

TIPS AND PITFALL IN INTERNAL MEDICINE CASES

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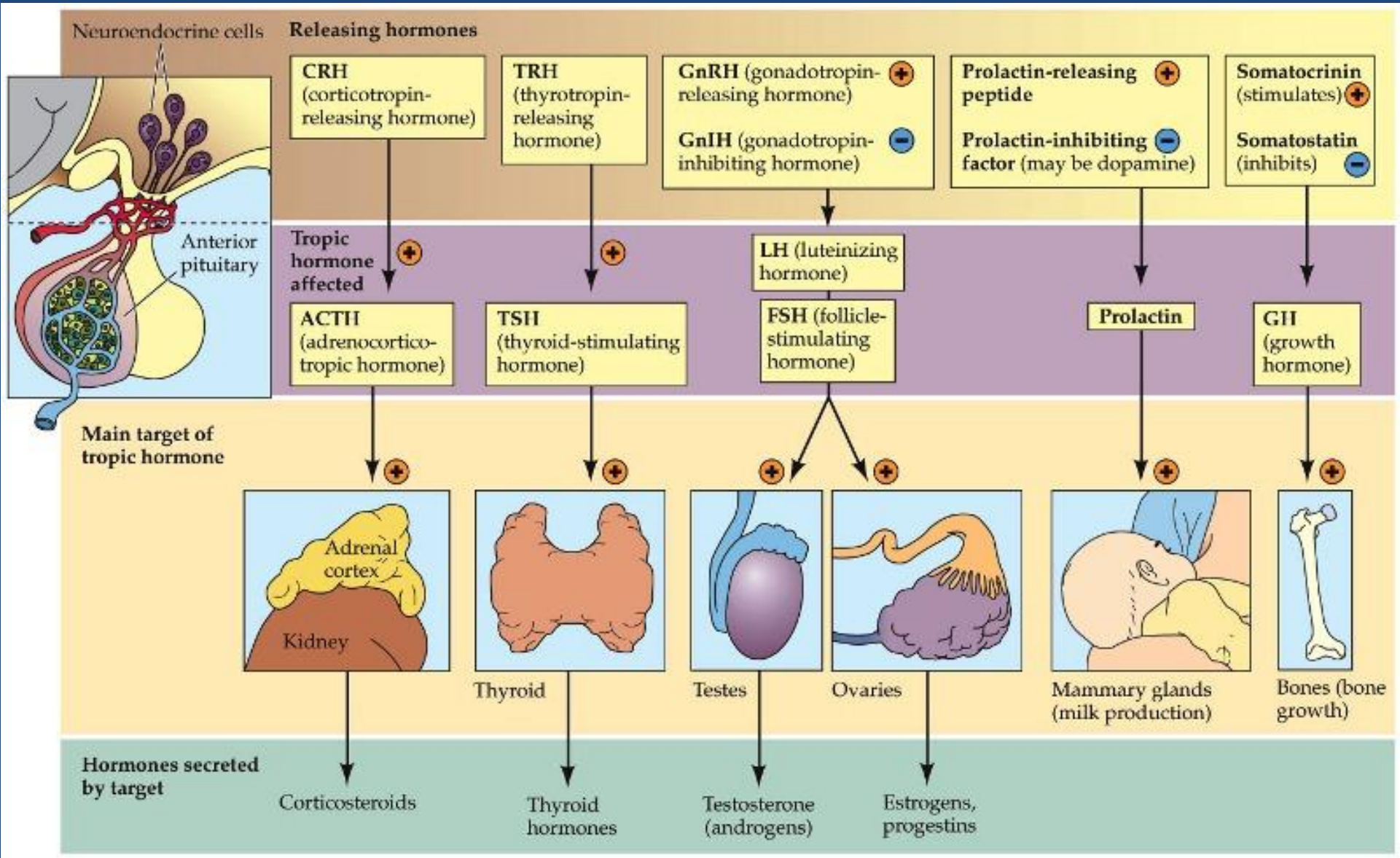
Division of Endocrinology Metabolism

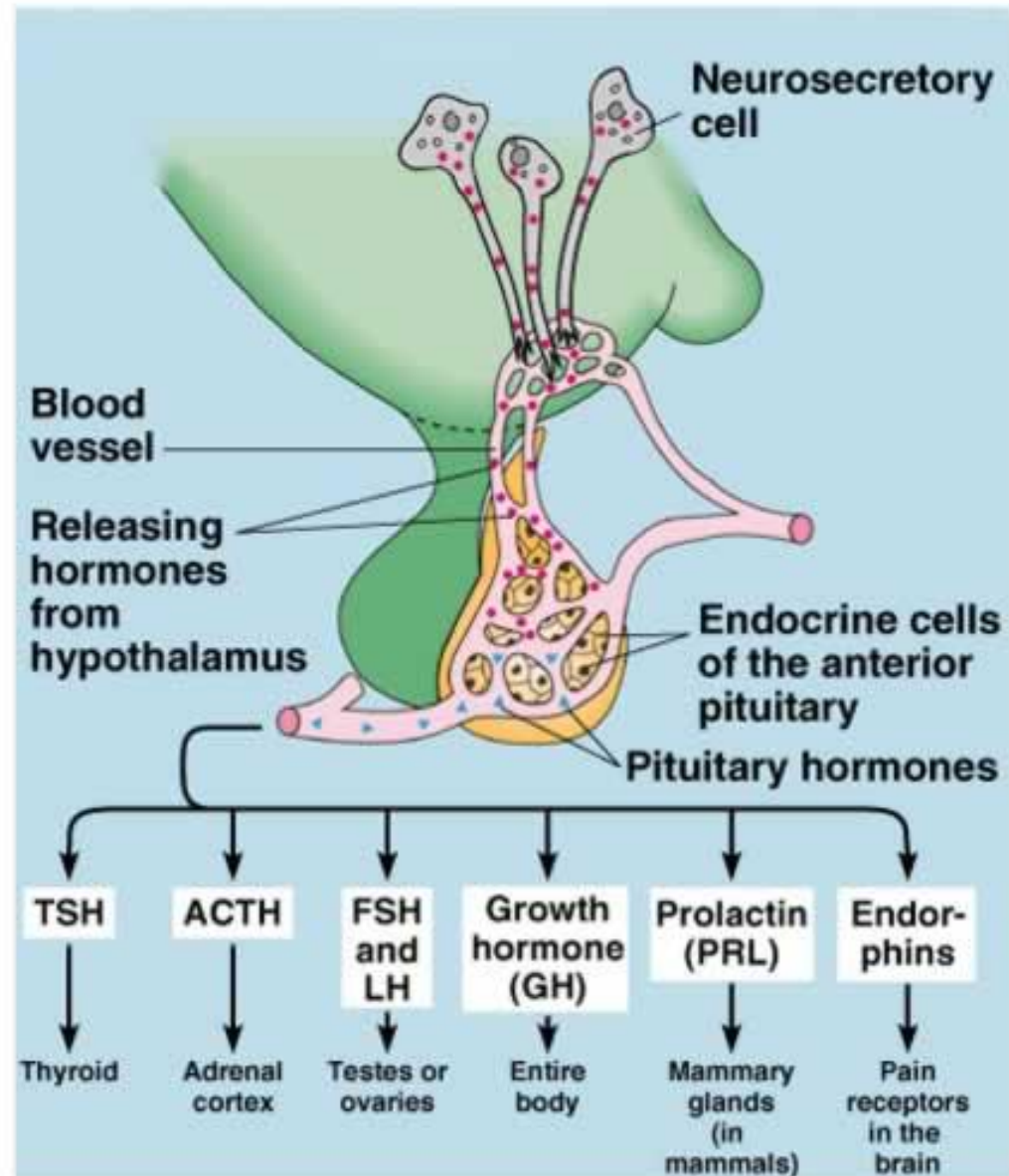
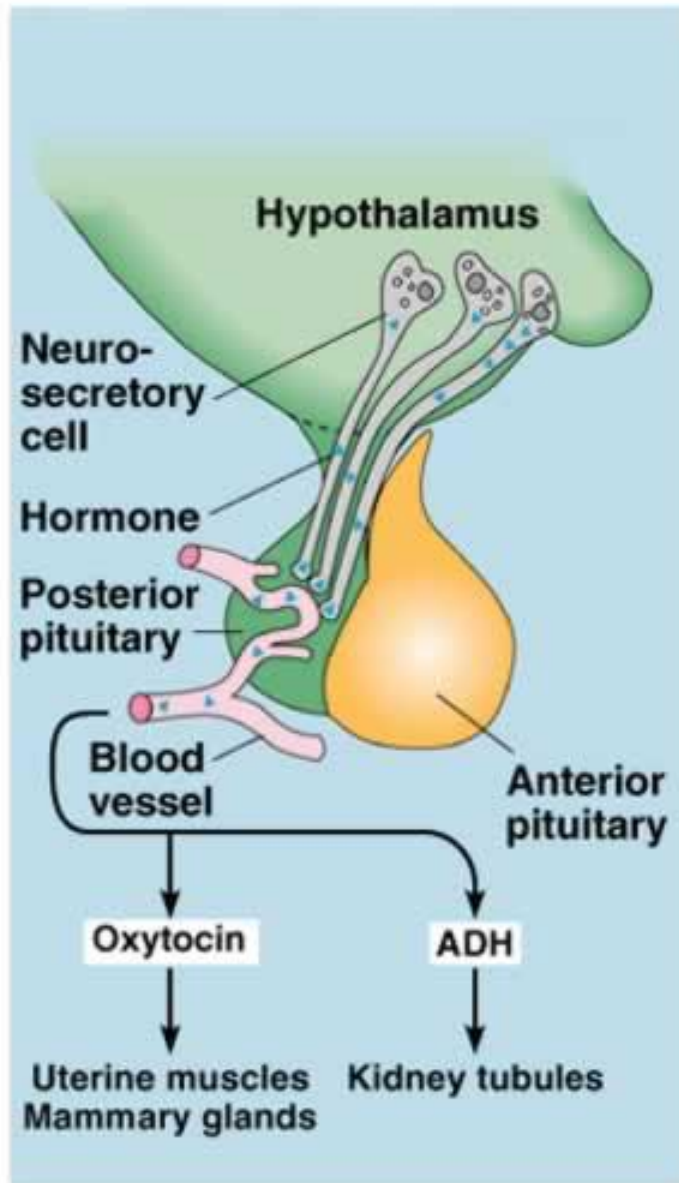
Department of Internal Medicine Faculty of Medicine

Airlangga University-Dr.Soetomo Teaching Hospital

Seminar and Interactive Case Discussion From A to Z Brain Tumor in Daily Practice

GDC 21 April 2018





PITUITARY TUMORS - CLASSIFICATION

According to their size:

- **Microadenomas:** have less than 1 cm, do not modify the shape of sella turcica and do not produce pituitary tumor syndrome
- **Macroadenomas:** have more than 1 cm. and according to the direction they develop produce “the syndrome of pituitary tumors”

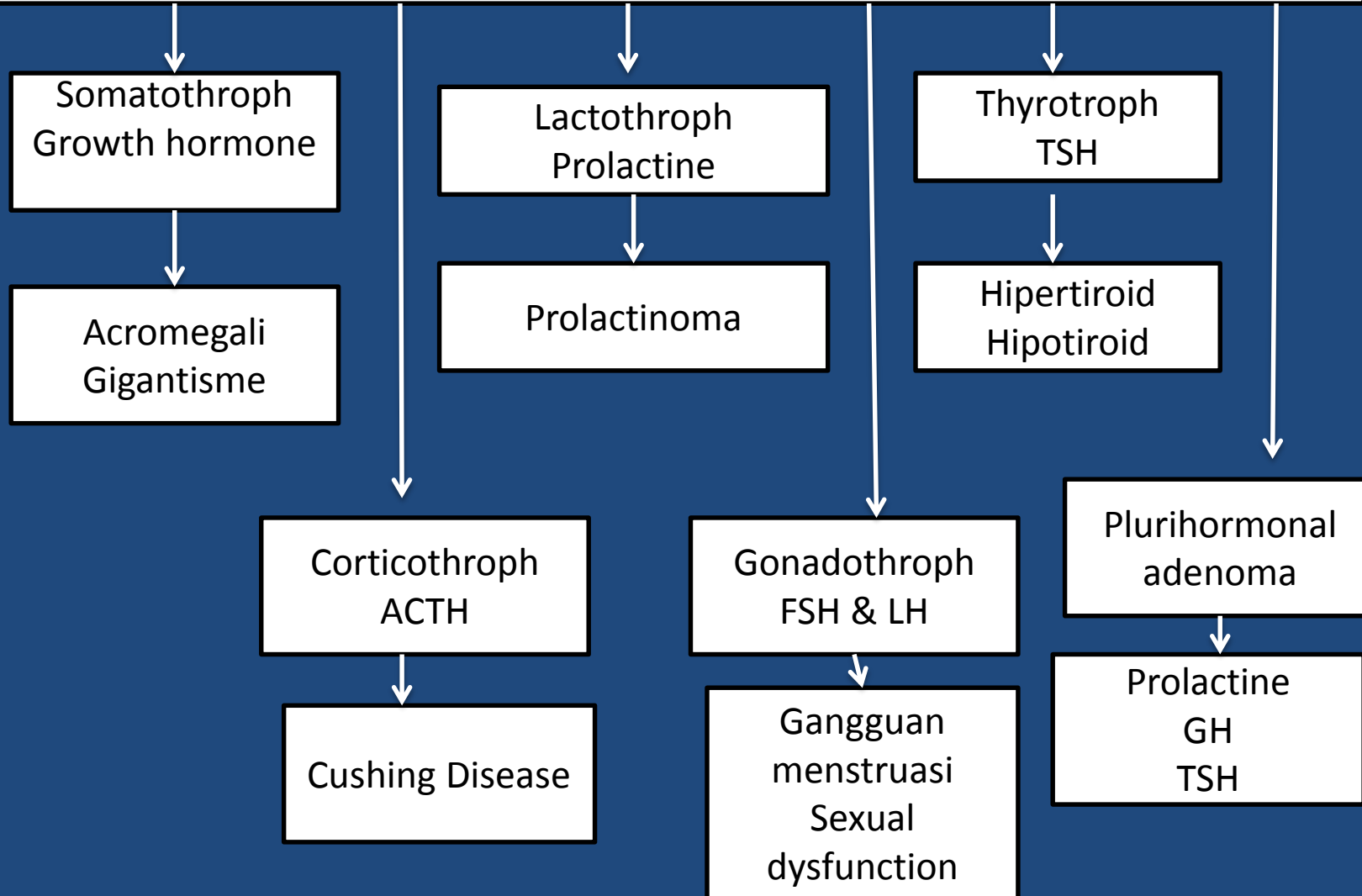
According to their degree of aggression

- Benign adenomas
- Invasive adenomas
- Carcinomas: less than 1 % of pituitary tumors

PITUITARY TUMOR SYNDROME

- **NEUROLOGIC SYMPTOMS:**
 - Headache
 - Nerves III, IV and VI which cross the cavernous sinus
 - Temporal seizures
 - Other seizures
 - Meningeal signs
- **OPHTHALMOLOGIC SIGNS**
 - Decreased visual acuity
 - Reduction of visual field according to tumor extension
 - Exophthalmos : rare
- **RADIOLOGICAL SYGNS**
 - Enlarged surface of sella turcica
 - Radiologic signs specific for some pituitary adenomas: acromegaly

TUMOR OTAK ADENOMA PITUITARY



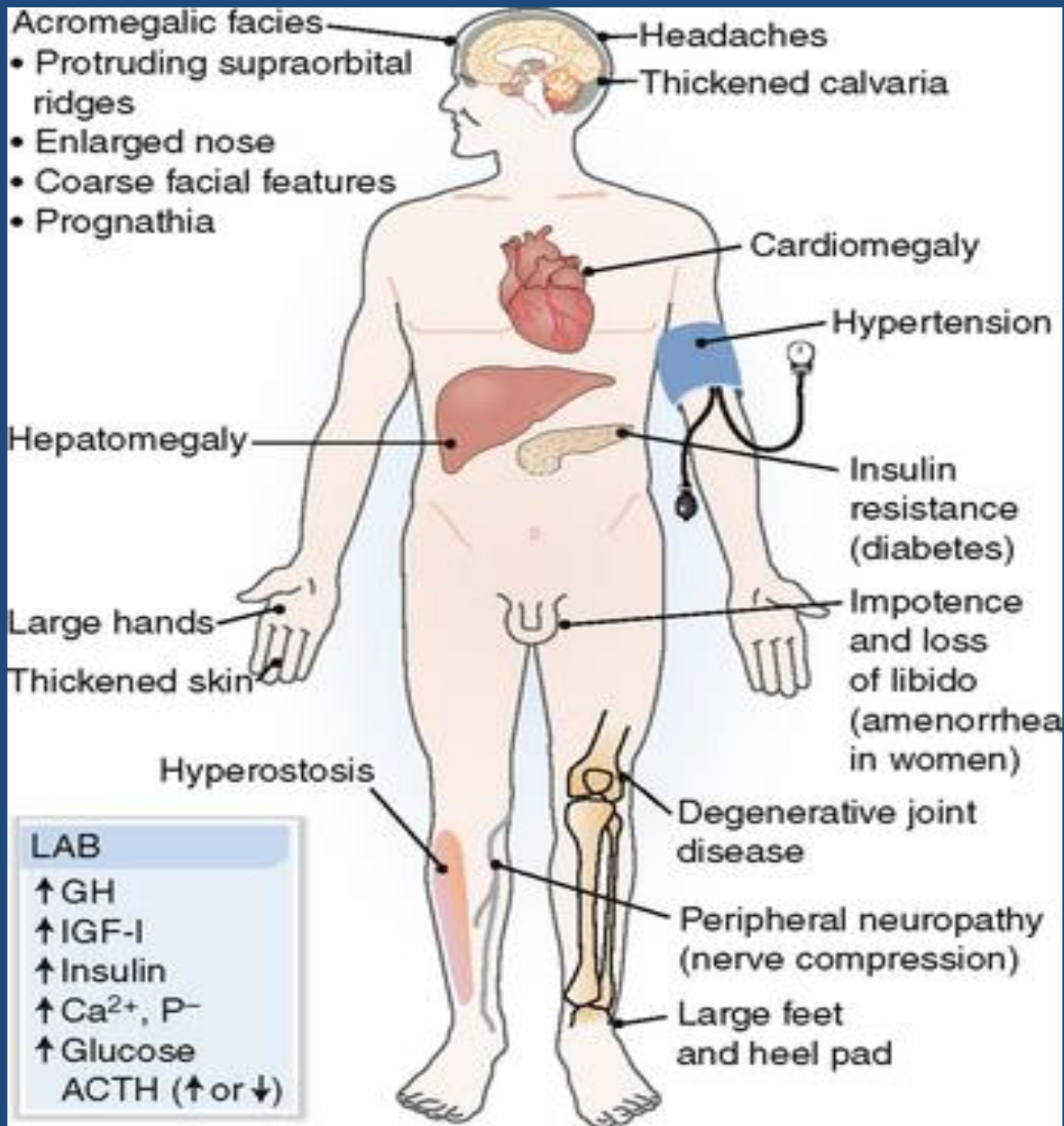
ACROMEGALY signs and symptoms

- Pituitary tumor syndrome:
- Narrowing of the visual field,
- Decreased visual acuity

- Facial abnormalities:
 - Prominent frontal boses
 - Prominent occipital bone
 - Enlargement of low jaw
 - Dental : spaces between tees
 - Large tongue







Cushing's Syndrome

Exogenous

Endogenous

ACTH dependent

ACTH independent

- . Pituitary Adenoma
(Cushing's disease)
- . Ectopic ACTH Secreción
Syndrome
- . Ectopic CRH Secrecion
Syndrome

- . Adrenocortical Tumor
- . McCune Albright
- . Macronodular Adrenal
Hiperplasia
- . Pigmented Nodular Adrenal
Hiperplasia

Possible causes of Cushing's syndrome¹

Endogenous Cause:

Overproduction of cortisol (a glucocorticoid) caused by either:

Pituitary tumor
(Cushing's disease),
70% of endogenous
cases

Adrenal tumor,
15% of endogenous
cases

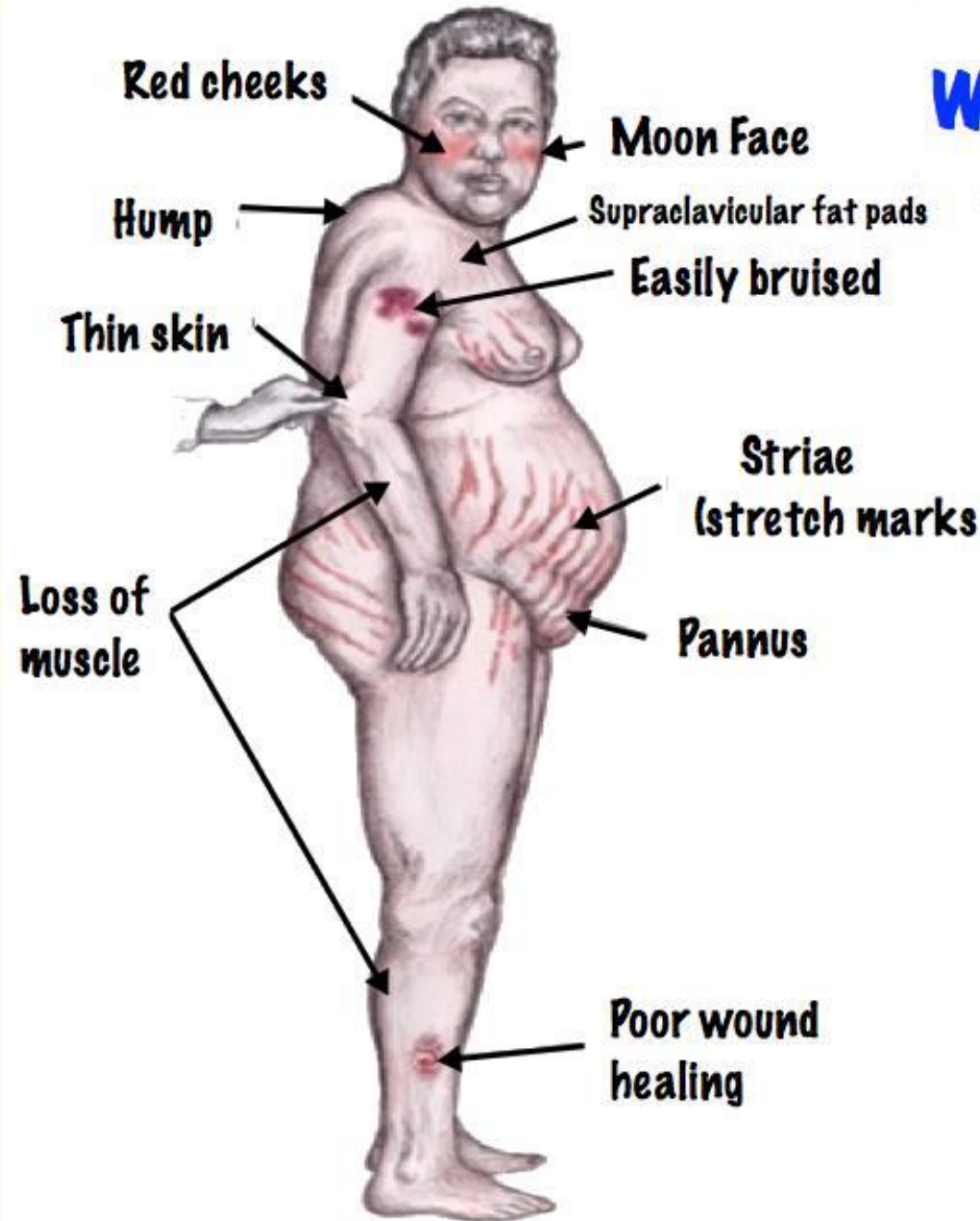
**Other or
unknown causes,**
15% of
endogenous cases

Exogenous Cause:

Taking medicines
containing
glucocorticoids,
such as hydrocortisone

Women with Cushing's Syndrome/Disease

May have some or all symptoms including:



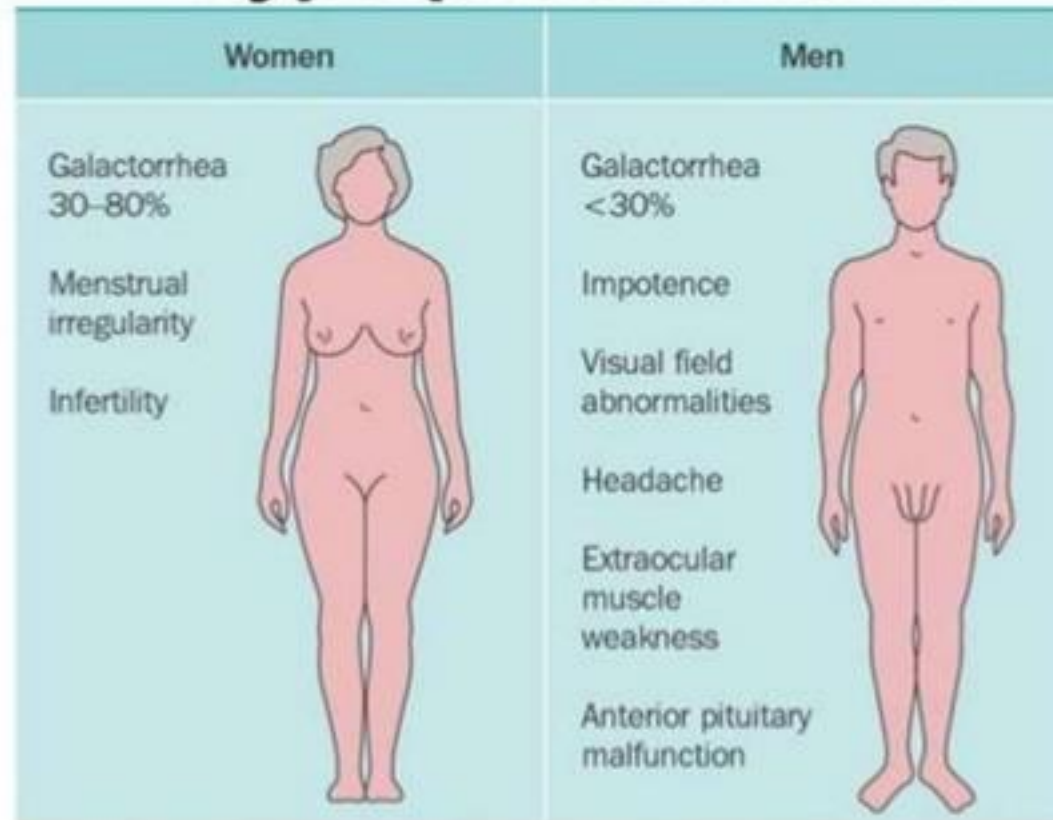
- Loss of Menstrual Cycle
- High Blood Pressure
- Type II Diabetes
- Low Ferritin
- Low Vitamin D
- Low Estradiol
- Low FH and LSH
- Secondary Hypothyroidism
- Fatigue
- Insomnia
- Loss of Libido
- Difficulty with blood draws

Symptoms worsen over time and vary by individual



Clinical manifestations of hyperprolactinemia

Women	Men
Galactorrhea 30–80%	Galactorrhea <30%
Menstrual irregularity	Impotence
Infertility	Visual field abnormalities
	Headache
	Extraocular muscle weakness
	Anterior pituitary malfunction

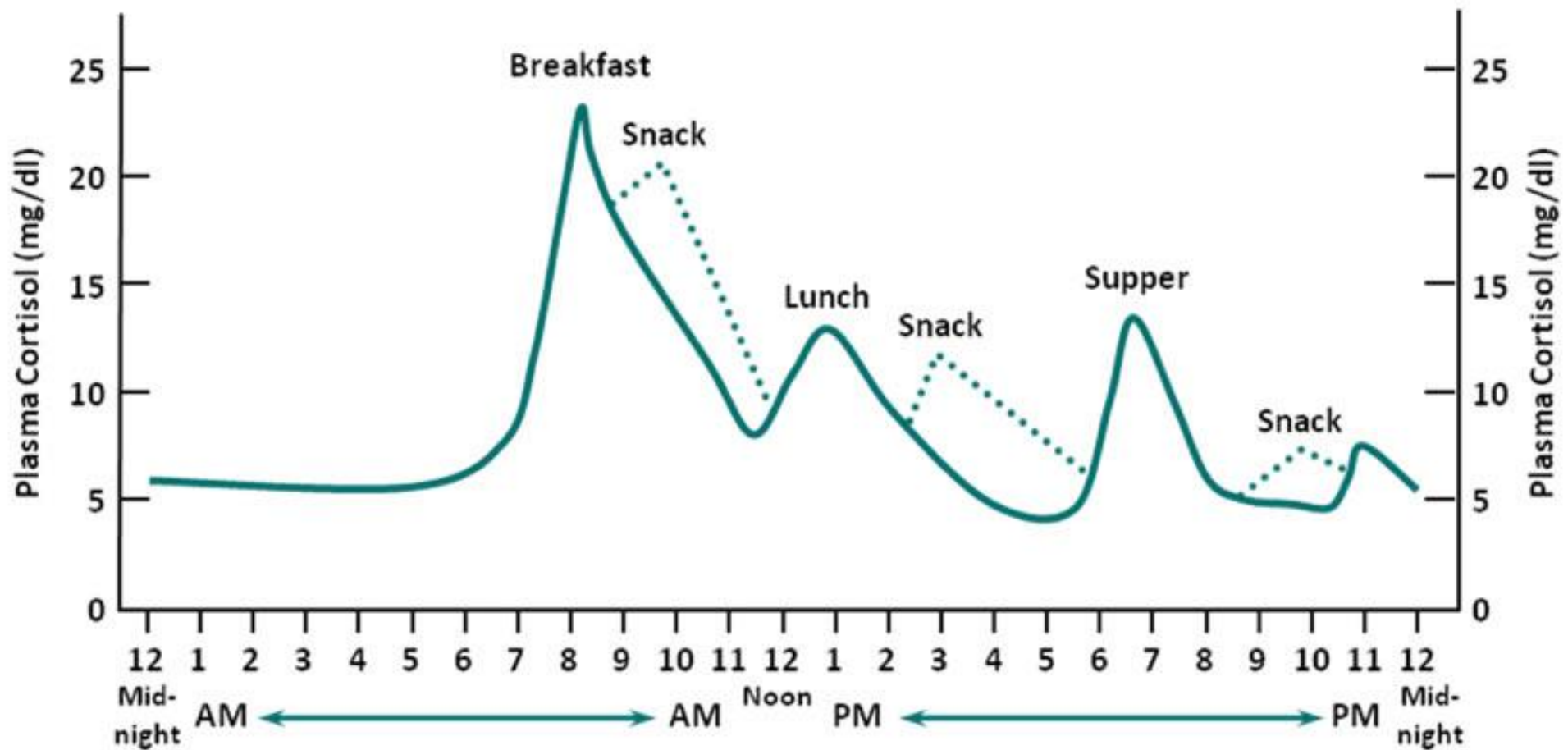


- Hypogonadism in both women and men by suppressing GnRH secretion and pulsatility, resulting in low levels of LH and FSH

IATROGENIC CUSHING SYNDROME

Dampak penggunaan steroid jangka panjang

Circadian Rhythm And Cortisol (With & Without Snacks)



NOVORAPID® / APIDRA® in FORMULA for STEROID TREATED DM-Pts

FORMULA MP-25.4 or MP – 25.2 and FORMULA DEX-4.4 or DEX-4.2

(Clinical Experiences: Tjokroprawiro 2010-2016)

FORMULA MP-25.4 | For Sensitive Pts, Use Formula MP-25.2

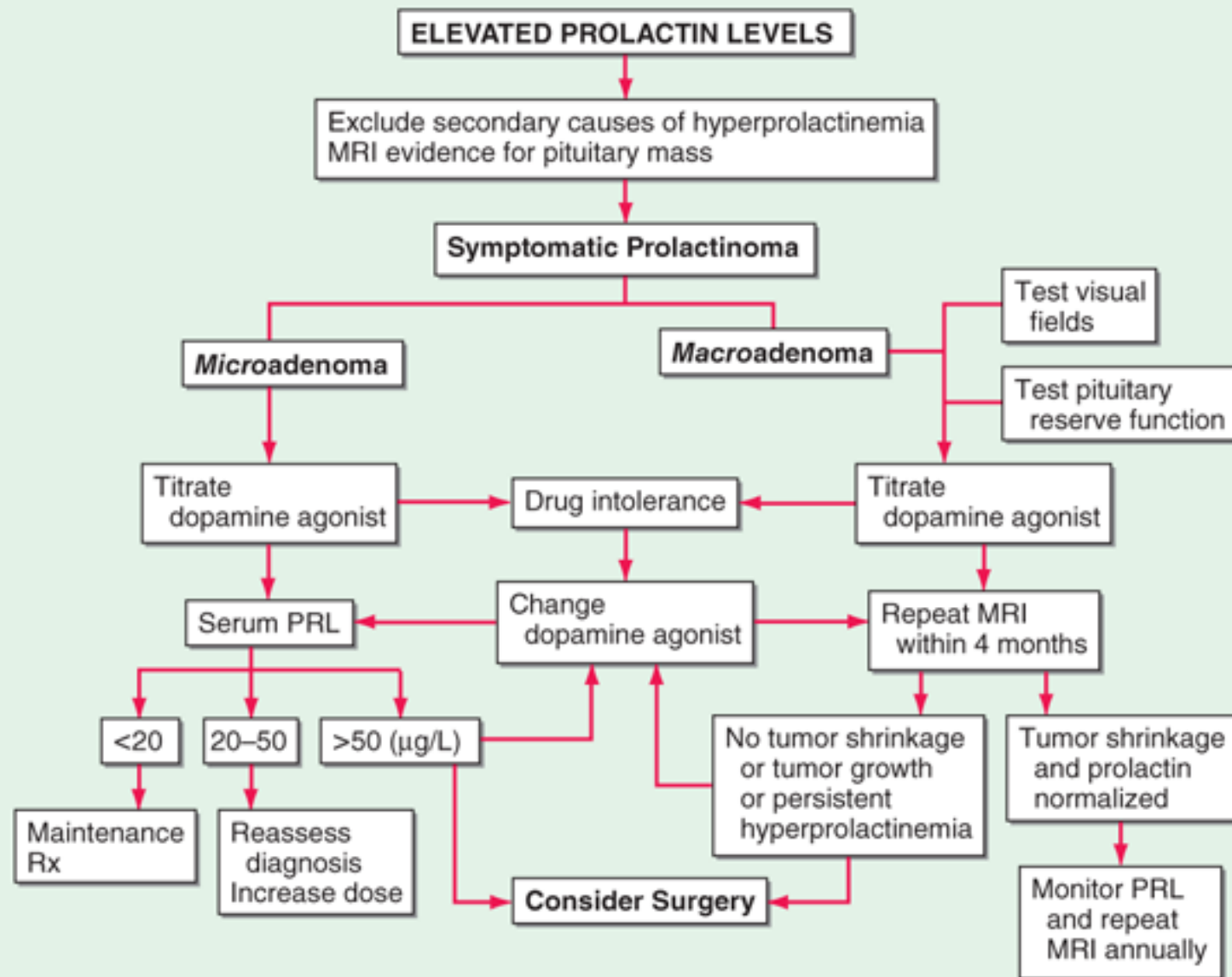
- ① INTRAVENA METHYL PREDNISOLONE (MP) 25 mg :
Every 25 mg MP SHOULD be BACKED UP with 4 units NOVORAPID® / APIDRA® SC or IV**
- ② METHYL PREDNISOLONE (MP) 50 mg : with 8 units NOVORAPID® / APIDRA® SC or IV**
- ③ METHYL PREDNISOLONE (MP) 125 mg : with 20 units NOVORAPID® / APIDRA® SC / IV / PUMP**

FORMULA DEX-4.4 | For Sensitive Pts, Use Formula Dex-4.2

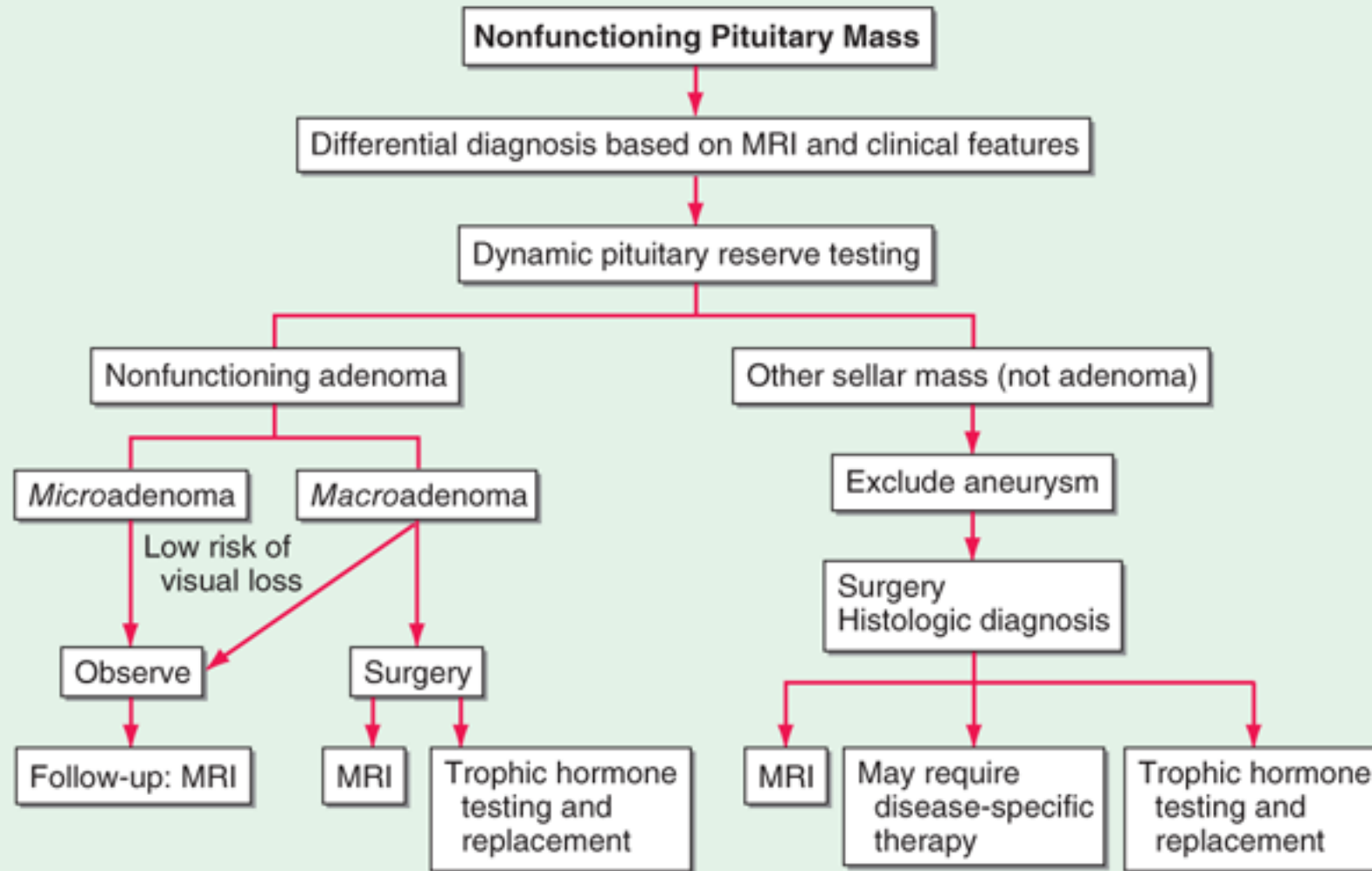
- ① INTRAVENA DEXAMETHASON (DEX) 4 mg : BACKED UP with 4 units NOVORAPID® / APIDRA® SC or IV**
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THANK YOU

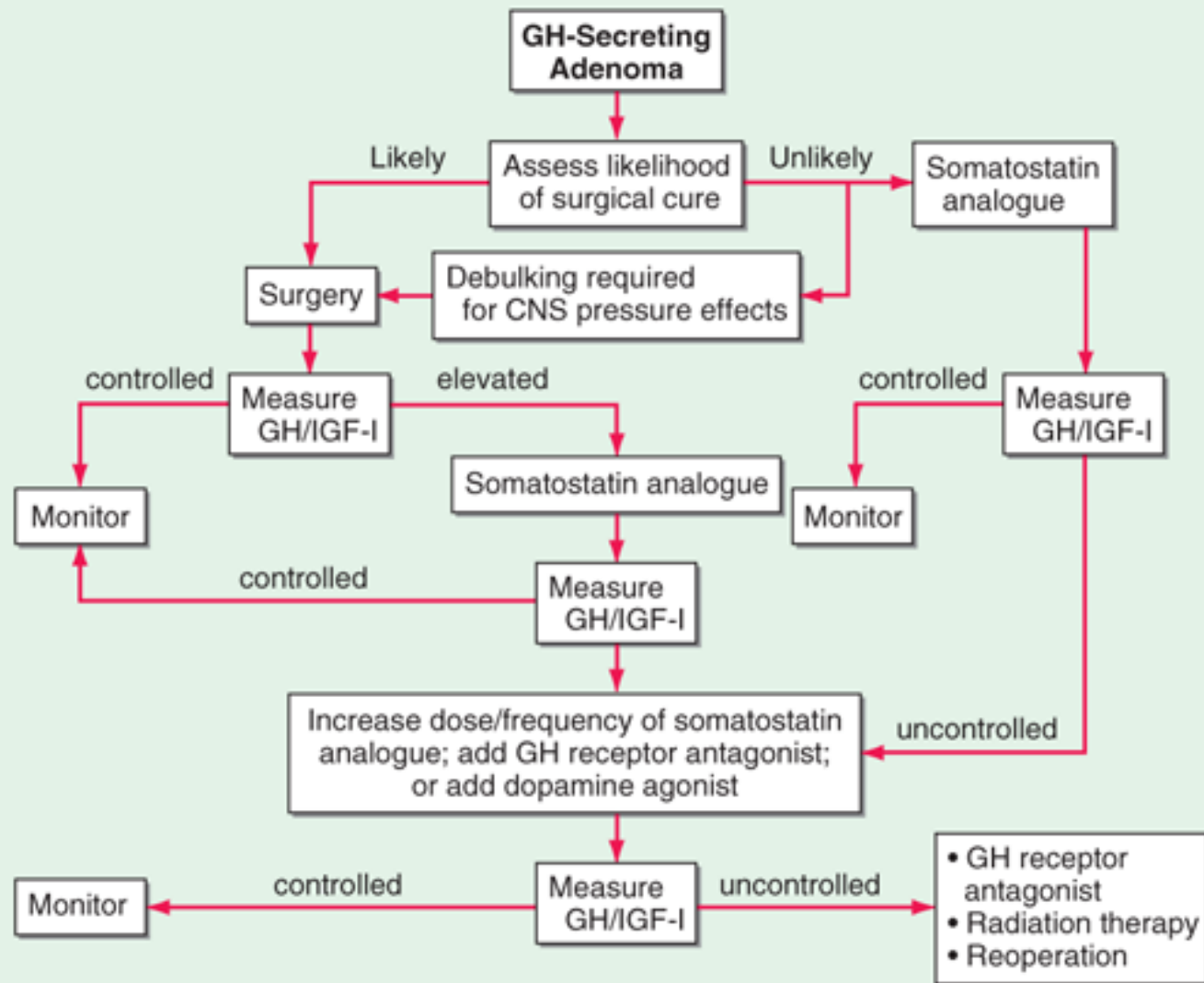
MANAGEMENT OF PROLACTINOMA



MANAGEMENT OF A NONFUNCTIONING PITUITARY MASS



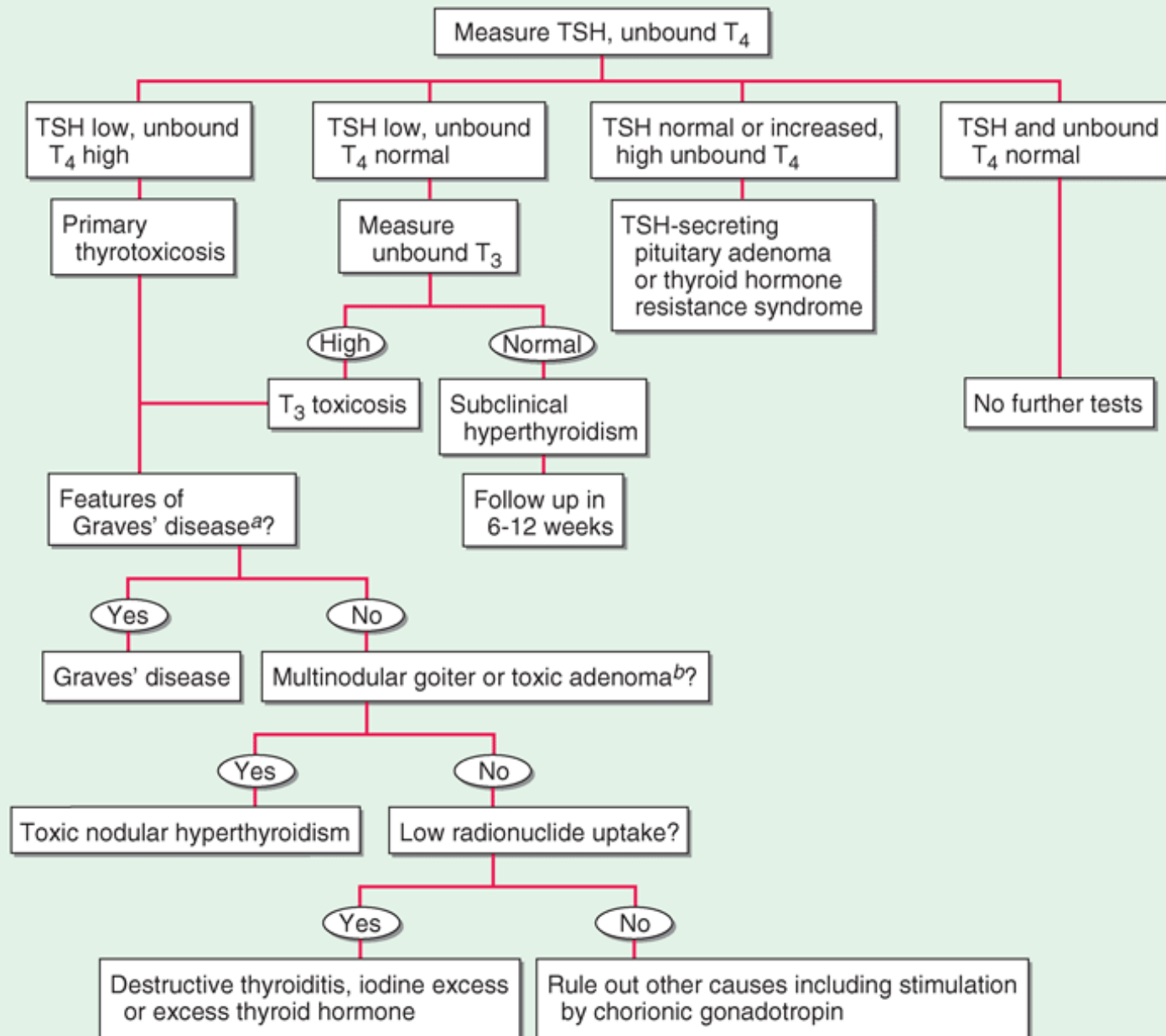
MANAGEMENT OF ACROMEGALY



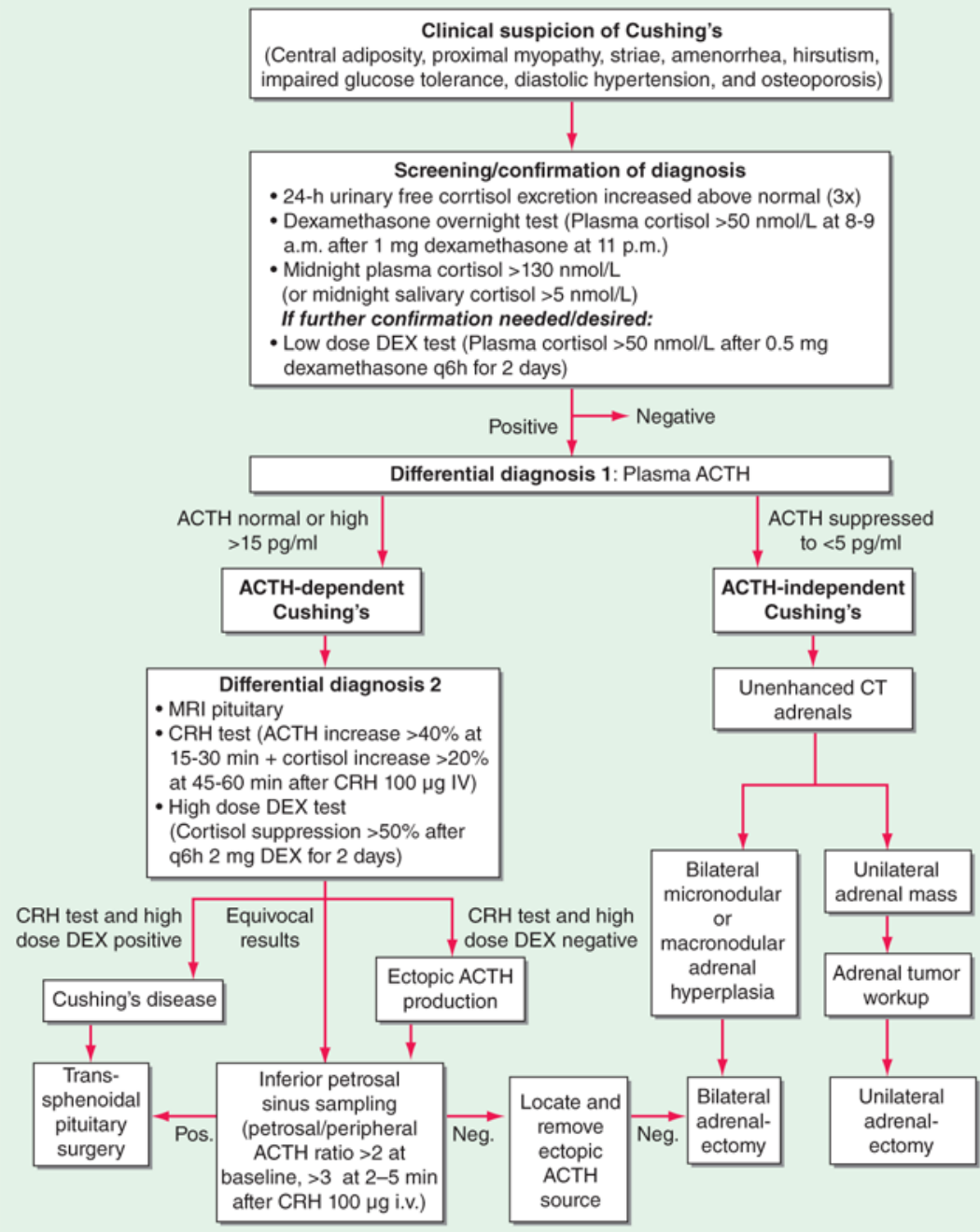
Source: D. L. Kasper, A. S. Fauci, S. L. Hauser, D. L. Longo, J. L. Jameson, J. Loscalzo: Harrison's Principles of Internal Medicine, 19th Edition. www.accessmedicine.com

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EVALUATION OF THYROTOXICOSIS



ALGORITHM FOR MANAGEMENT OF THE PATIENT WITH SUSPECTED CUSHING'S SYNDROME





Symptoms of Brain Tumor

- Headaches
- Seizures Visual changes,
- Changes in personality, mood, mental capacity, and concentration
- Gastrointestinal symptoms such as nausea, loss of appetite, and vomiting.

Seizures are a presenting symptom in approximately 20% of patients

Among all patients with brain tumors, 70% with primary tumors and 40% with metastatic brain tumors develop seizures at some time during the clinical course

CIRCADIAN RHYTHM WITH SUPERIMPOSED EXAMPLE OF THE CORTISOL LEVELS ACHIEVED IN AN INDIVIDUAL TAKING TWO DOSES OF HYDROCORTISONE A DAY

