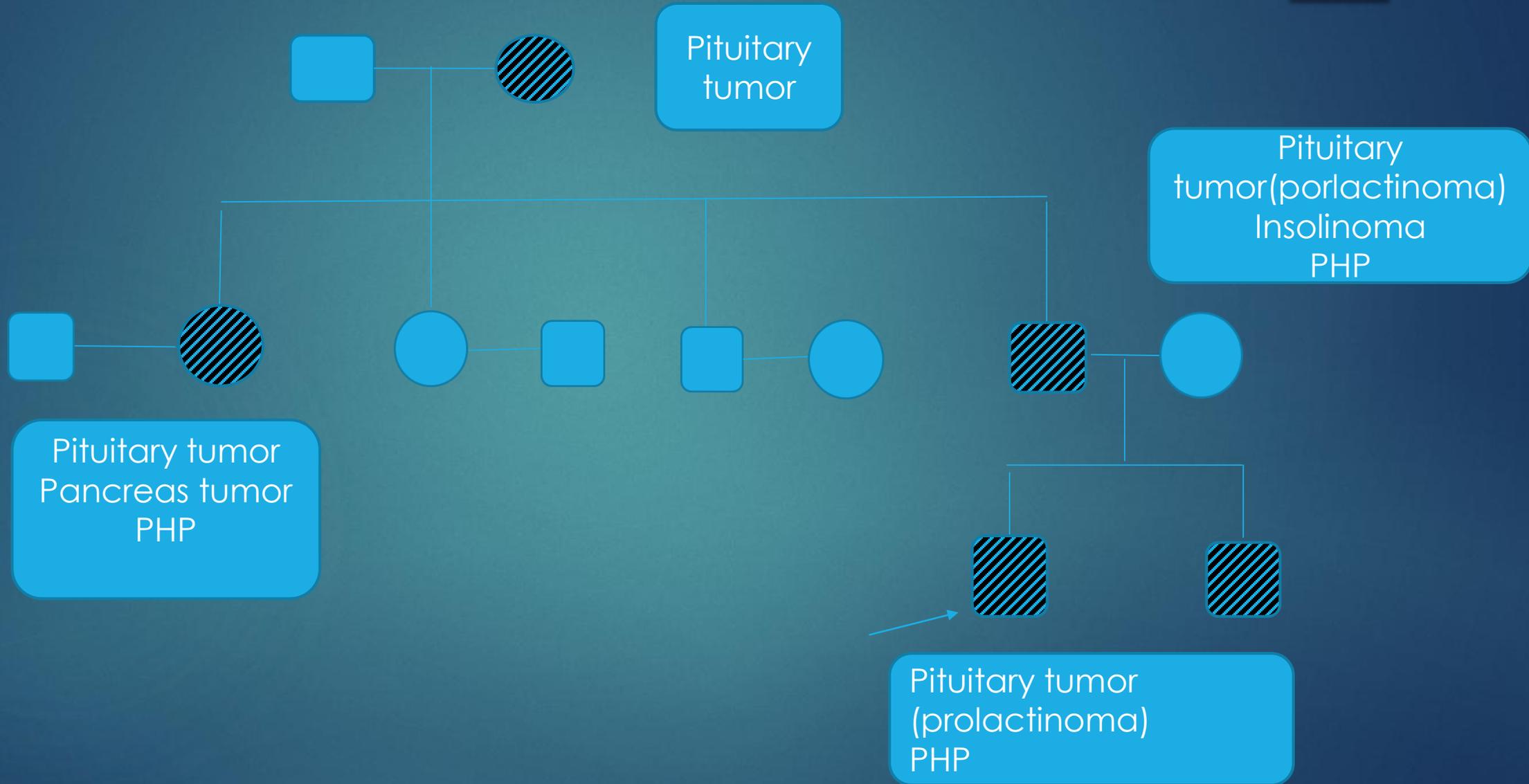
❖ PMH:

- ❖ Pituitary adenoma(resected)
- ❖ PHP(resected)

❖ DH

- ❖ hydrocortisone: 25 mg/daily
- ❖ Levothyroxine: 700 micgr/week
- ❖ Testosterone 250 mg/21 days
- ❖ Calcium carbonate BD,
- ❖ Calcium fort TDS
- ❖ Rocatrol BD

FH



# FH:

- ❖ 2 times surgery in grand mother because of invasive pituitary tumor
- ❖ Death in 64 y/o after second surgery
- ❖ Persistent headache in one of patients aunts
- ❖ Renal stone in the family

# FH:

- ❖ Father
- ❖ : visual disturbance & headache (35y/o)
  - ❖ Cystic sellar lesion: surgery+ cabergolin
- ❖ Renal stone & bone fracture (37 y/o)
- ❖ Hypoglycemia (40 y/o)
  - ❖ Bs<20, c-peptide:6,34 ng/ml,insulin:23 micu/ml
  - ❖ EUS: well defined hypoechoic mass with sharp border in pancreatic body
  - ❖ Sub total pancreatectomy +splenectomy: multiple well differentiated neuroendocrine tumor of pancreas
  - ❖ IHC: NSE ,chromogranin :strongly positive,ki67<1% ,benign neuroendocrine tumor
  - ❖ Parathyroidectomy:3,5/4 , parathyroid hyperplasia
- ❖ Headache recurrence :sellar mass 15\*20 mm with right para sellar extension ,re surgery(40)

# FH

## ❖ Brother:

- ❖ Ca: 10.3 mg/dl
- ❖ Ph: 3.5 mg/dl
- ❖ Vit D: 19.7 ng/ml
- ❖ PTH: 10.1 pg/ml
- ❖ IGF1: 330 ng/ml (584)
- ❖ Prolactin : 10.7 ng/dl
- ❖ Pituitary MRI: 11\*7\*8 mm **macro adenoma** at right side of pituitary gland with heterogeneous enhancement
- ❖ Parathyroid tc<sup>99</sup> MIBI scan : parathyroid adenoma inf to left thyroid lobe.

# ROS:

- ❖ Headache -,seizure -,depression –
- ❖ Visual disturbance –
- ❖ Snoring +
- ❖ Oily skin +
- ❖ Increased sweating –
- ❖ Skin thinning –
- ❖ Easy bruising -
- ❖ Beard growth(after starting testosterone)
- ❖ Gynecomastia +
- ❖ Induced galactorrhea
- ❖ Libido change –
- ❖ Muscle weakness -

# P/E

- ❖ 22 Y/O male
- ❖ Weight 126kg, height 187, BMI: 36
- ❖ Bp:105/70 PR:90
- ❖ Moon face -jaw deformity -,
- ❖ Angiofibroma -
- ❖ Thyroid surgery scar in neck
- ❖ Buffalo hump +
- ❖ Acanthosis nigricans -
- ❖ Gynecomastia +
- ❖ Striae + (<1cm,wight)
- ❖ Testis volume 1 cc ,penis stretch length:11 cm
- ❖ Muscle force 5/5

# LABS

- ❖ IGF1: 168 ng/ml (385)
- ❖ GH:
  - ❖ basal: 0.05 ng/ml
  - ❖ 30 min after glucose: < 0.05
  - ❖ 60 min after glucose: < 0.05
- ❖ Prolactin : 1604 miu/l (370)
- ❖ Calcium: 8.8 mg/dl
- ❖ Ph: 5 mg/dl

# Problem list

- ❖ 22 Y/O male
- ❖ FH of MEN1
- ❖ Pituitary tumor ,thyroid &parathyroid surgery
- ❖ Complain of fatigue & continuing weight gain & induced galactorrhea
- ❖ Gynecomastia, testis volume  $\uparrow$  cc & SPL: 11cm
- ❖ Prolactin \*  $\uparrow$  ULN
- ❖ Partial empty sellae/remnant