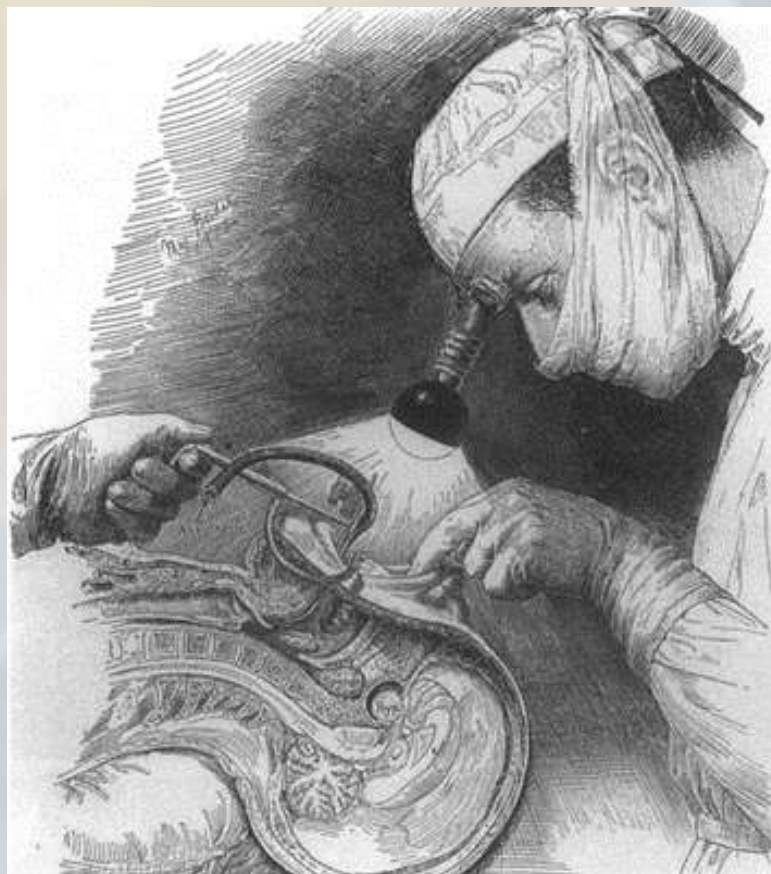


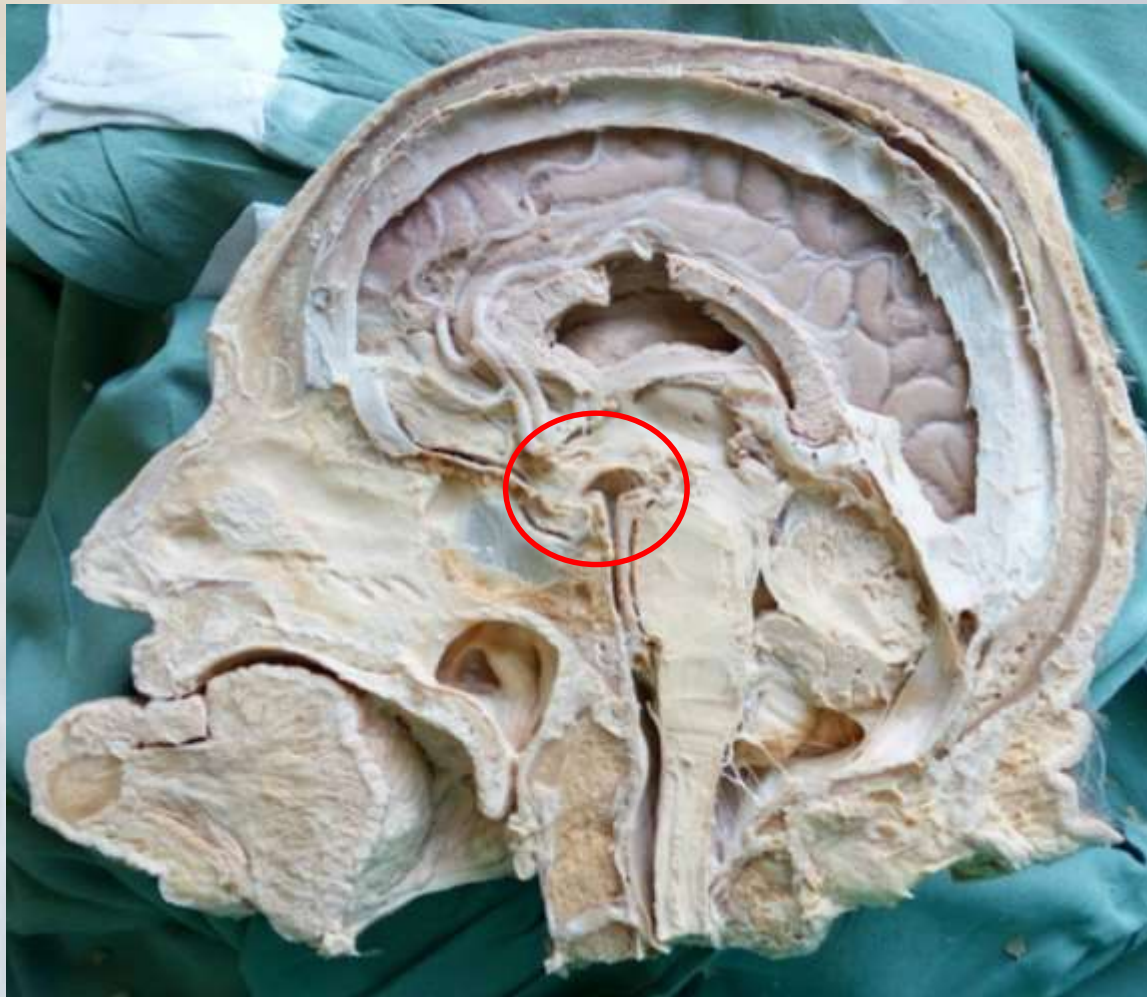
Hypofýza: základy anatomie



Malucelli A, Bartoš R, Sameš M

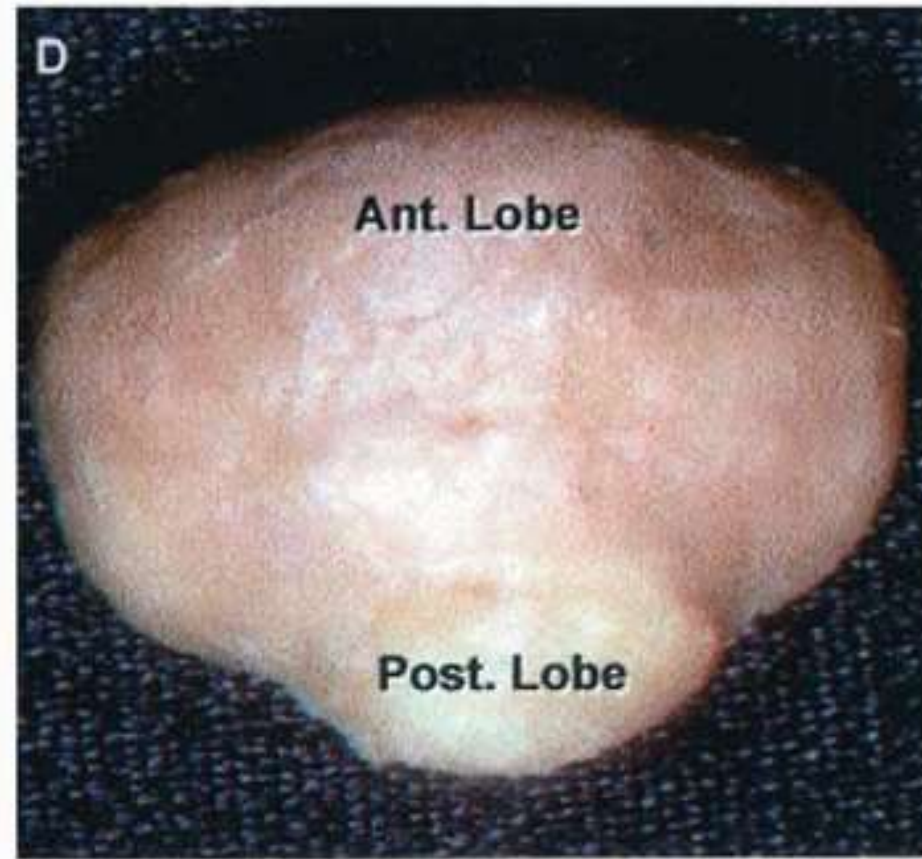
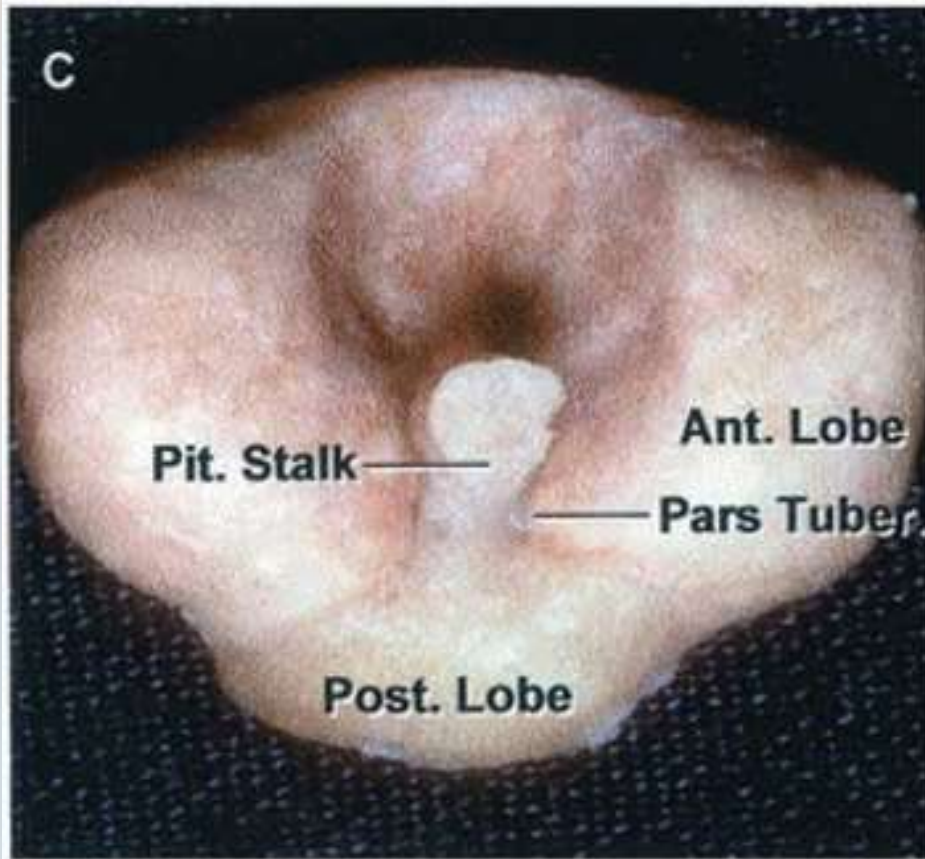
Neurochirurgická klinika, Anatomická Laboratoř Báze Lebni
Masarykova Nemocnice, Univerzita J.E. Purkyně, Ústí nad Labem

Hypofýza: základy anatomie



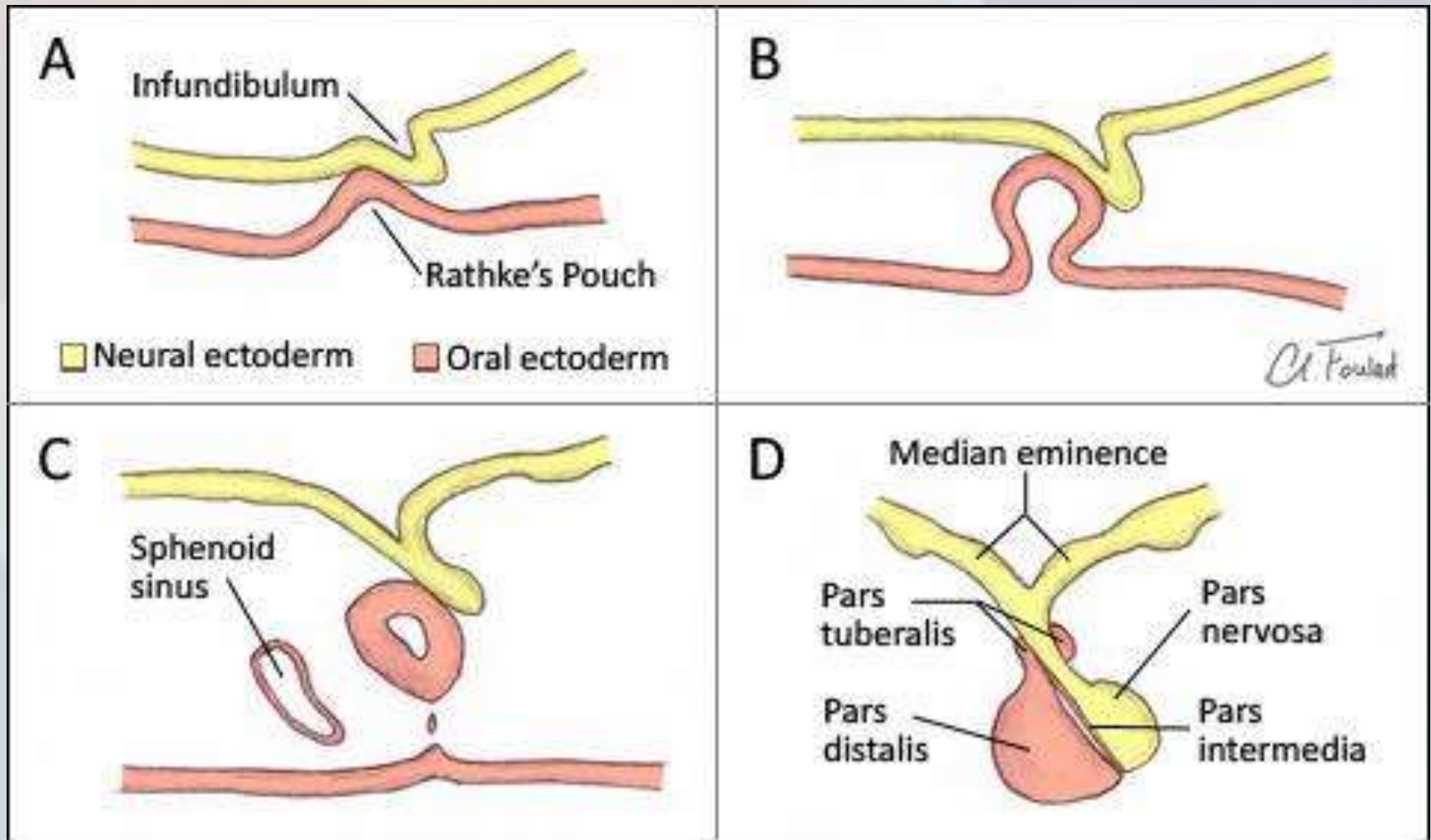
ὑπό- (hypo-) = pod
φύειν (phyein) = růst

Hypofýza: základy anatomie



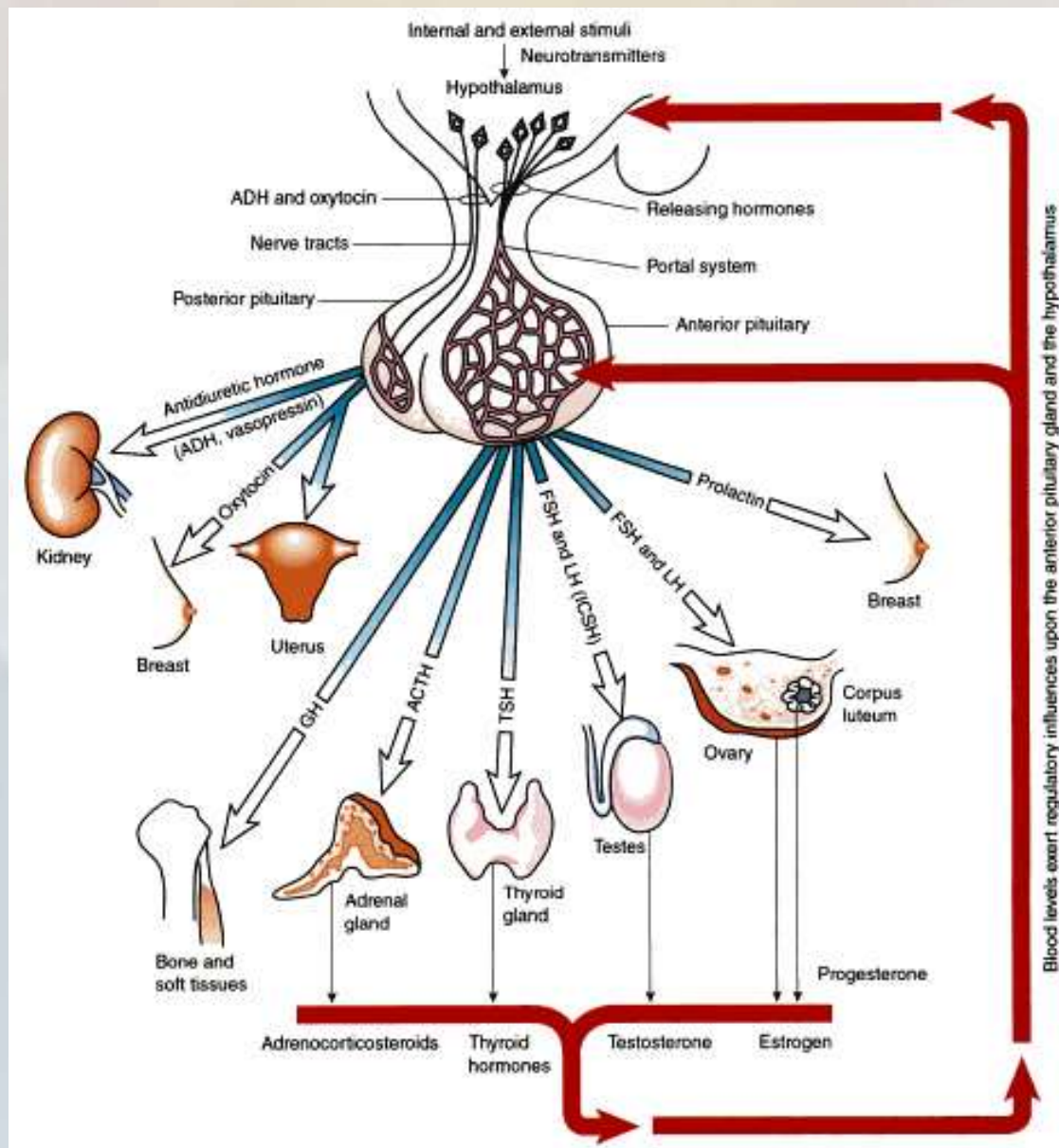
Dvoulaločná architektura

Hypofýza: základy anatomie



Orální a neurální původ

Hypofýza: funkce



Adenohypofýza:

FSH

LH

ACTH

TSH

PRL

STH

Neurohypofýza:

Oxytocin

ADH

Hypofýza: funkce

N. supraopticus a
paraventricularis

Tractus
supraopticohypofysealis
(modrý)

N. arcuatus,
ventromedialis, area
preoptica

Tractus
tuberoinfundibularis
(žlutý)

Superior hypophyseal artery

Pars distalis

Secondary
capillary plexus

Endocrine cells

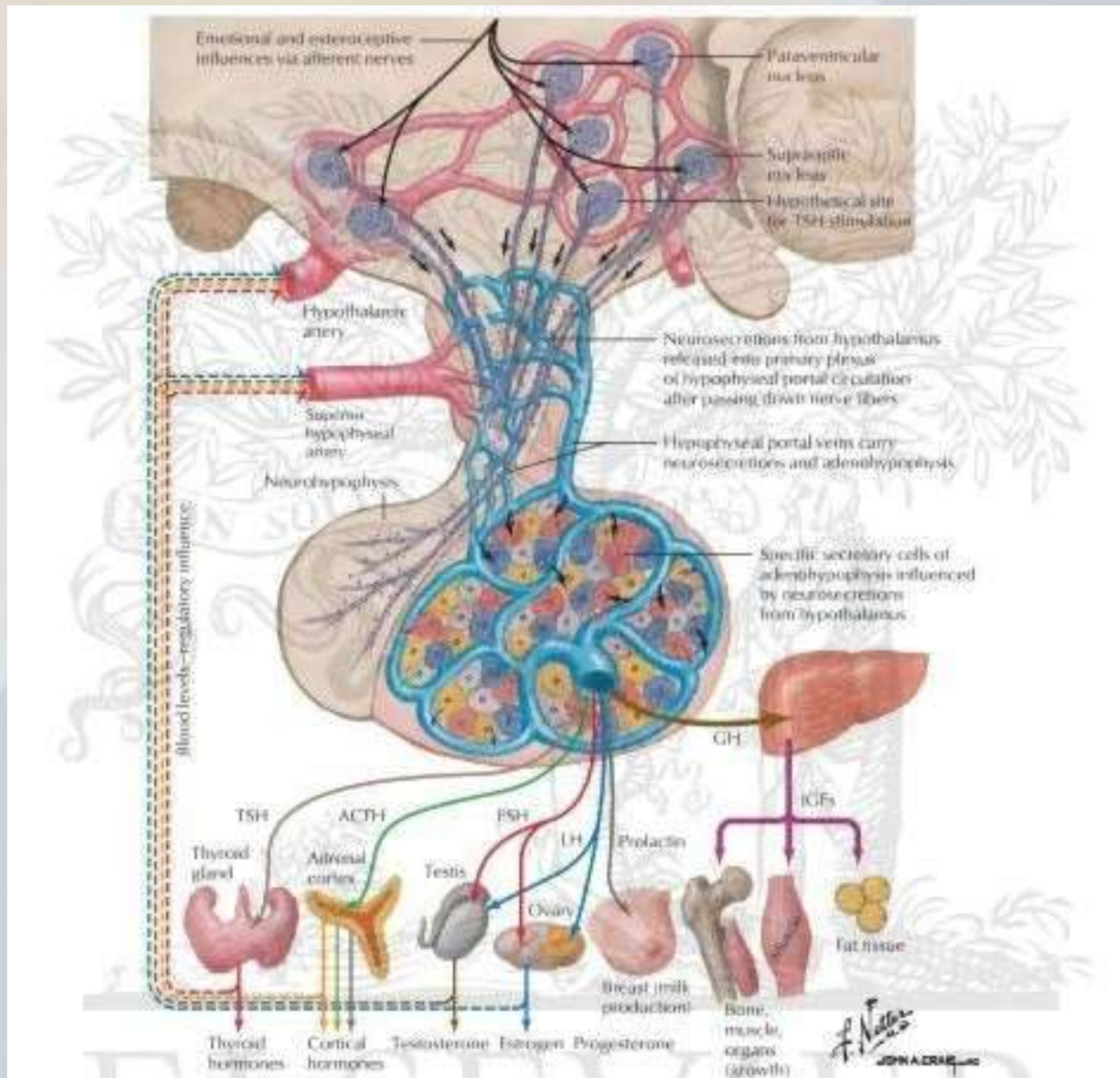
Inferior hypophyseal artery

Pars nervosa

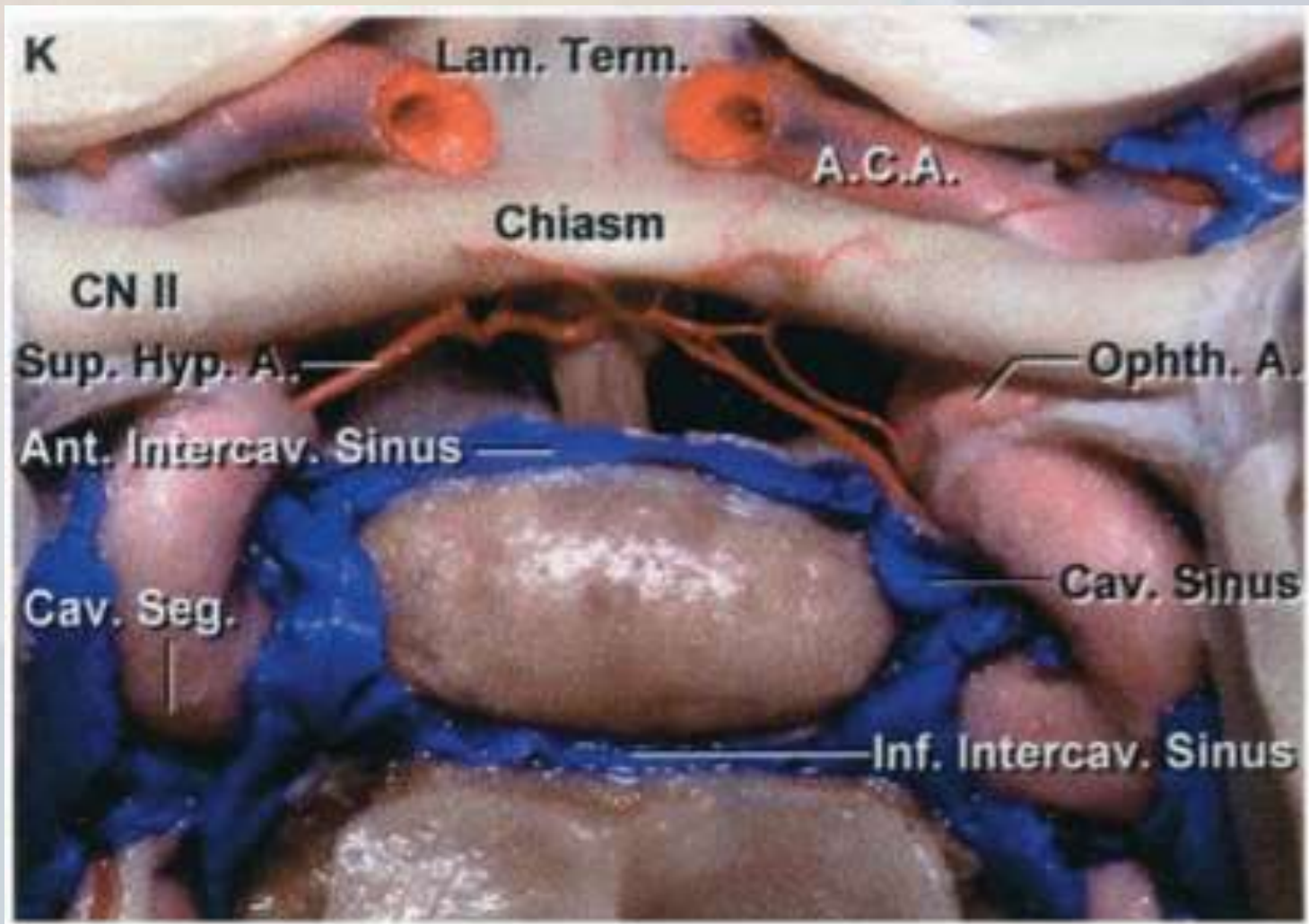
Collecting vein

- ▲ Hormones produced in the hypothalamus and released in the pars nervosa
- Stimulating (or inhibiting) hormones produced in the hypothalamus
- Hormones produced in the pars distalis

Hypofýza: portální systém

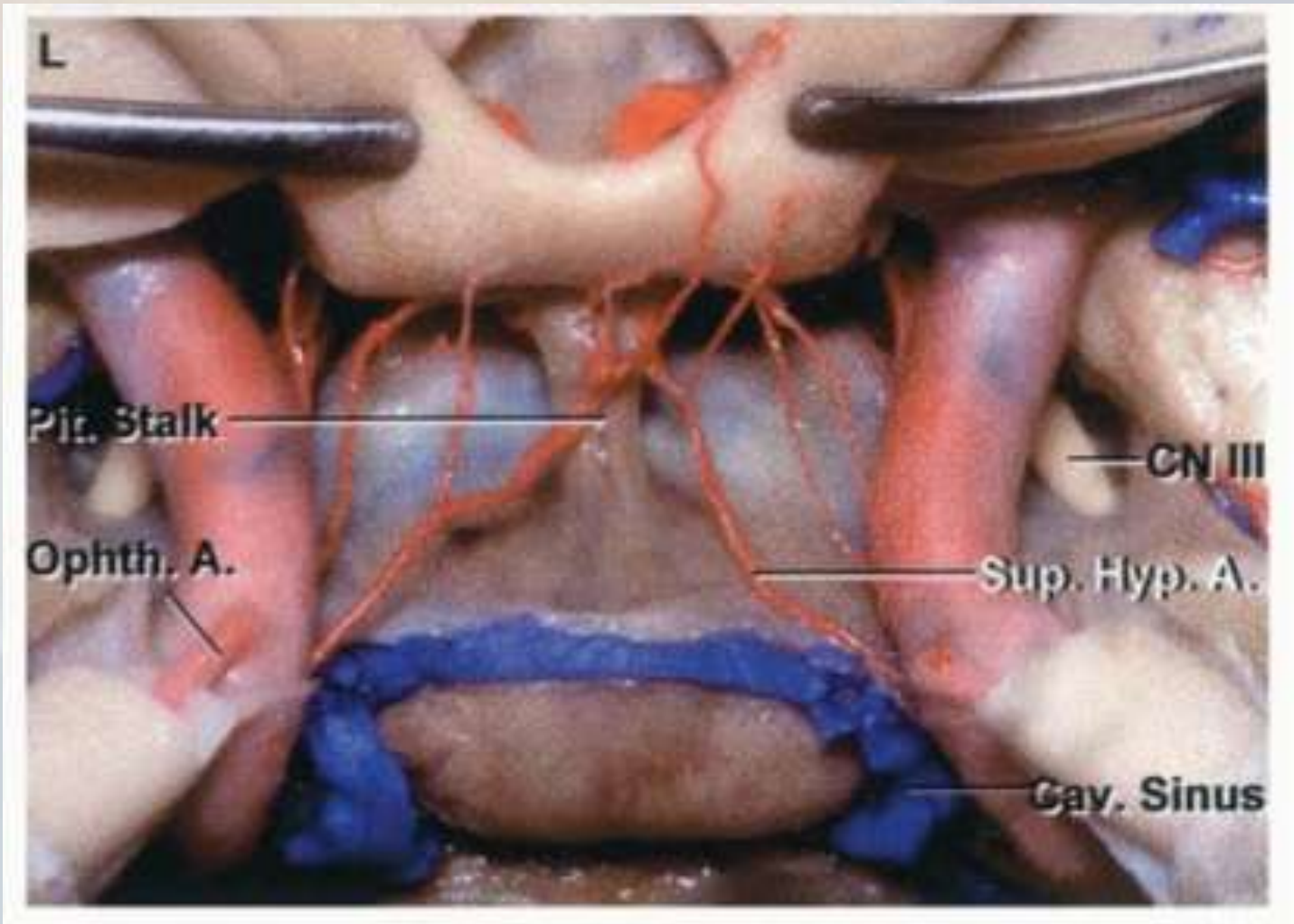


Hypofýza: cévní zásobení



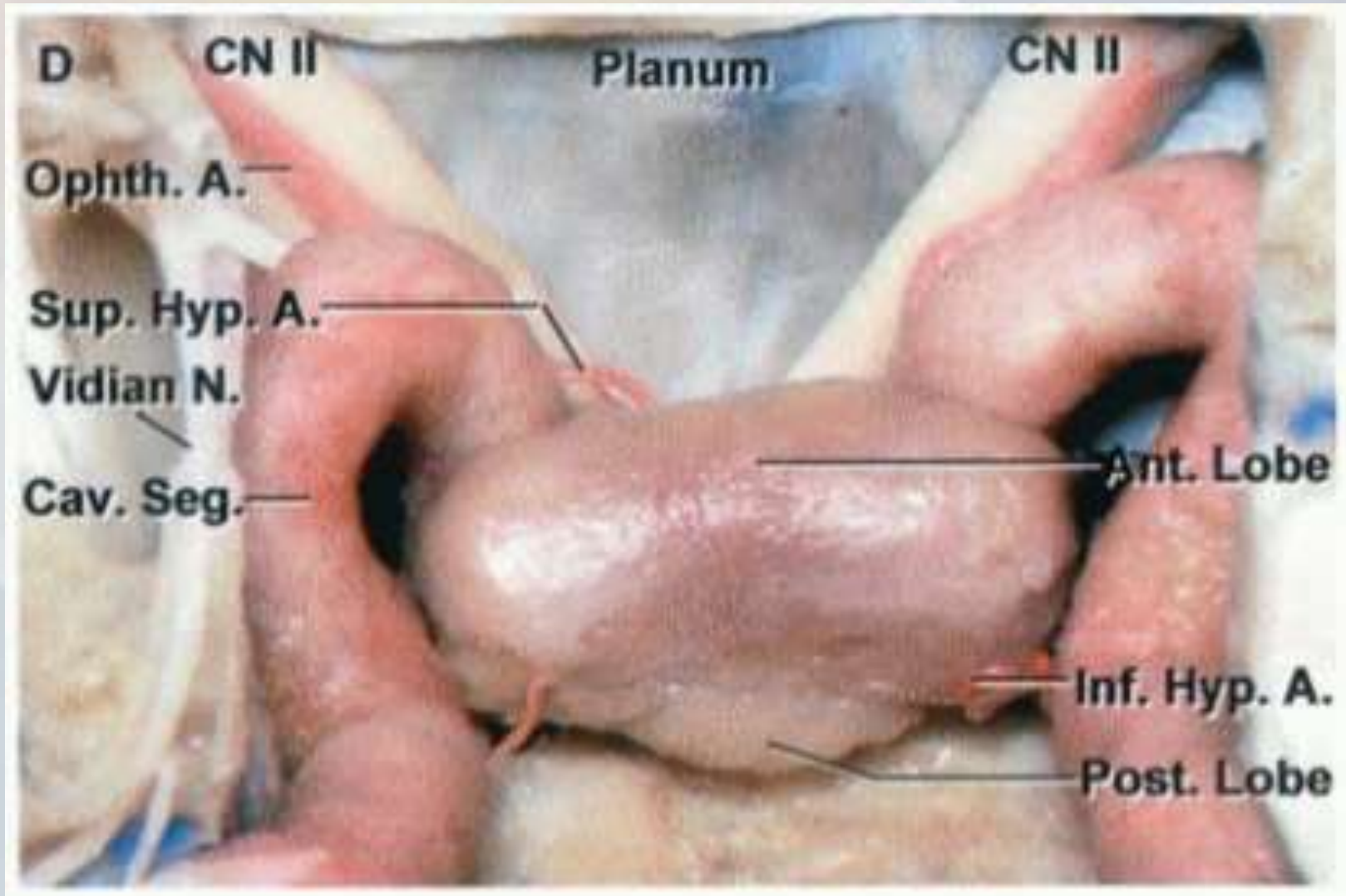
Horní hypofyzární artérie

Hypofýza: zásobení



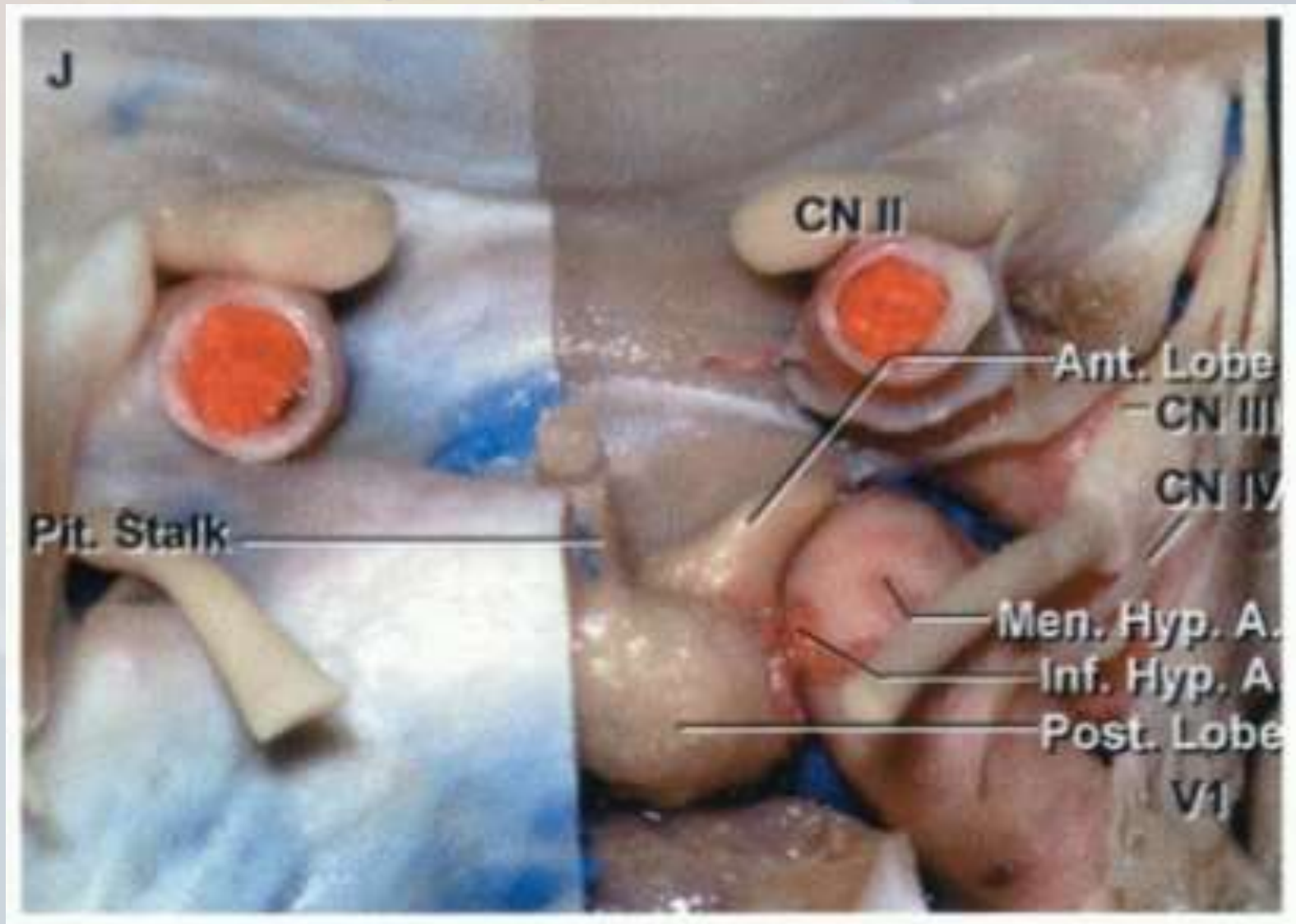
Horní hypofyzární artérie

Hypofýza: cévní zásobení



Dolní hypofyzární artérie

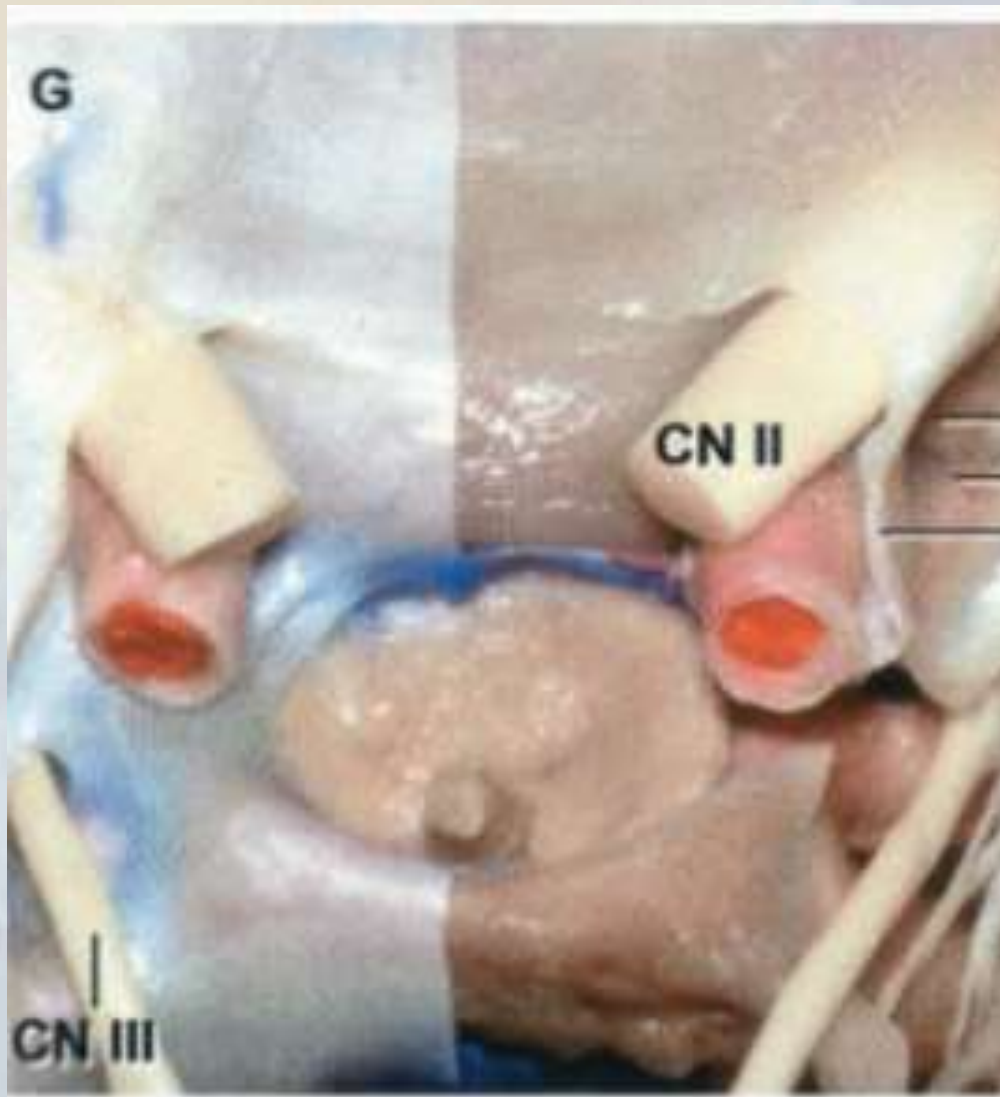
Hypofýza: zásobení



Dolní hypofyzární artérie

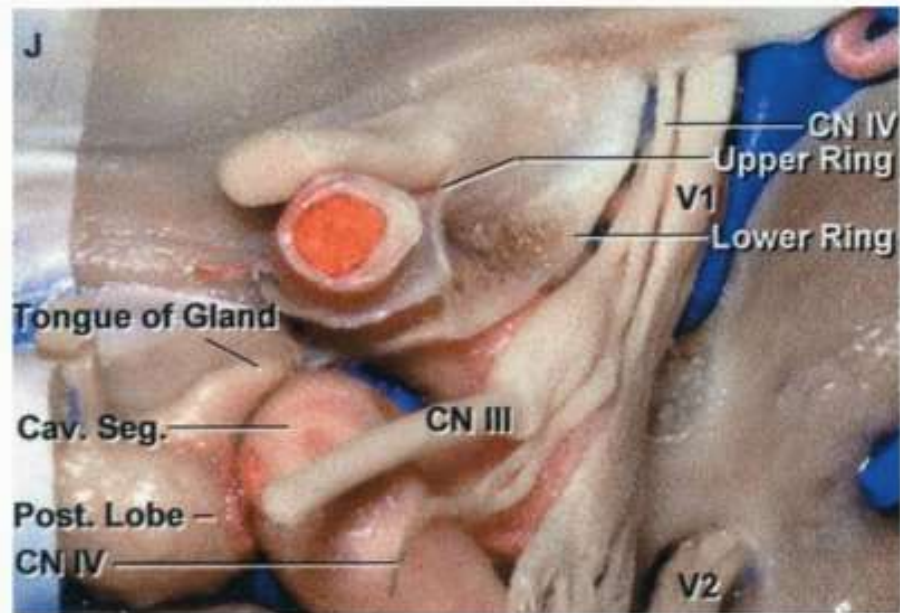
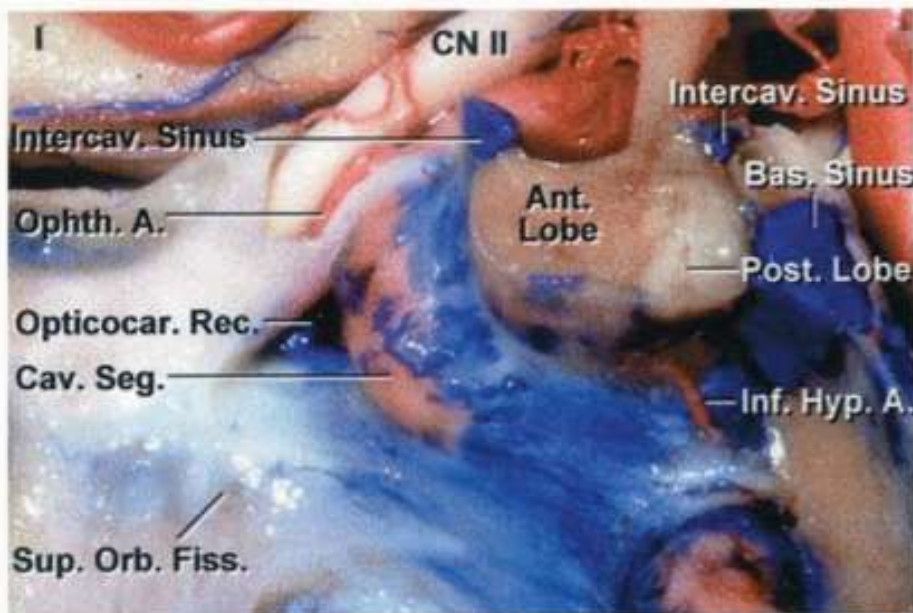
Truncus meningohypofisarius – Art. Bernasconi-Cassinari

Hypofýza: uložení



Intradurálně extraarachnoidálně

Hypofýza: uložení



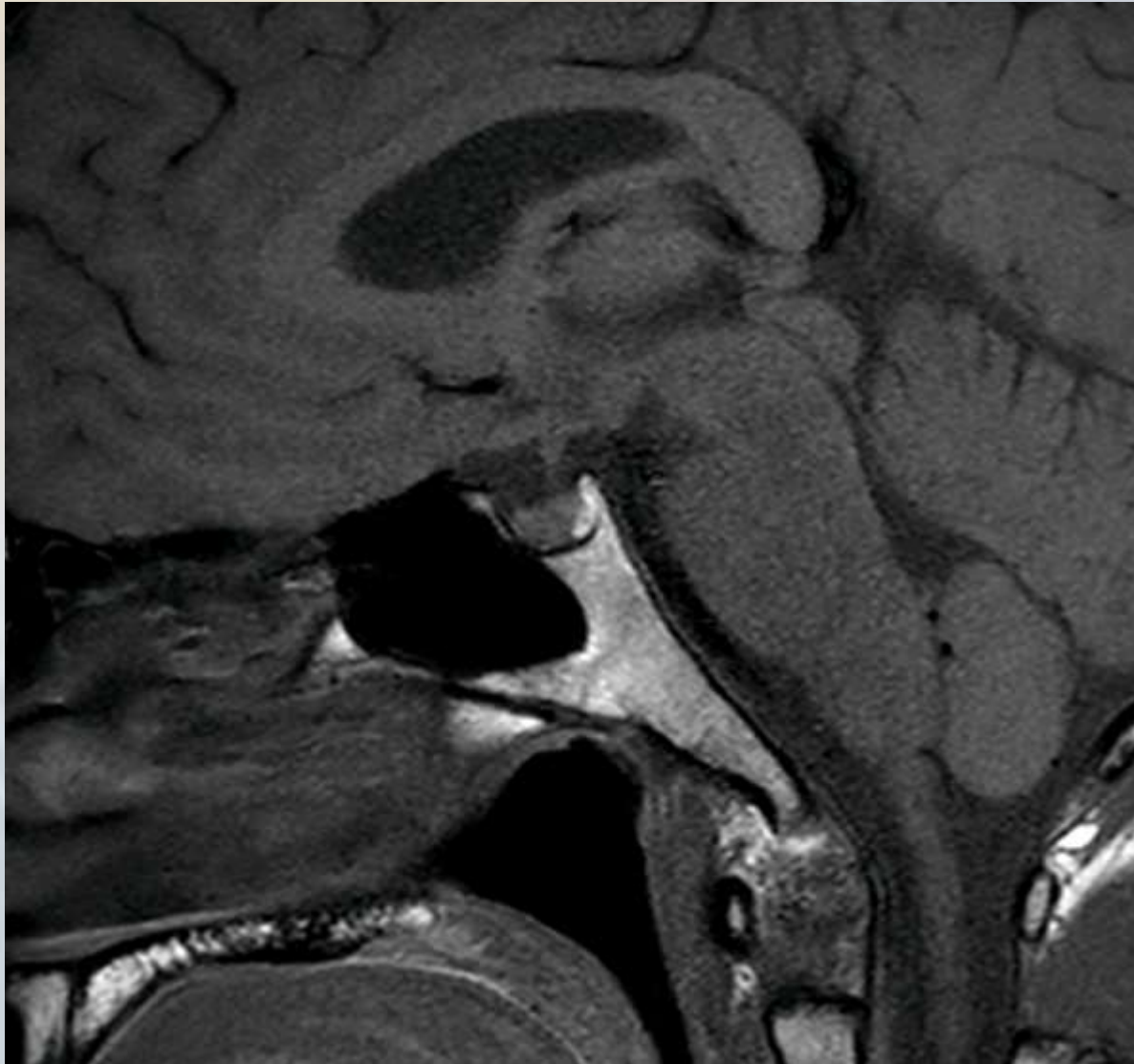
Intradurálně extraarachnoidálně

Hypofýza: základy anatomie

Interaktivní část!!

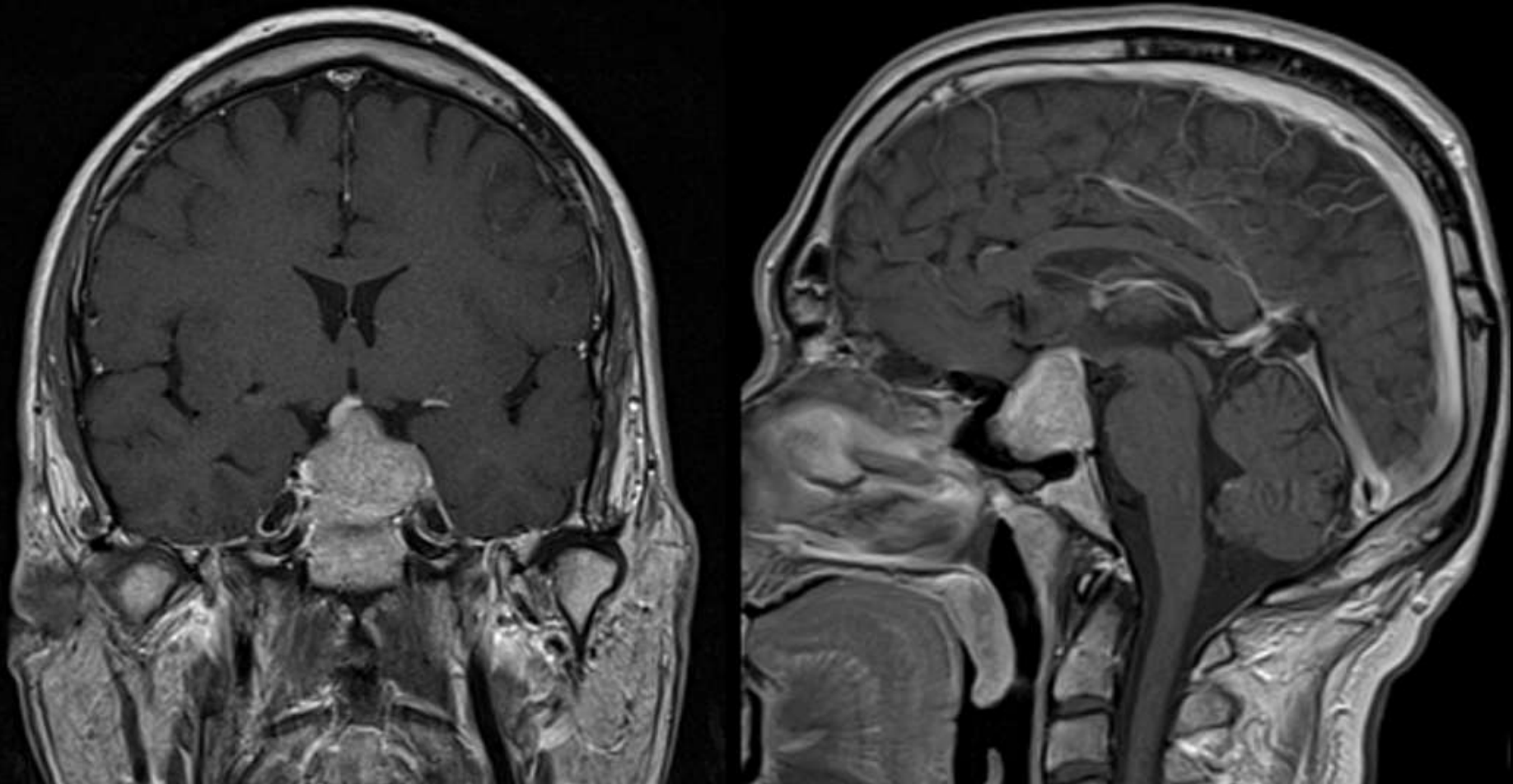


Hypofýza: základy anatomie

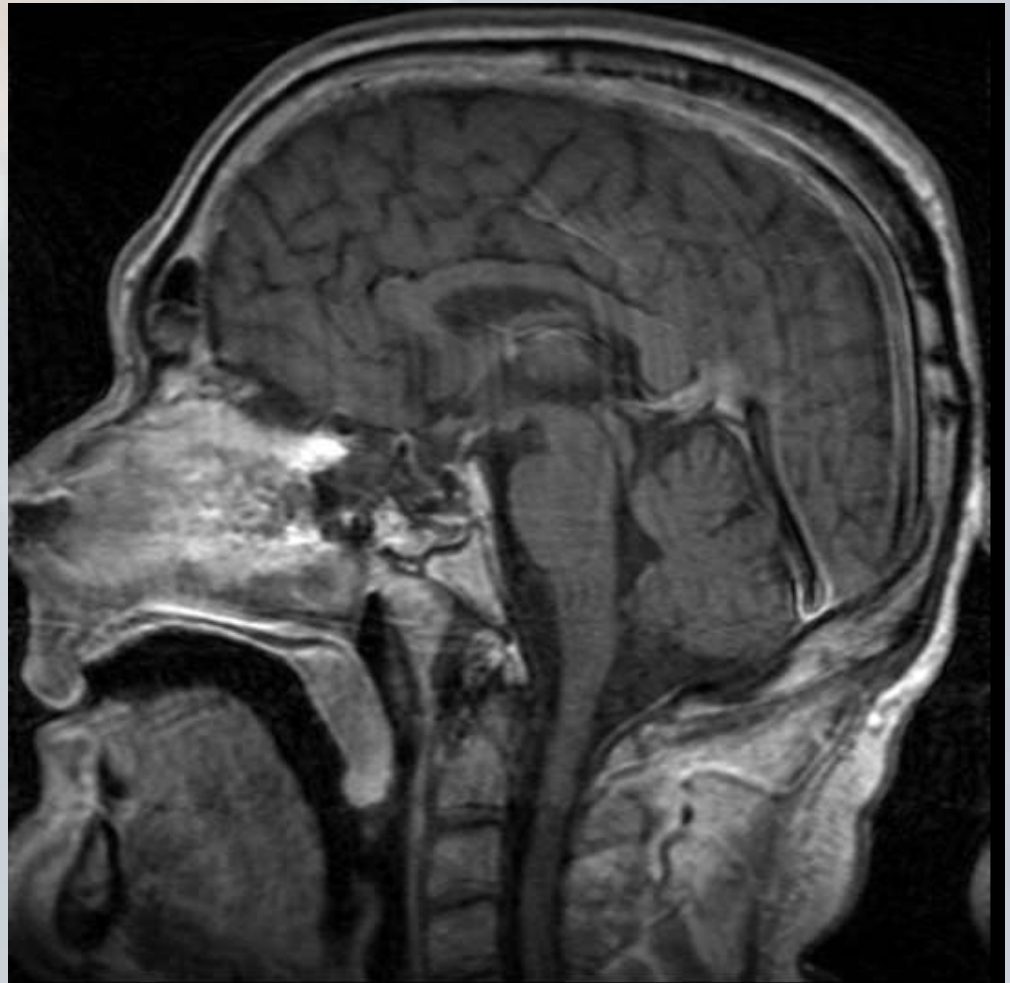
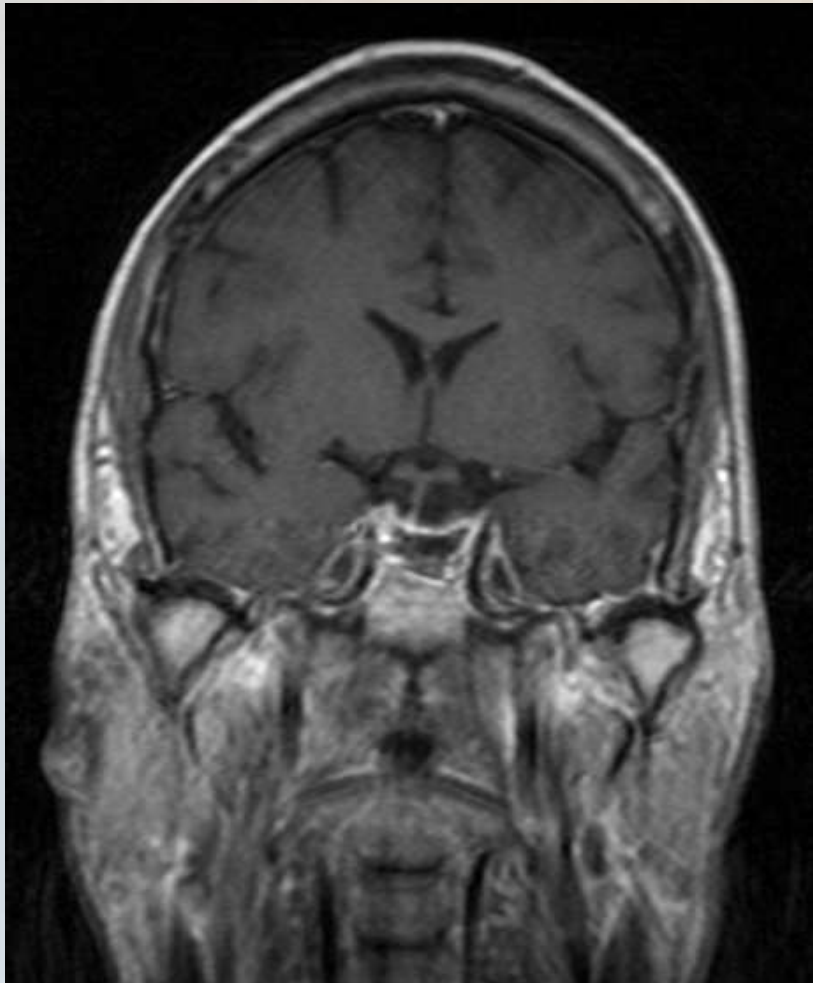


Adiuretin (ADH)

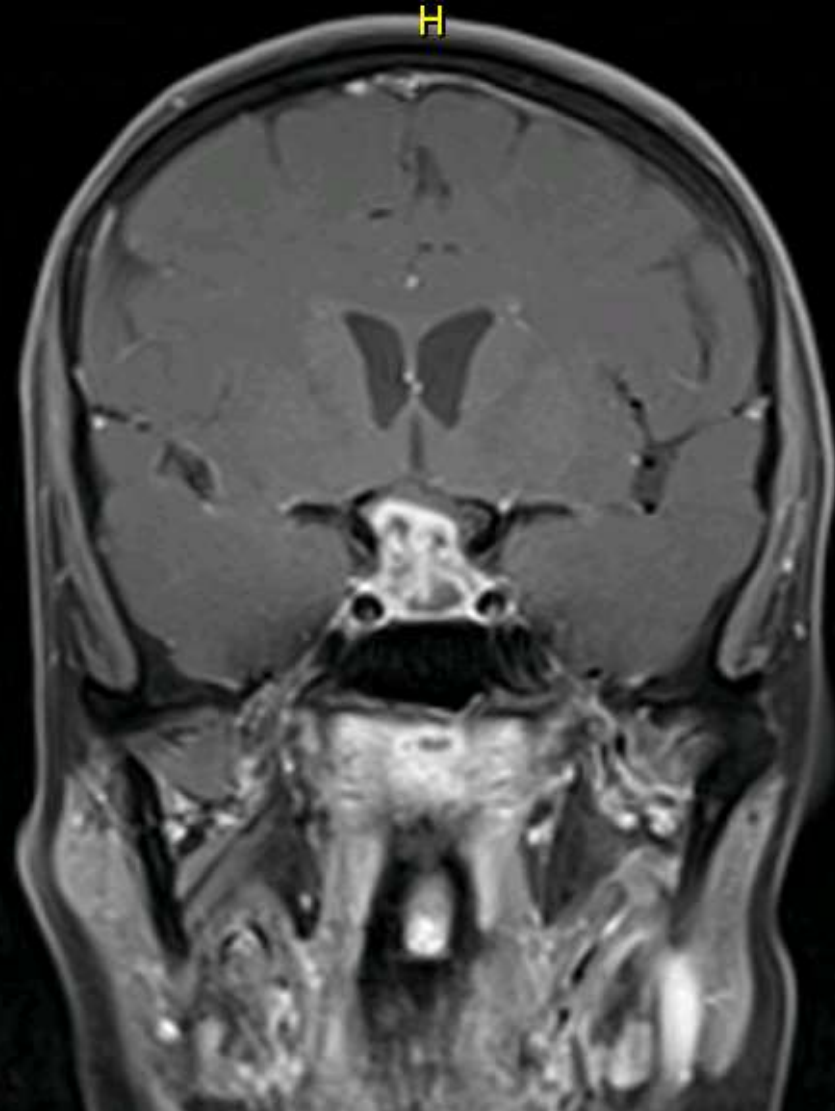
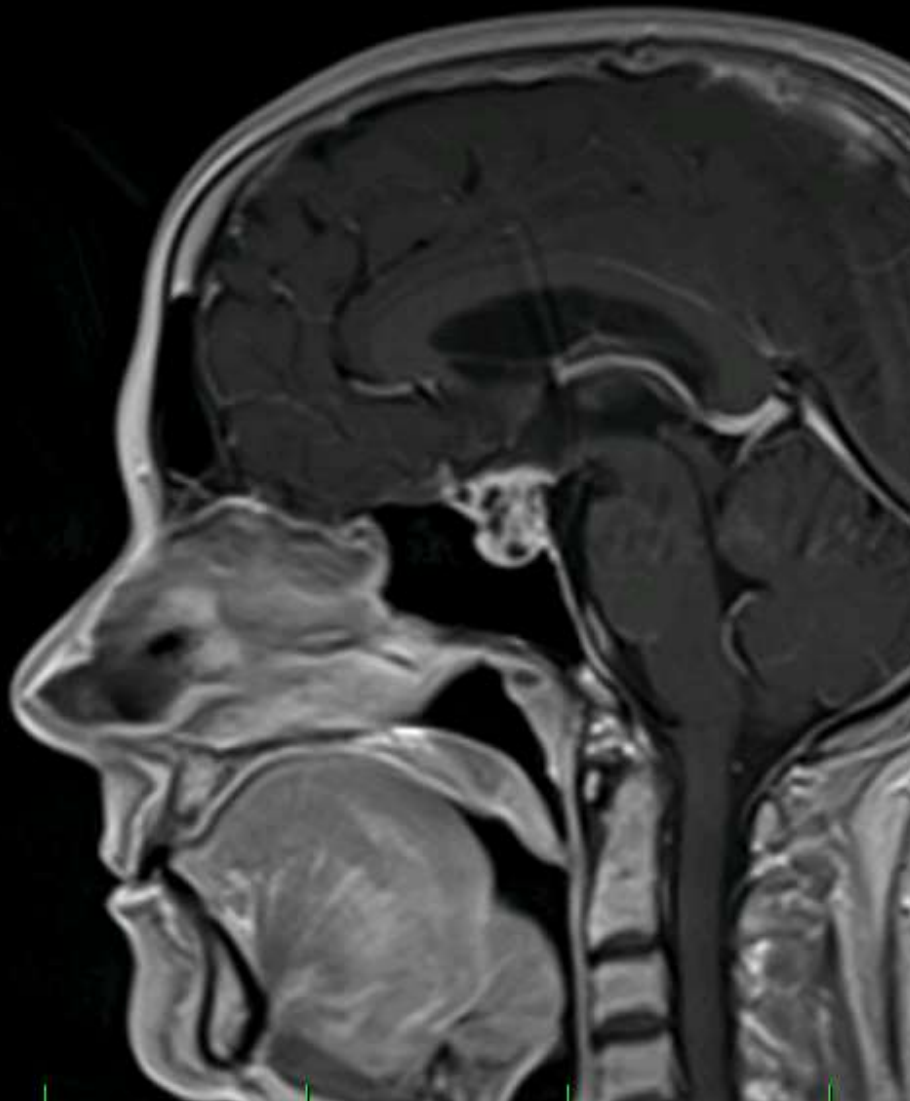
Můž, 47 let
Adenom afunkční



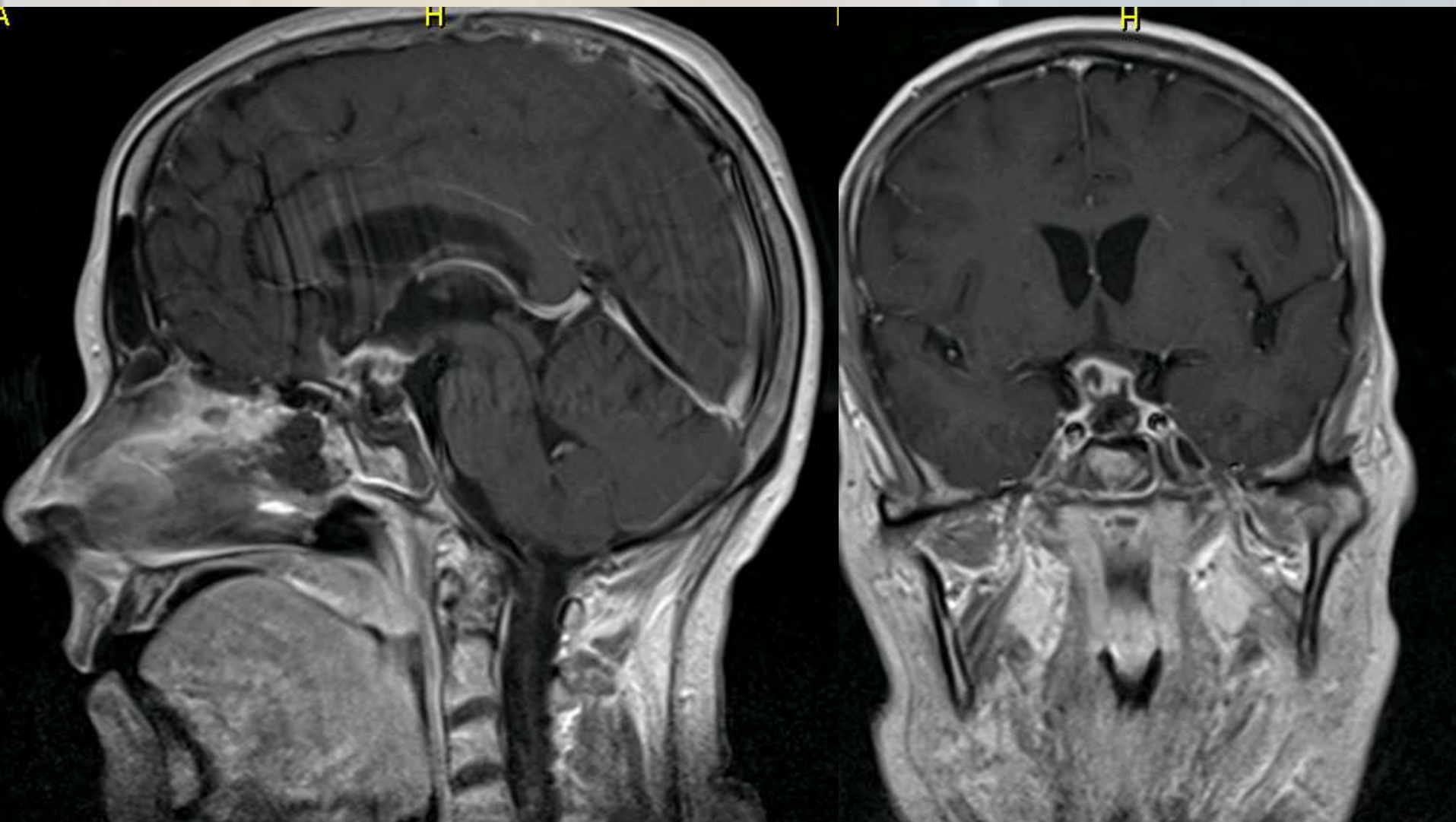
Radikální resekce



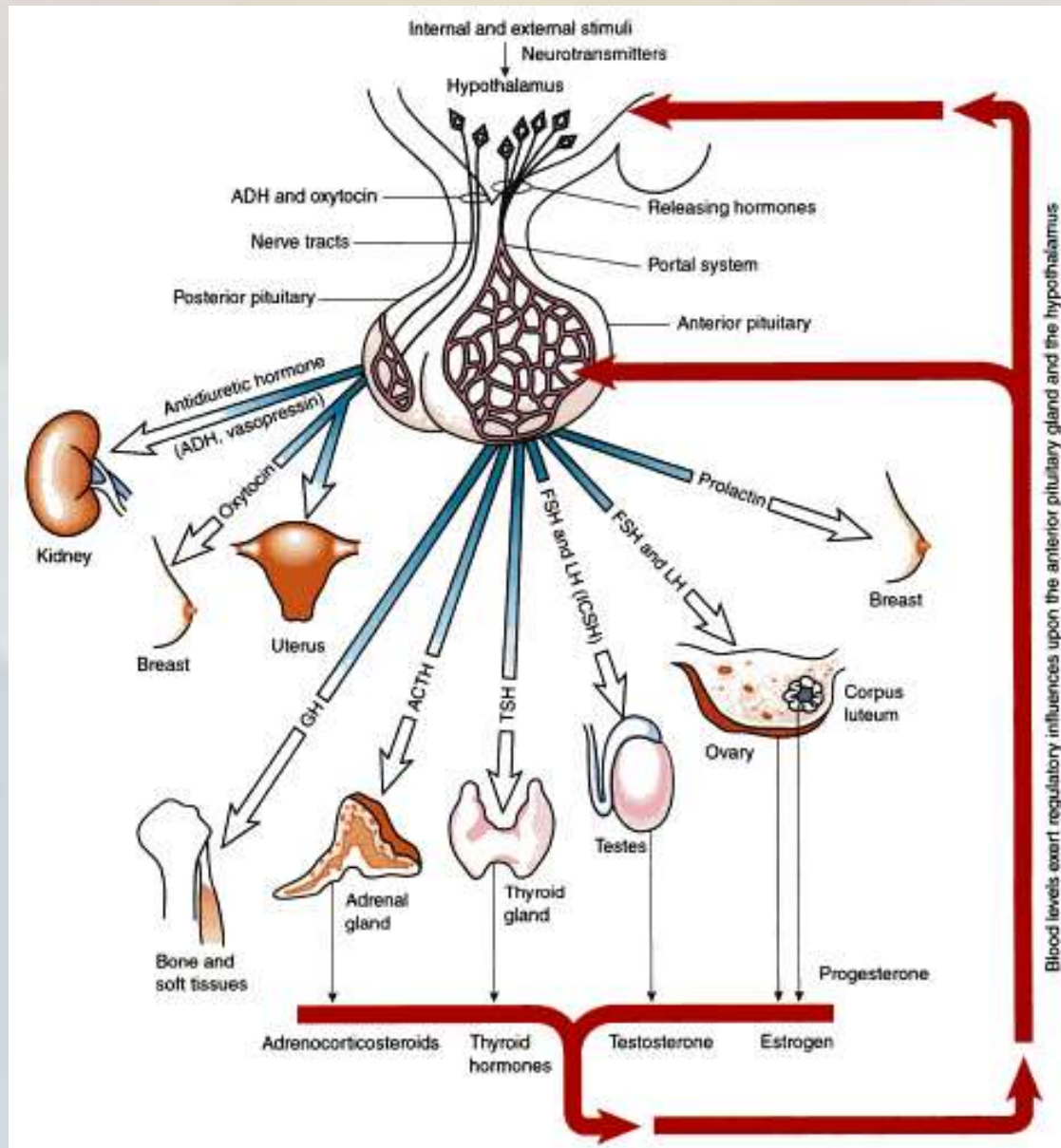
Žena, 65 let
Kraniopharyngeom



Subtotální resekce



Hypofýza: funkce



Adenohypofýza:

FSH

LH

ACTH

TSH

PRL

STH

Neurohypofýza:

Oxytocin

ADH



ACTH
Cushing's
syndrome

Hypofýza: funkce



(a)



(b)

ACTH – Cushingův syndrom

Hypofýza: funkce



STH – nanismus u dětí,
nadváha a slabost u
dospělých

Hypofýza: funkce



TSH
Hypertyreóza

Hypofýza: funkce

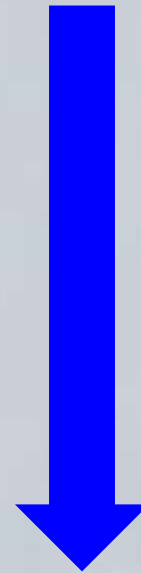


STH
Acromegalie

Hypofýza: funkce



FSH



PRL



Hypofýza: funkce



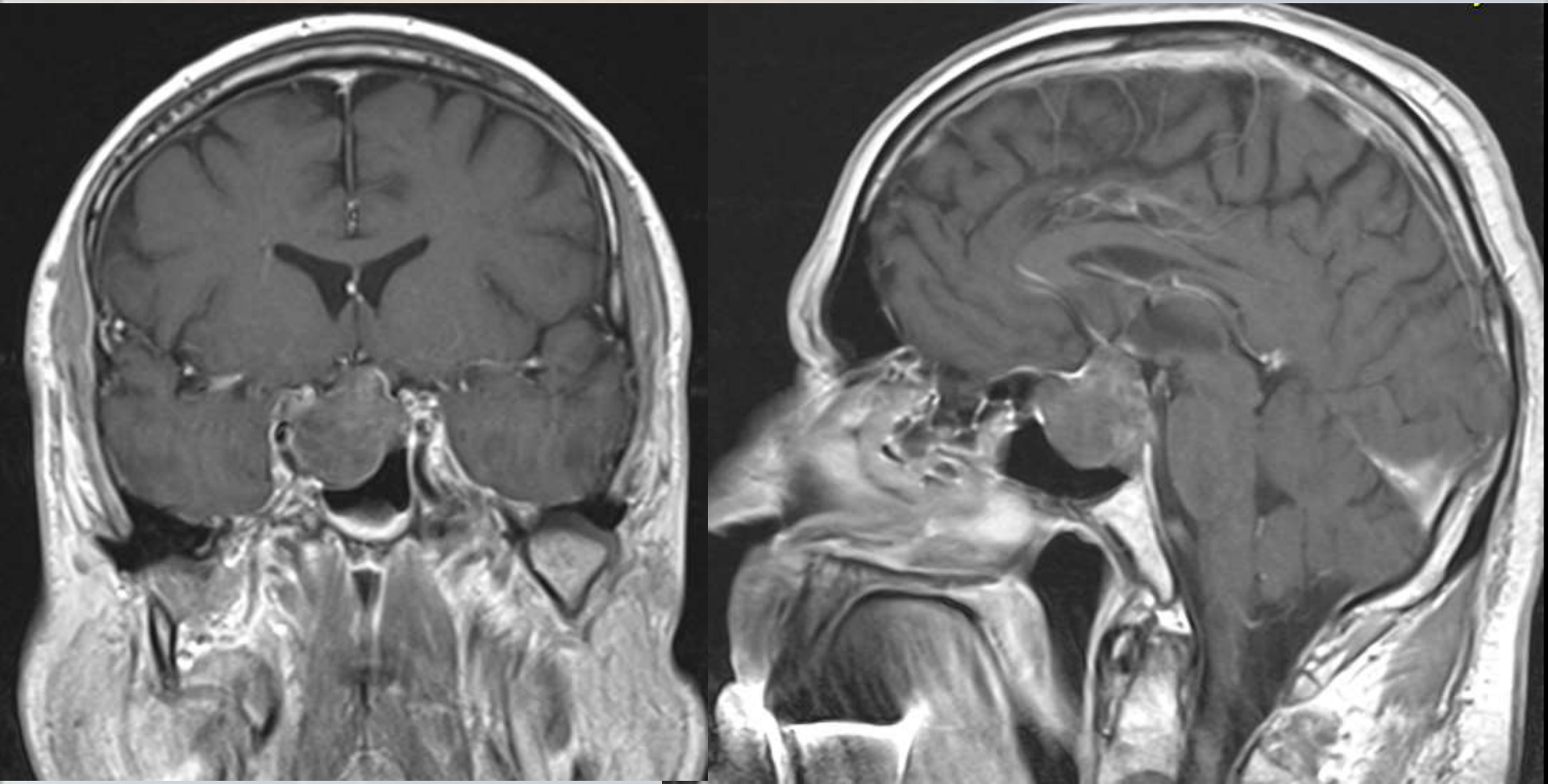
ADH
Diabetes insipidus

Hypofýza: funkce

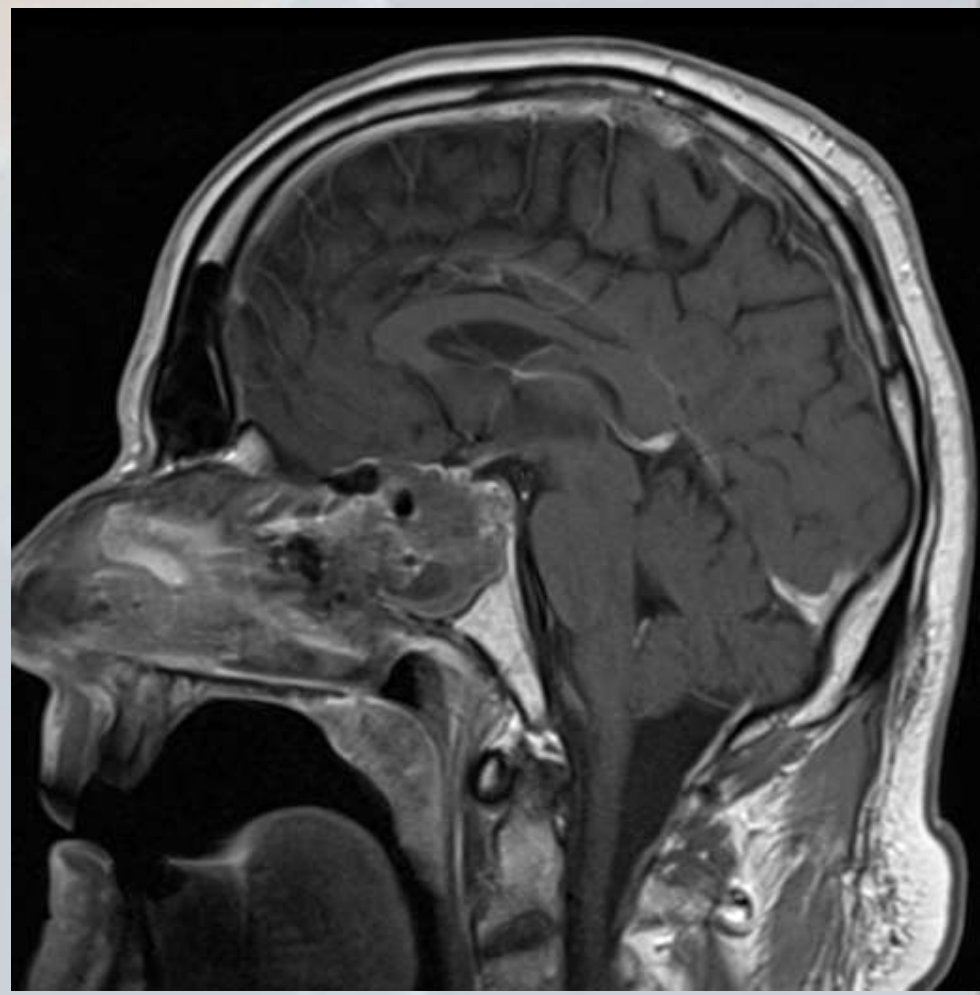
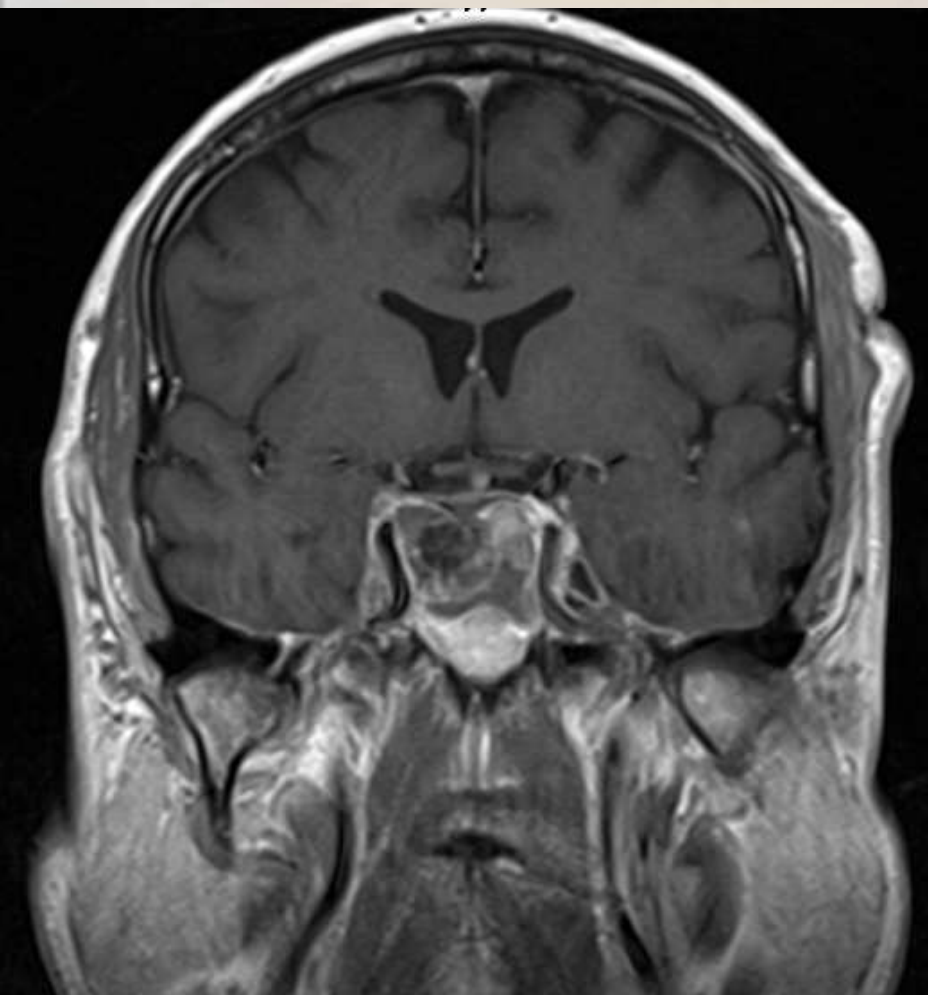
Tab. 1. Zjednodušená klasifikace tumorů hypofýzy s uvedením hormonální sekrece a základními hypersekrečními syndromy.

Typ adenomu	Hormonální sekrece	Hypersekreční syndrom
kortikotropní	adrenokortikotropní hormon a pro-opiomelanokortin	Cushingova nemoc
somatotropní	růstový hormon	akromegalie (gigantismus)
tyotropní	tyreostimulačního hormon	vzácněji hypertyreóza, častěji hormonálně asymptomatické
gonadotropní	luteinizační hormon, folikulostimulační hormon	obvykle hormonálně asymptomatické
laktotropní nebo prolaktinom	prolaktin	galaktorea, hypogonadismus, amenorea, infertilita, impotence
„null cell“ adenom	bez hormonální sekrece	–

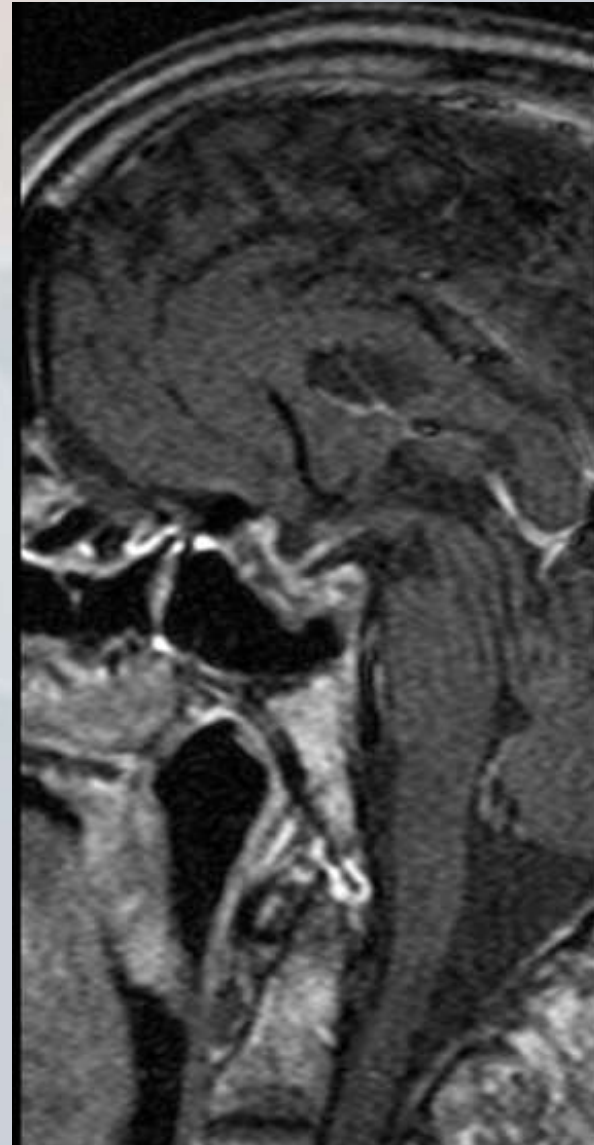
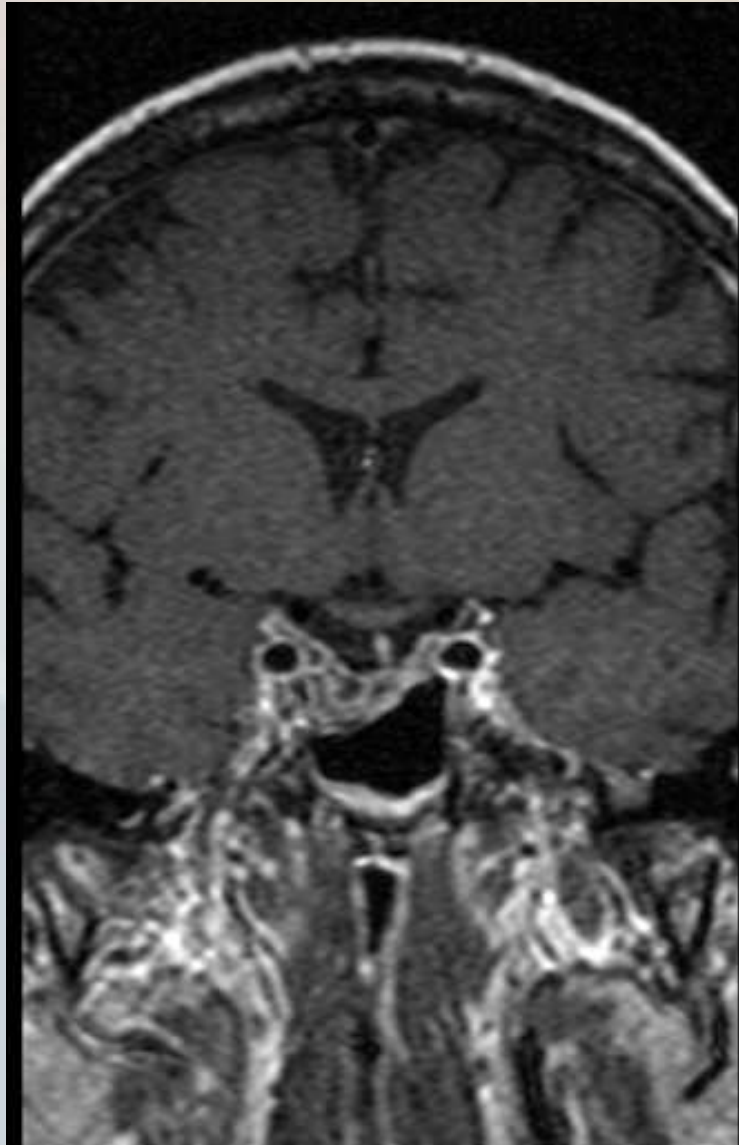
Múž, 70 let, akutní pareza III. a VI. h.n.
Apoplexie



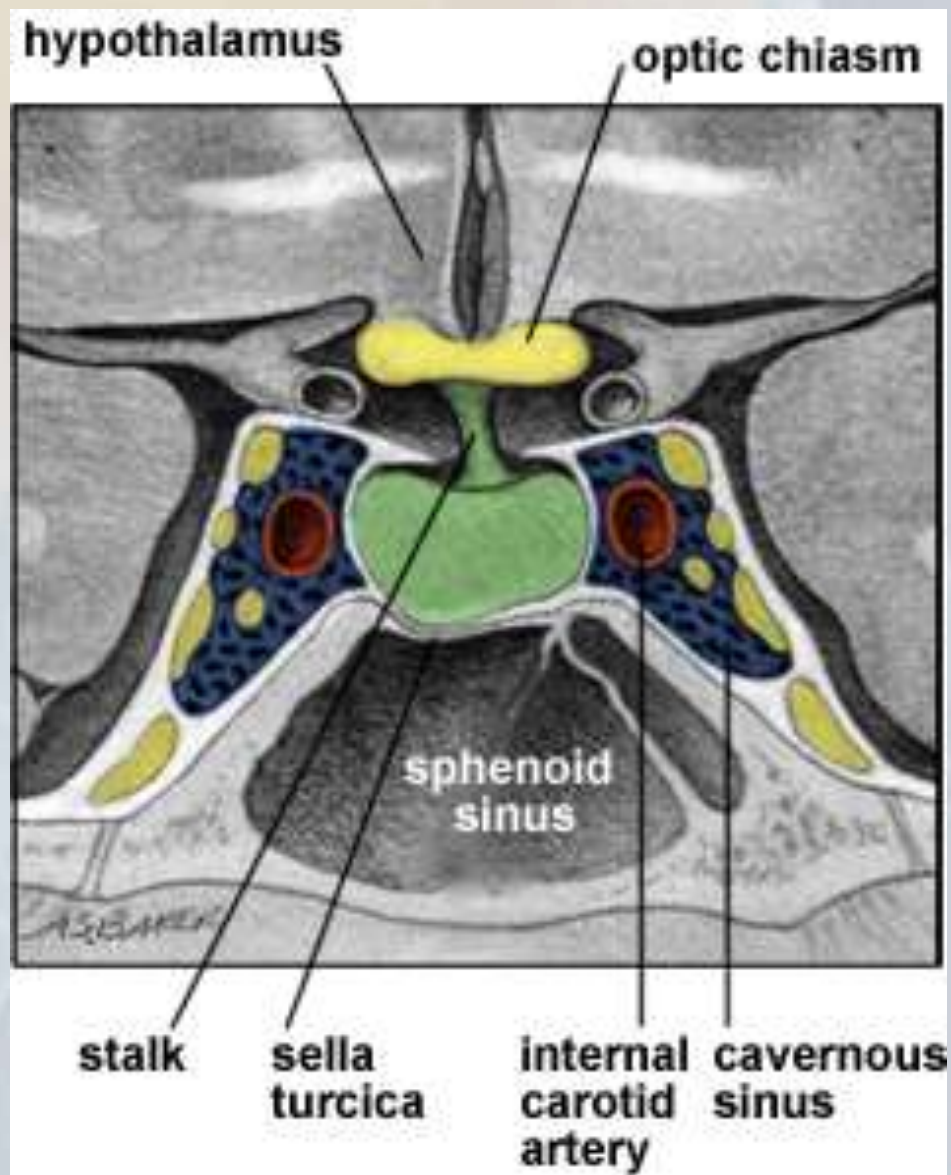
Evakuace (1. pooperační den)



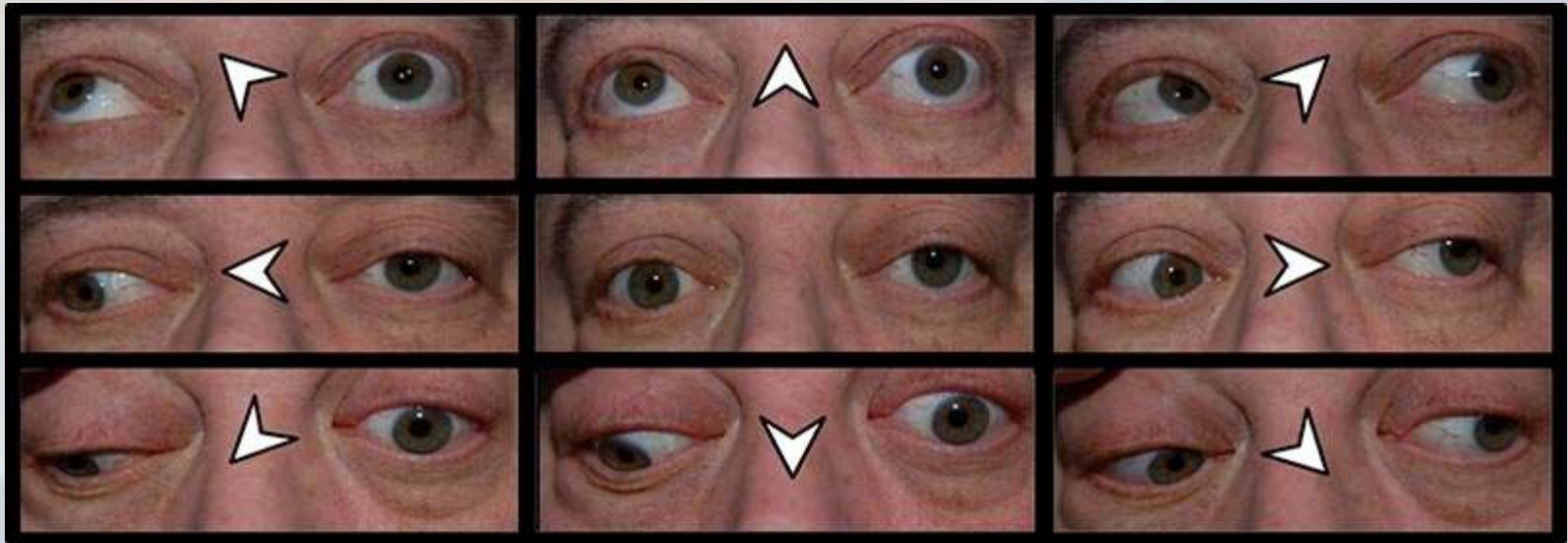
Po měsíci



Hypofýza: okolí



Hypofýza: porucha okohybnosti



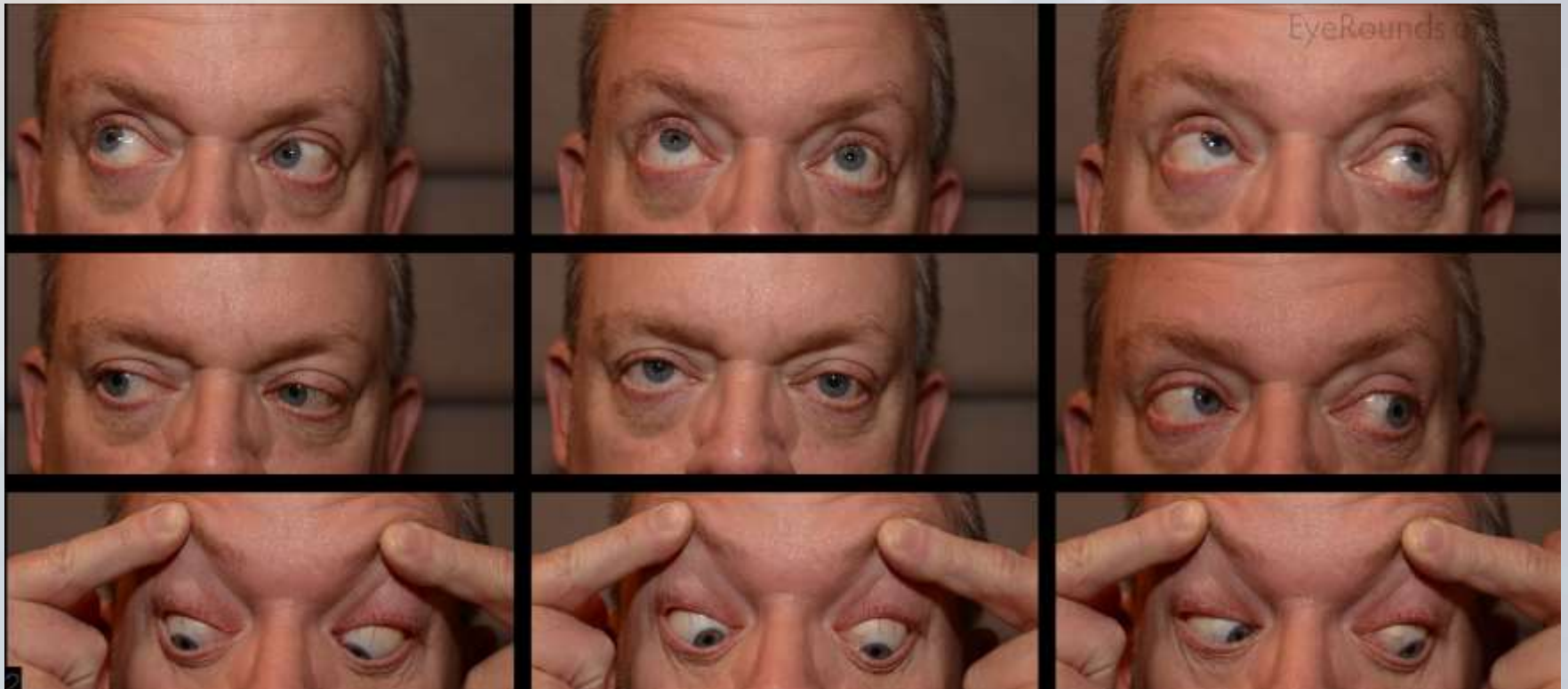
Pareza III. h.n. vlevo
Oculomotorius

Hypofýza: porucha visu



Pareza VI. h.n. vlevo
Abducens

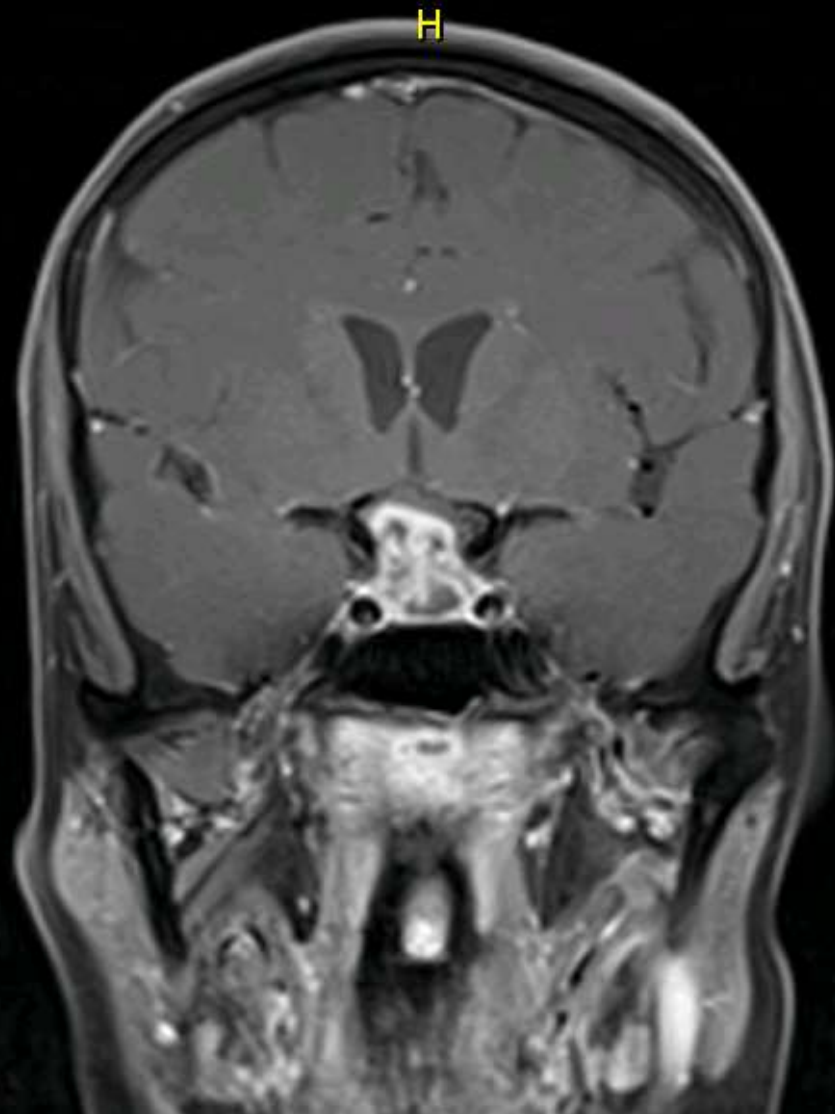
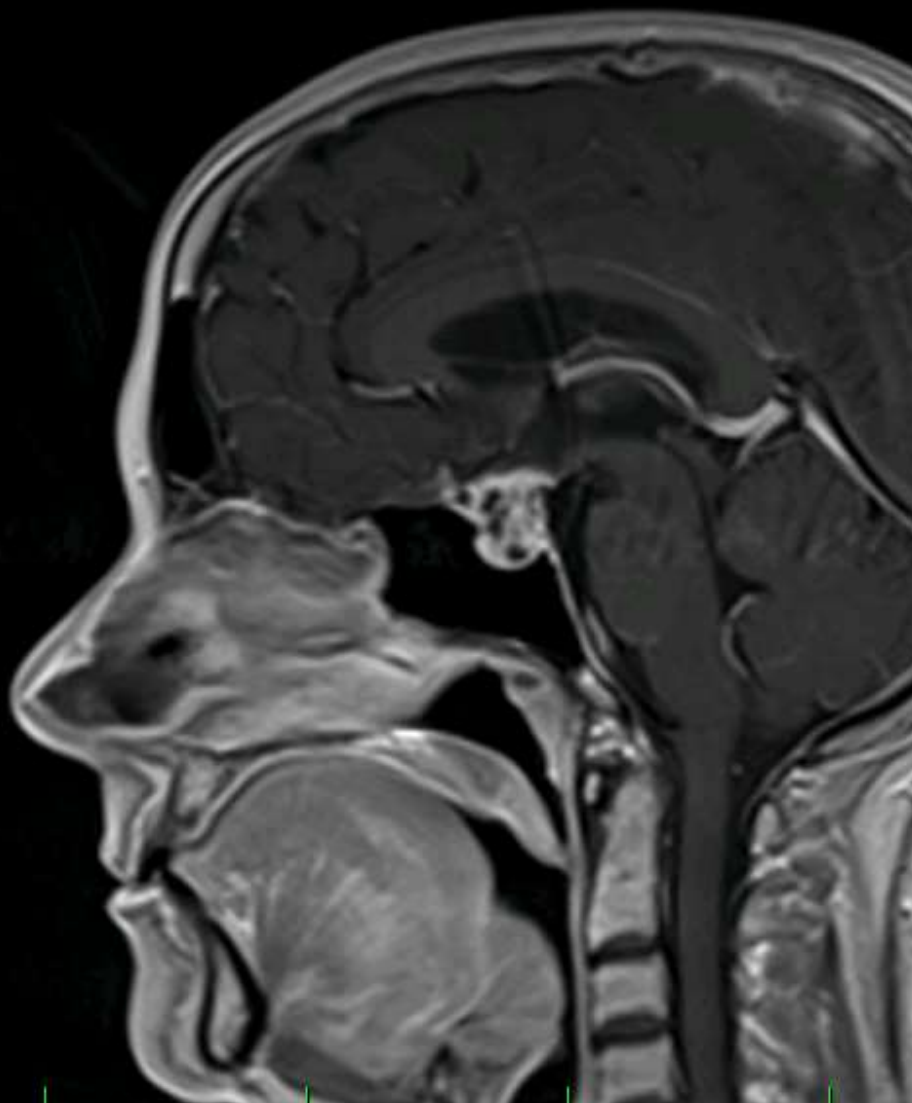
Hypofýza: porucha visu



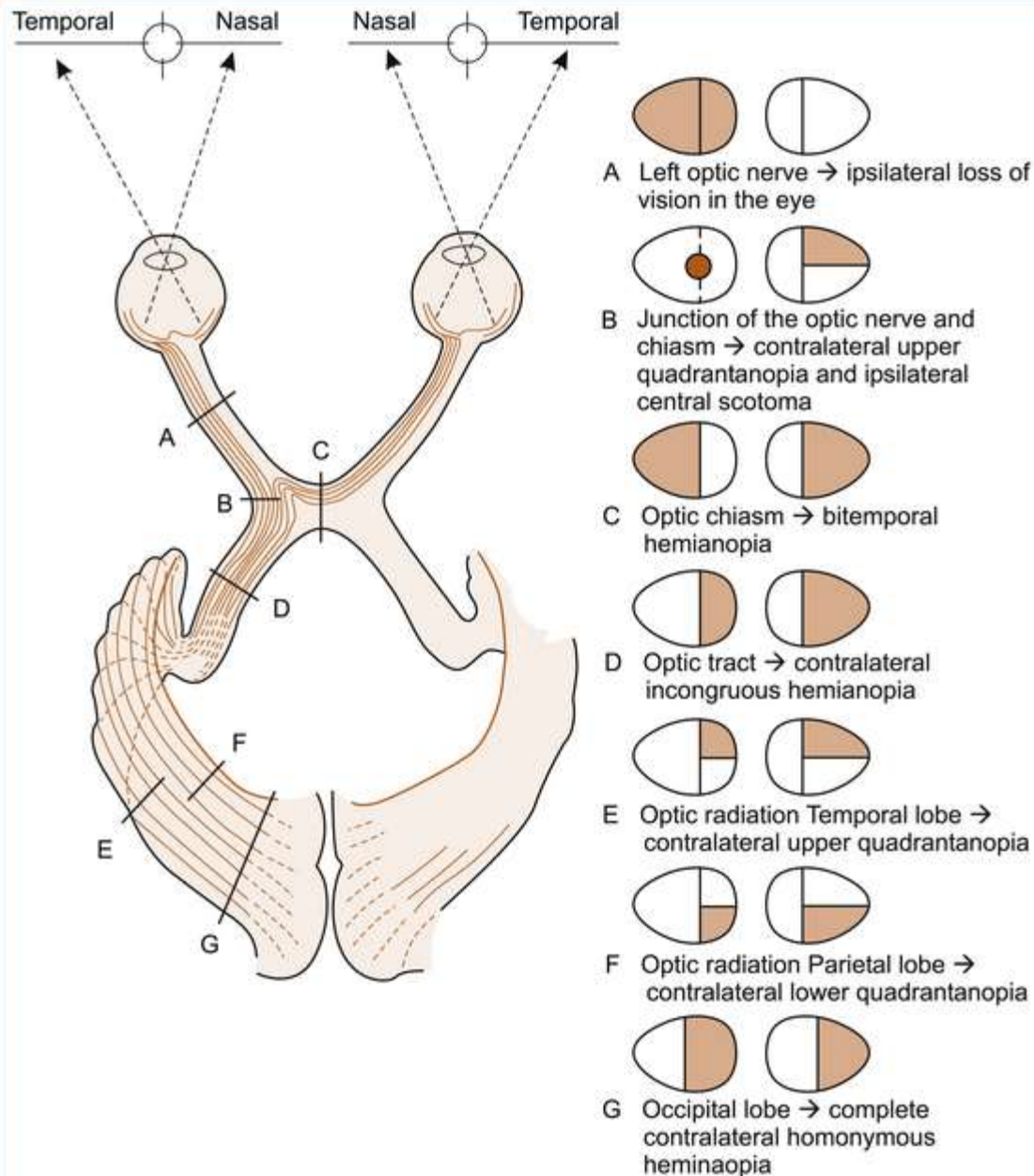
Pareza IV. h.n. vlevo

Troclearis

Původní tumor se slepotou OP a zhoršením
visu OL



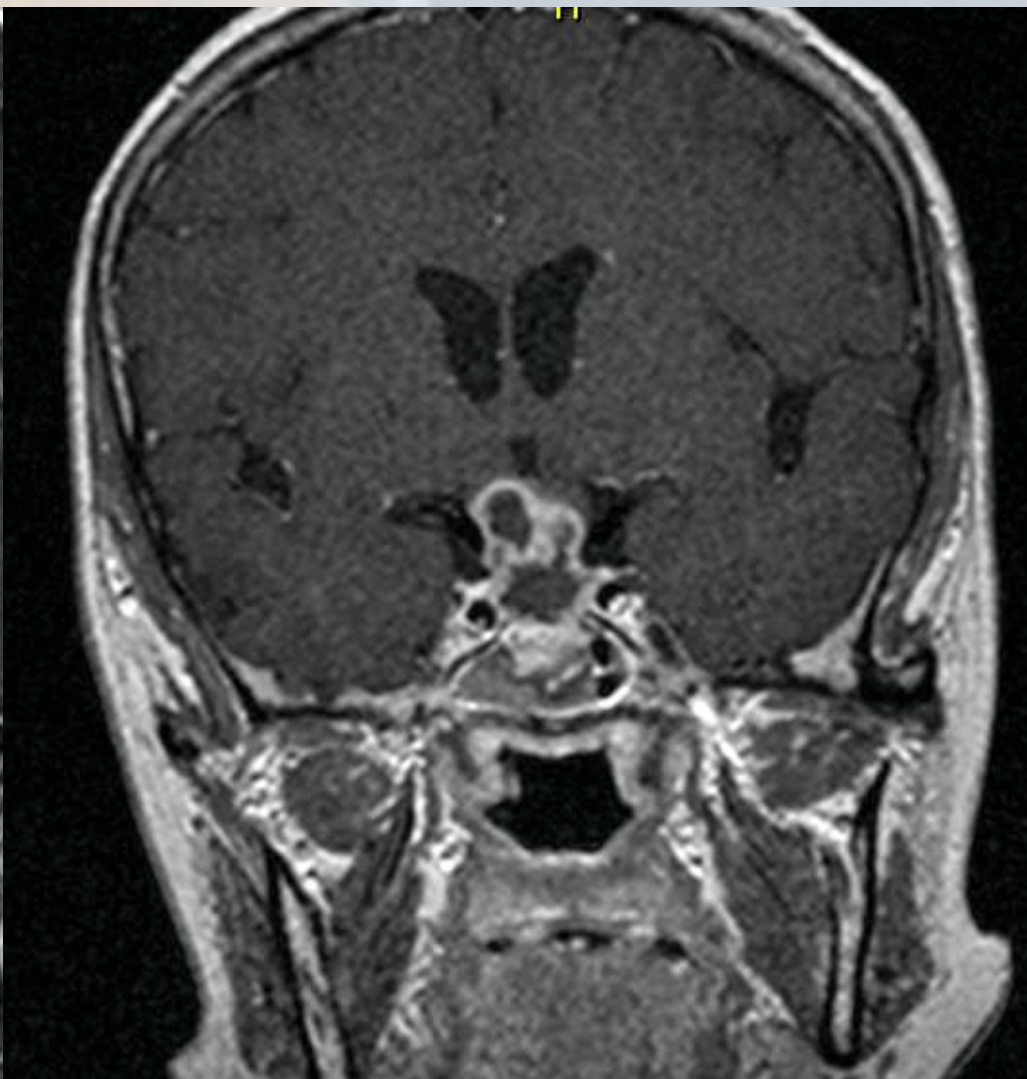
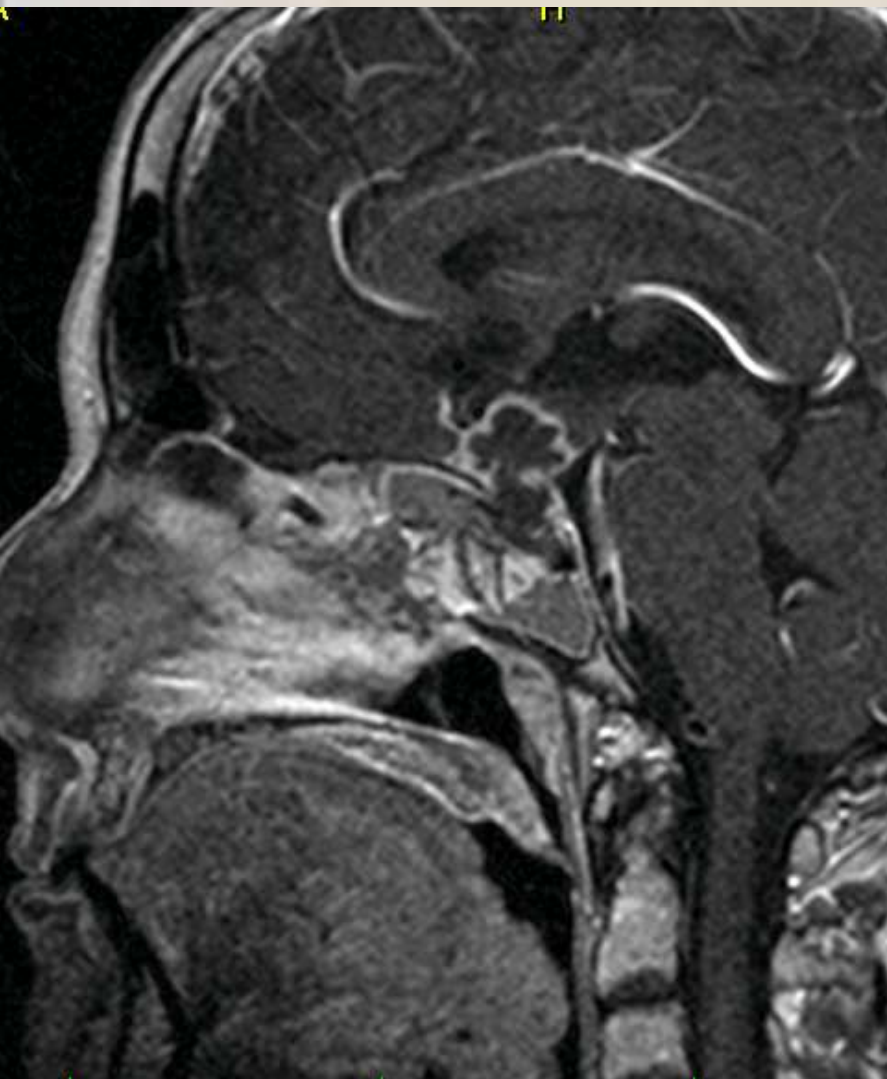
Hypofýza: porucha visu



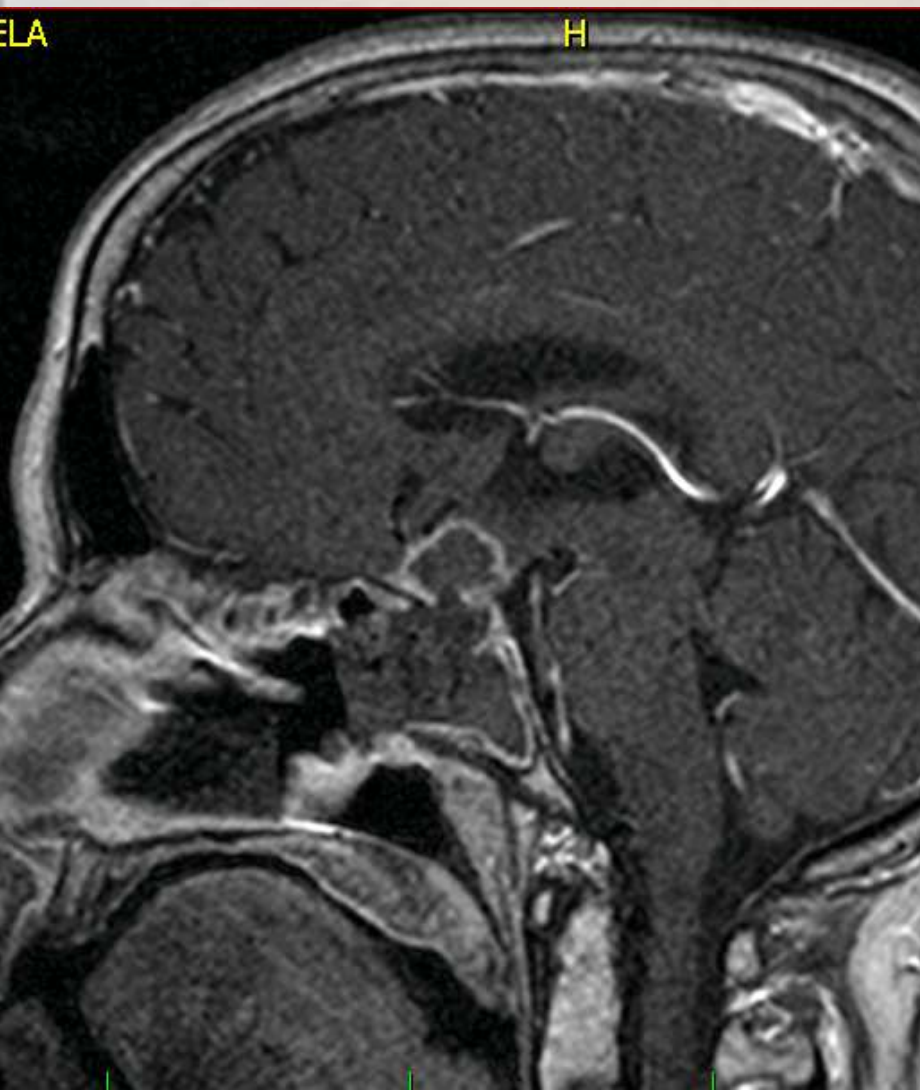
Hypofýza: empty sella syndrome



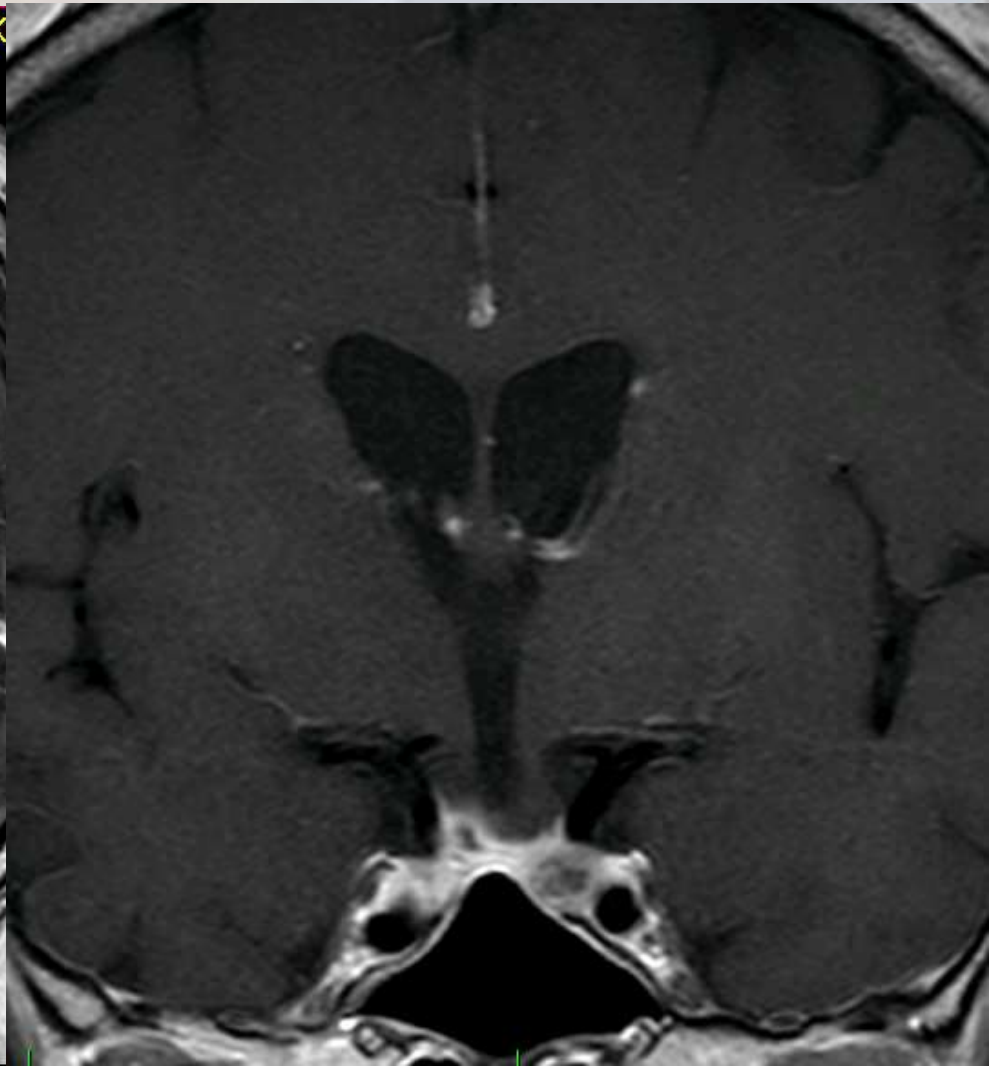
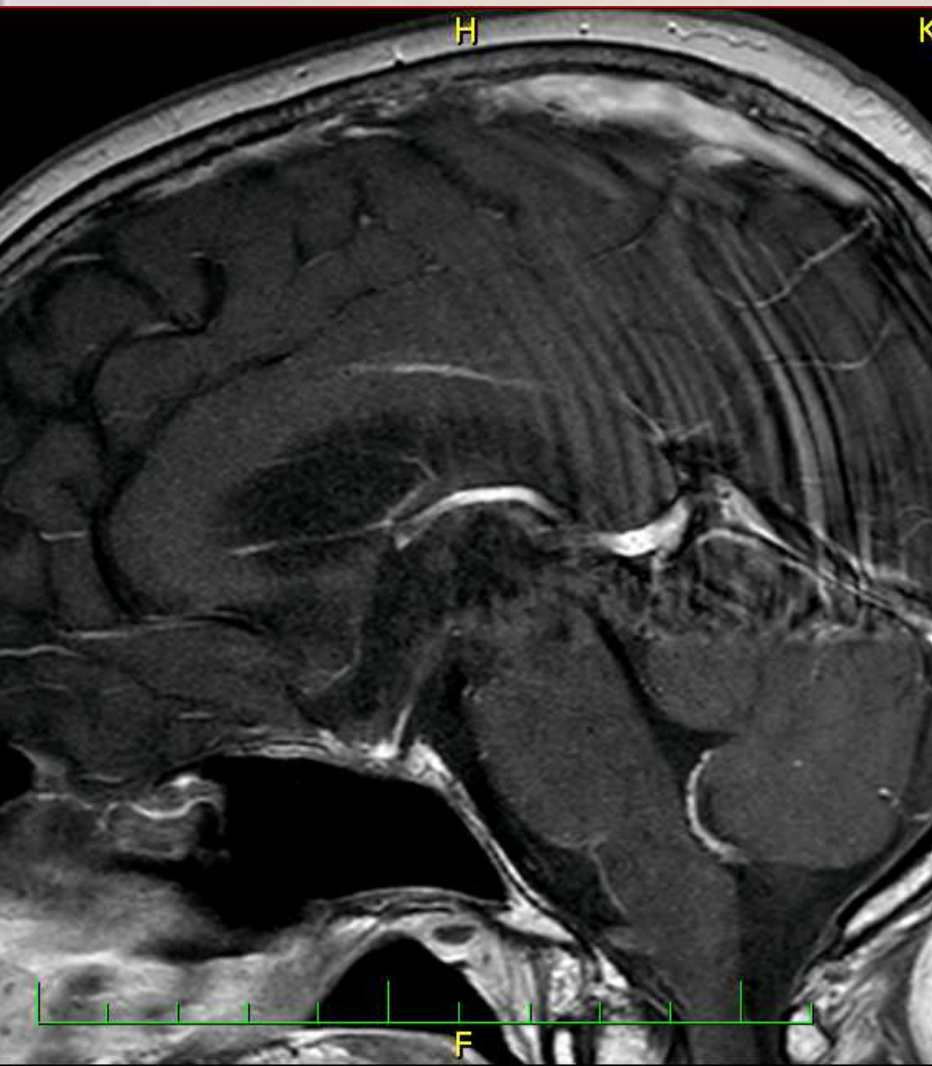
MR měsíc po operaci, susp. absces a znova
zhoršení visu OL, indikována revize



MR po revizi, peroperačně bez hnisu,
vypuštěna cystická složka a residuální
tumorozní hmoty

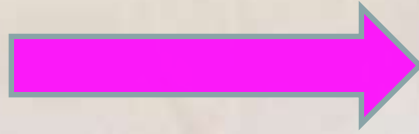


MR po 6 měsících, jen malé residuum kapsuly
v sedle, OP stále slepé, OL zlepšeno.
Zajímavý prolaps fundu III. komory

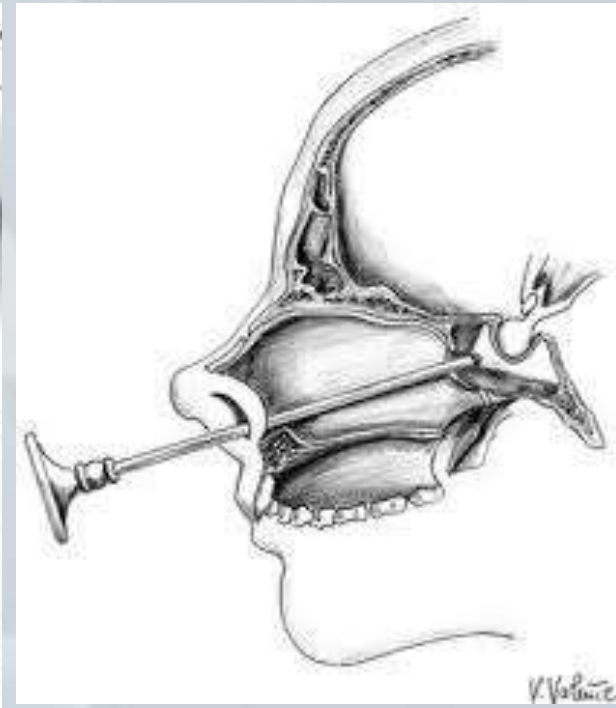
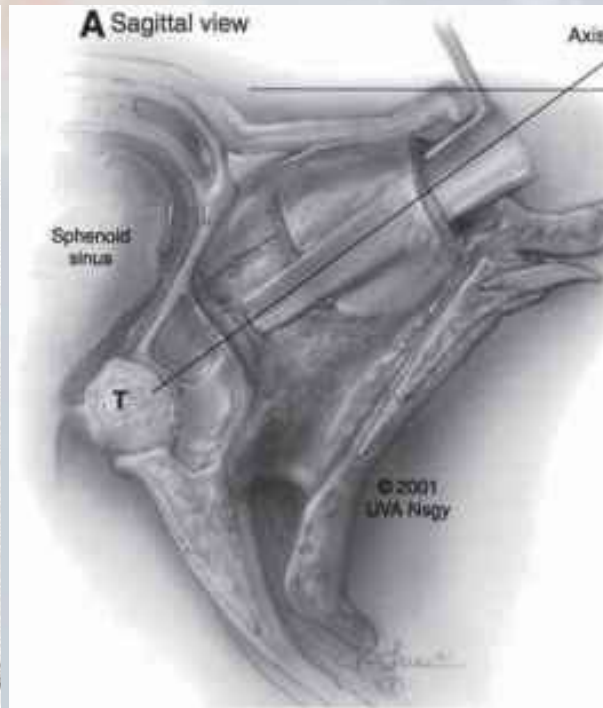


Microsurgery x endoscopy pituitary surgery

Schloffer 1907
Cushing 1912



Griffith Direct transnasal 1987
Jankowski Endoscopic surgery 1992



Direct transnasal approach

H.B.Griffith

J.Neurosurg, 1987

nasal septum



Direct transnasal approach



Reconstruction technique for CSF leak



Tachosil

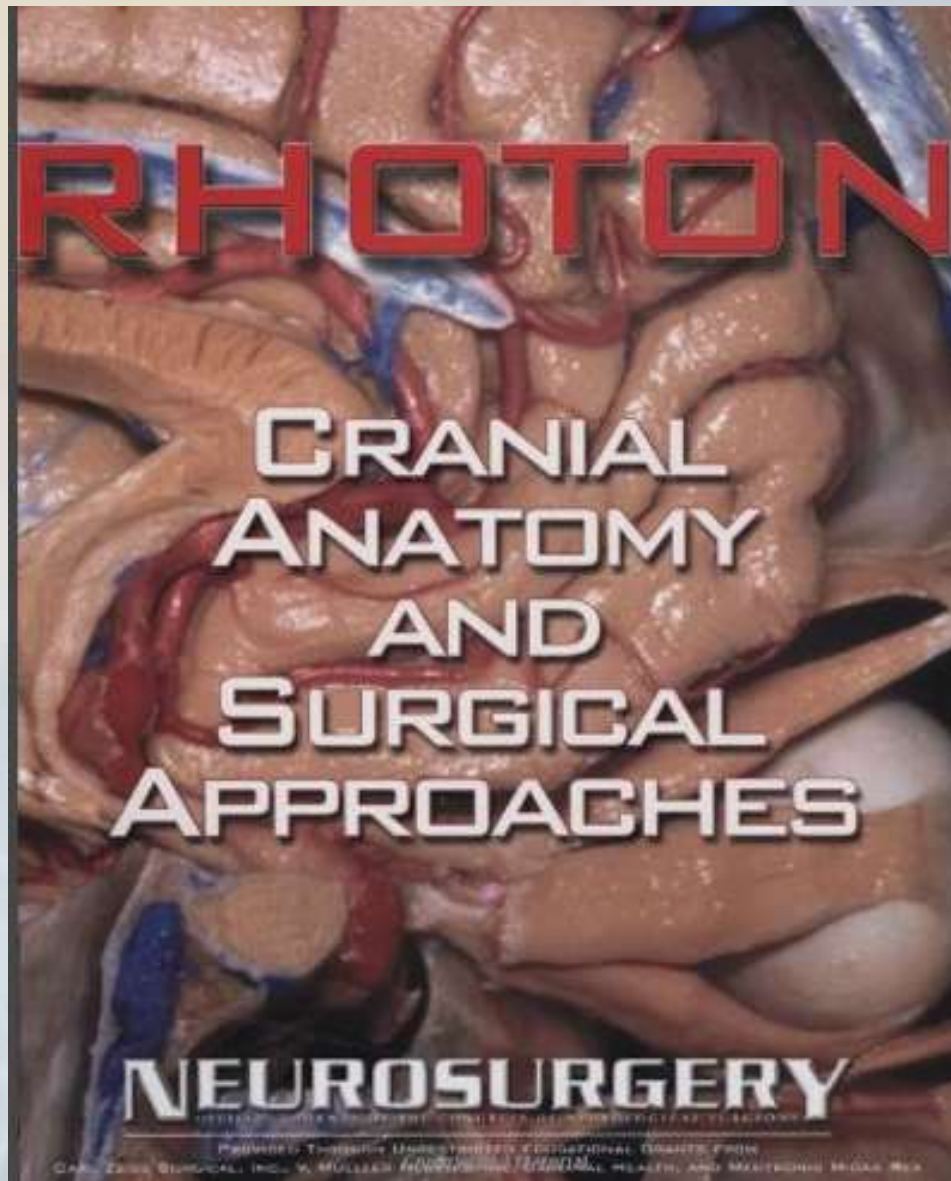
Fascia lata

Fat

Tissucol

Nasopore





alberto.malucelli@kzcr.eu

GRAZIE PER
L'ATTENZIONE!

