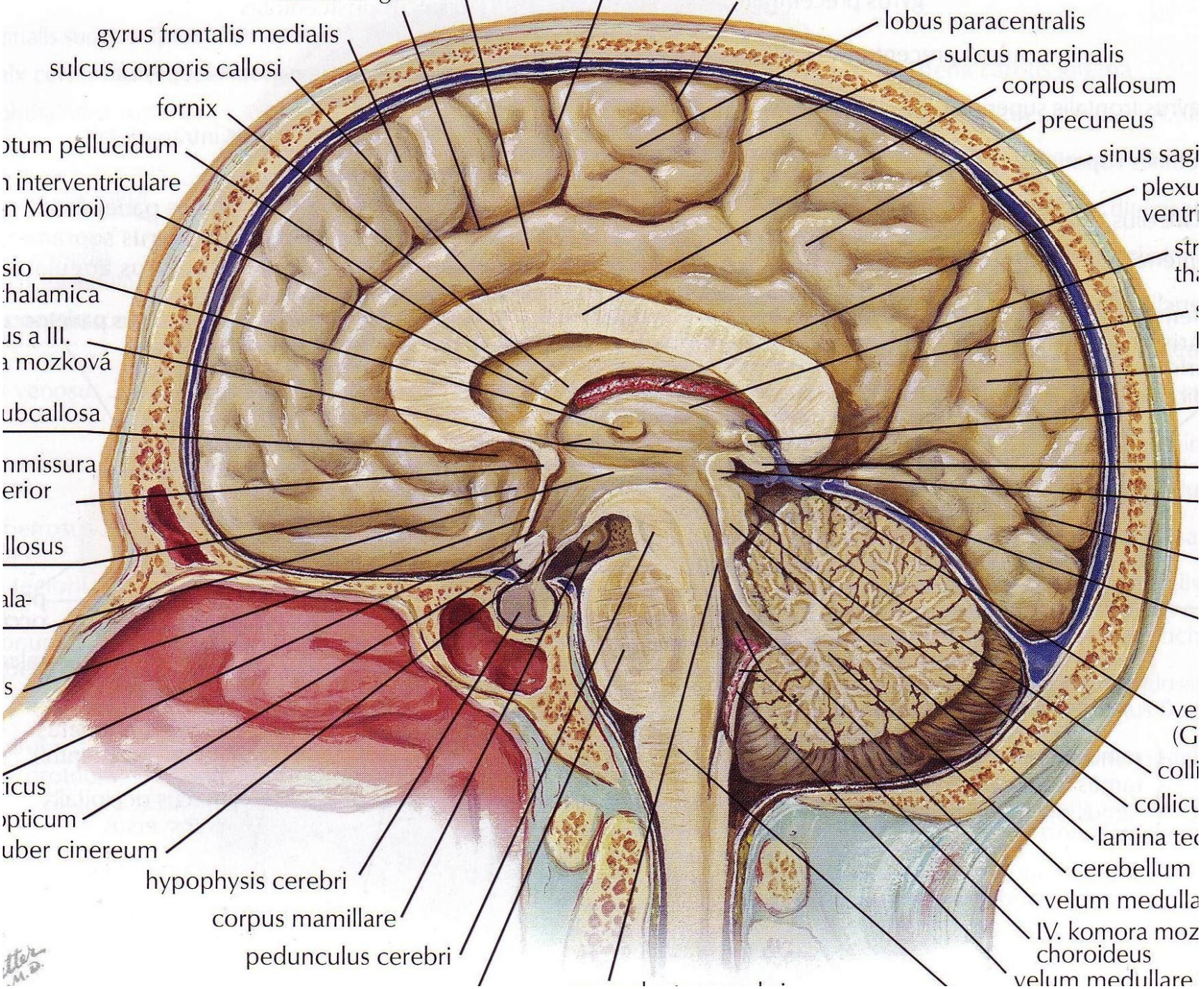
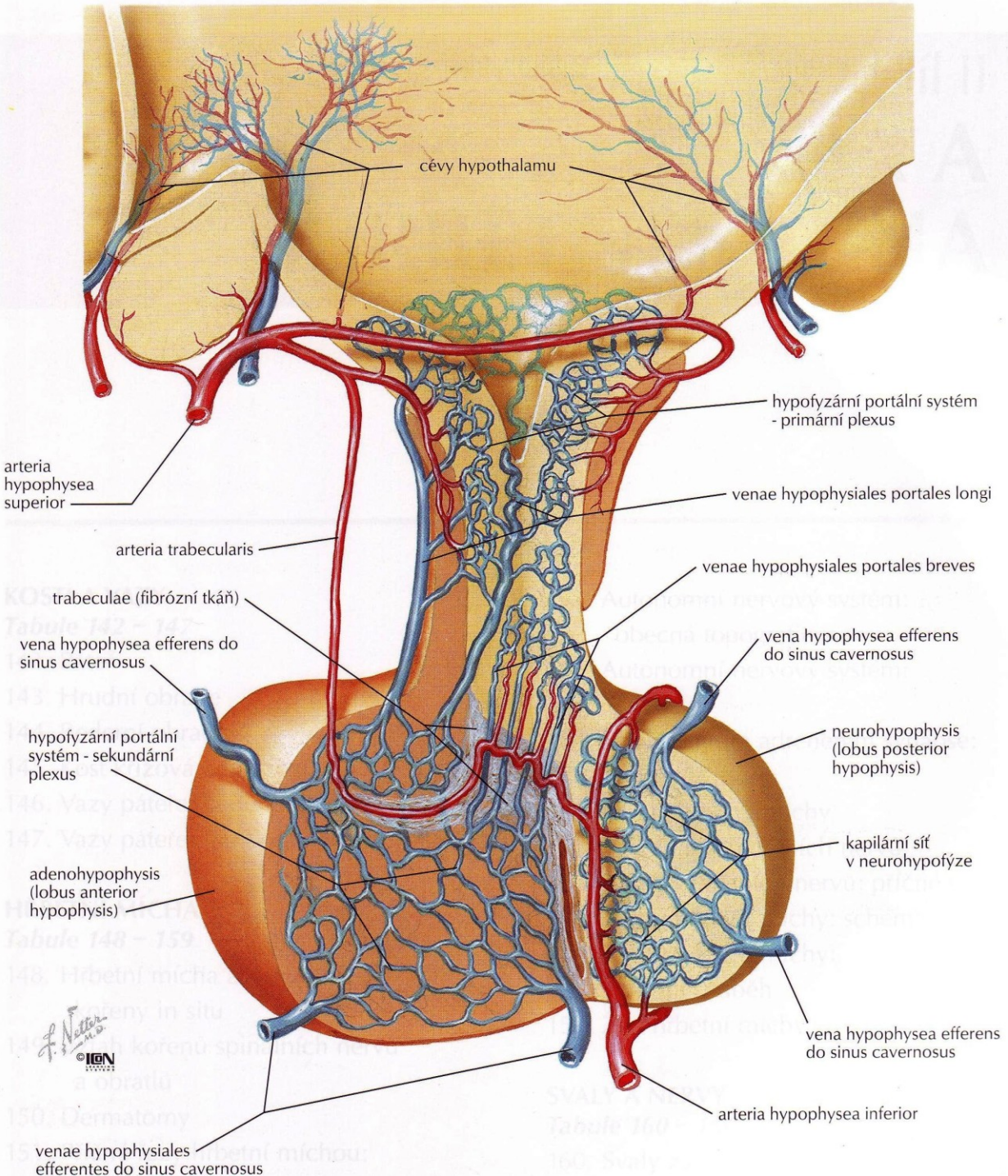
endokrinní žlázy

- hypofýza (podvěsek mozkový)
- epifýza (šišinka)
- glandula thyroidea
- glandulae parathyroideae
- thymus
- glandulae suprarenales
- pancreas
- ovaria
- testes

hypofýza

- nadřazený orgán endokrinních žláz
- řízena hypothalamem
- adenohypofýza (přední lalok)
    - somatotropní hormon
    - thyreotropní hormon
    - folikuly stimulující hormon
    - luteinizační hormon
    - adrenokortikotropní hormon
    - prolaktin
- neurohypofýza (zadní lalok)
    - oxytocin
    - antidiuretický hormon (vasopresin)


gyrus frontalis medialis
sulcus corporis callosi
fornix
otum pellucidum
n interventriculare
n Monroi)
sio
halamica
us a III.
a mozková
ubcallosa
nmissura
erior
llosus
ala-
s
icus
opticum
uber cinereum
hypophysis cerebri
corpus mamillare
pedunculus cerebri
lobus paracentralis
sulcus marginalis
corpus callosum
precuneus
sinus sagi
plexu
ventri
str
tha
ve
(G
colli
collicu
lamina tec
cerebellum
velum medulla
IV. komora moz
choroideus
velum medullare


cévy hypothalamu
hypofyzární portální systém - primární plexus
arteria hypophysea superior
venae hypophysiales portales longi
arteria trabecularis
venae hypophysiales portales breves
trabeculae (fibrózní tkáň)
vena hypophysea efferens do sinus cavernosus
vena hypophysea efferens do sinus cavernosus
hypofyzární portální systém - sekundární plexus
neurohypophysis (lobus posterior hypophysis)
kapilární síť v neurohypofýze
adenohypophysis (lobus anterior hypophysis)
vena hypophysea efferens do sinus cavernosus
arteria hypophysea inferior
venae hypophysiales efferentes do sinus cavernosus
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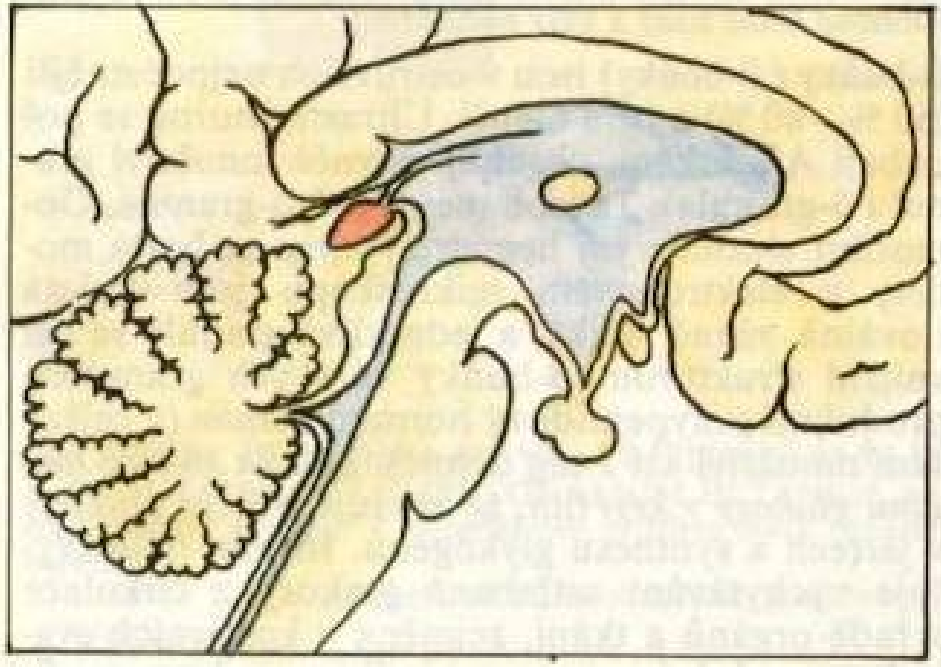
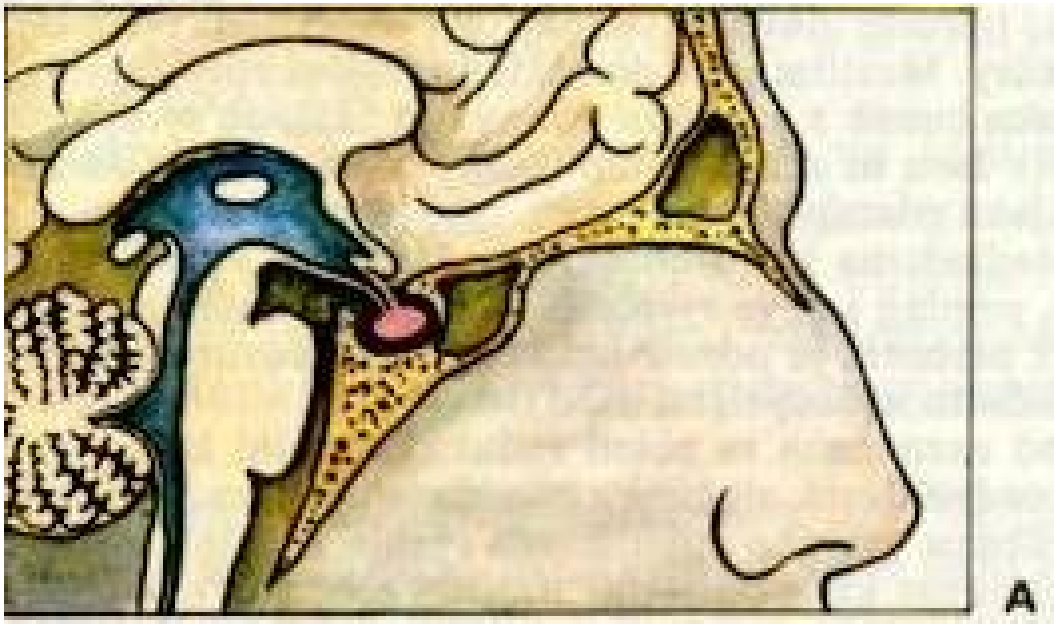
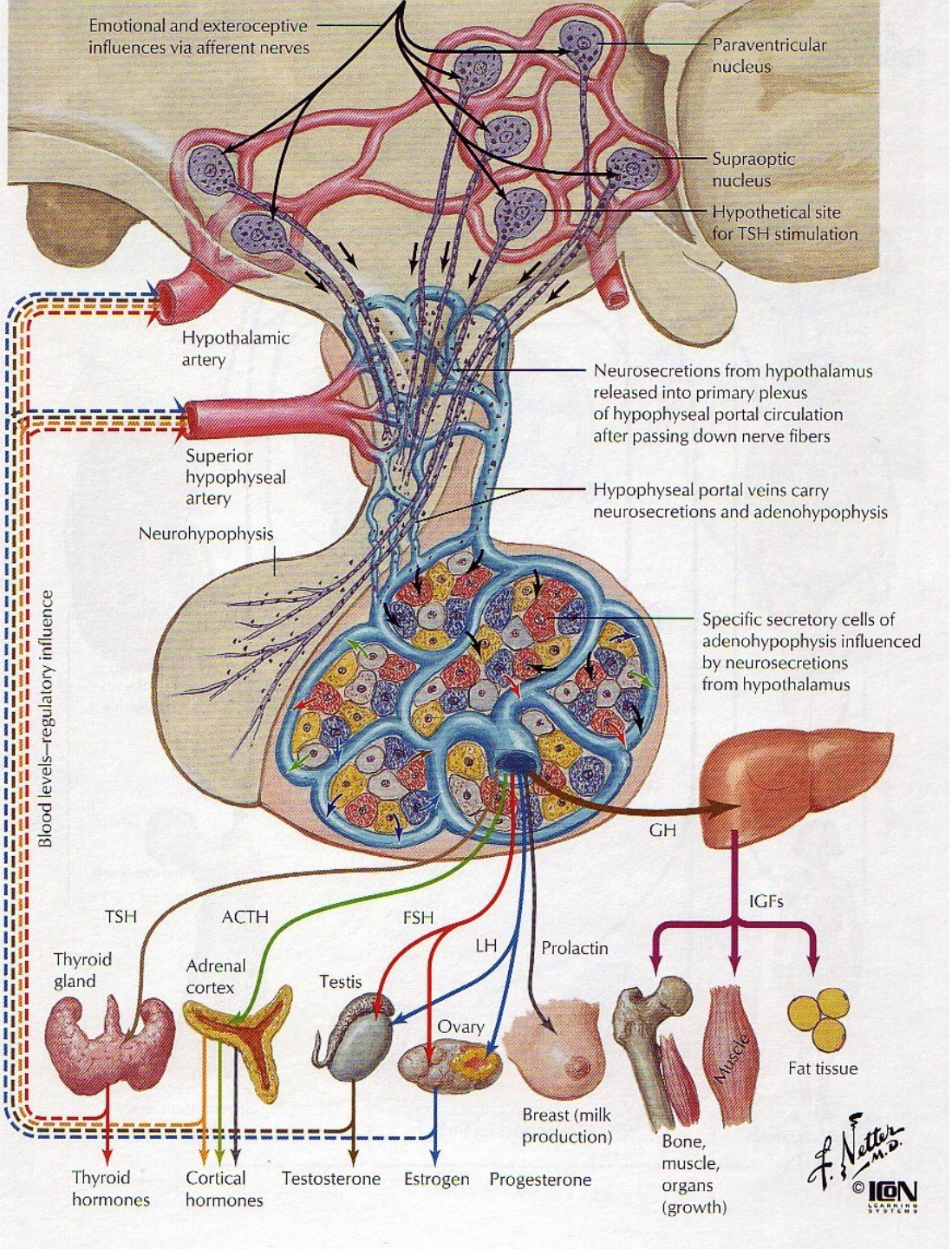


A



A


Emotional and exteroceptive influences via afferent nerves
Paraventricular nucleus
Supraoptic nucleus
Hypothetical site for TSH stimulation
Hypothalamic artery
Neurosecretions from hypothalamus released into primary plexus of hypophyseal portal circulation after passing down nerve fibers
Superior hypophyseal artery
Hypophyseal portal veins carry neurosecretions and adenohypophysis
Neurohypophysis
Specific secretory cells of adenohypophysis influenced by neurosecretions from hypothalamus
Blood levels—regulatory influence
GH
IGFs
TSH
ACTH
FSH
LH
Prolactin
Thyroid gland
Adrenal cortex
Testis
Ovary
Muscle
Fat tissue
Breast (milk production)
Bone, muscle, organs (growth)
Thyroid hormones
Cortical hormones
Testosterone
Estrogen
Progesterone
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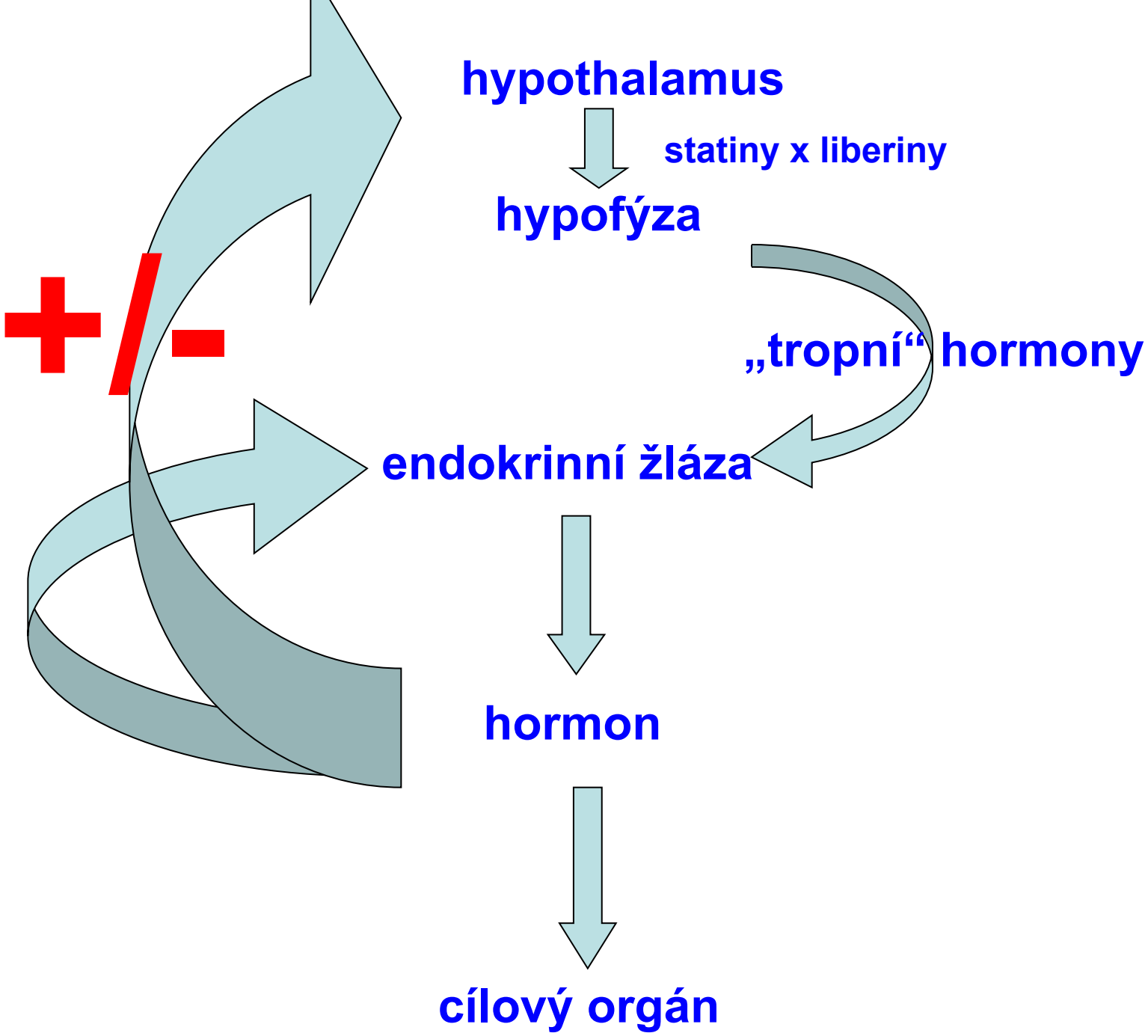
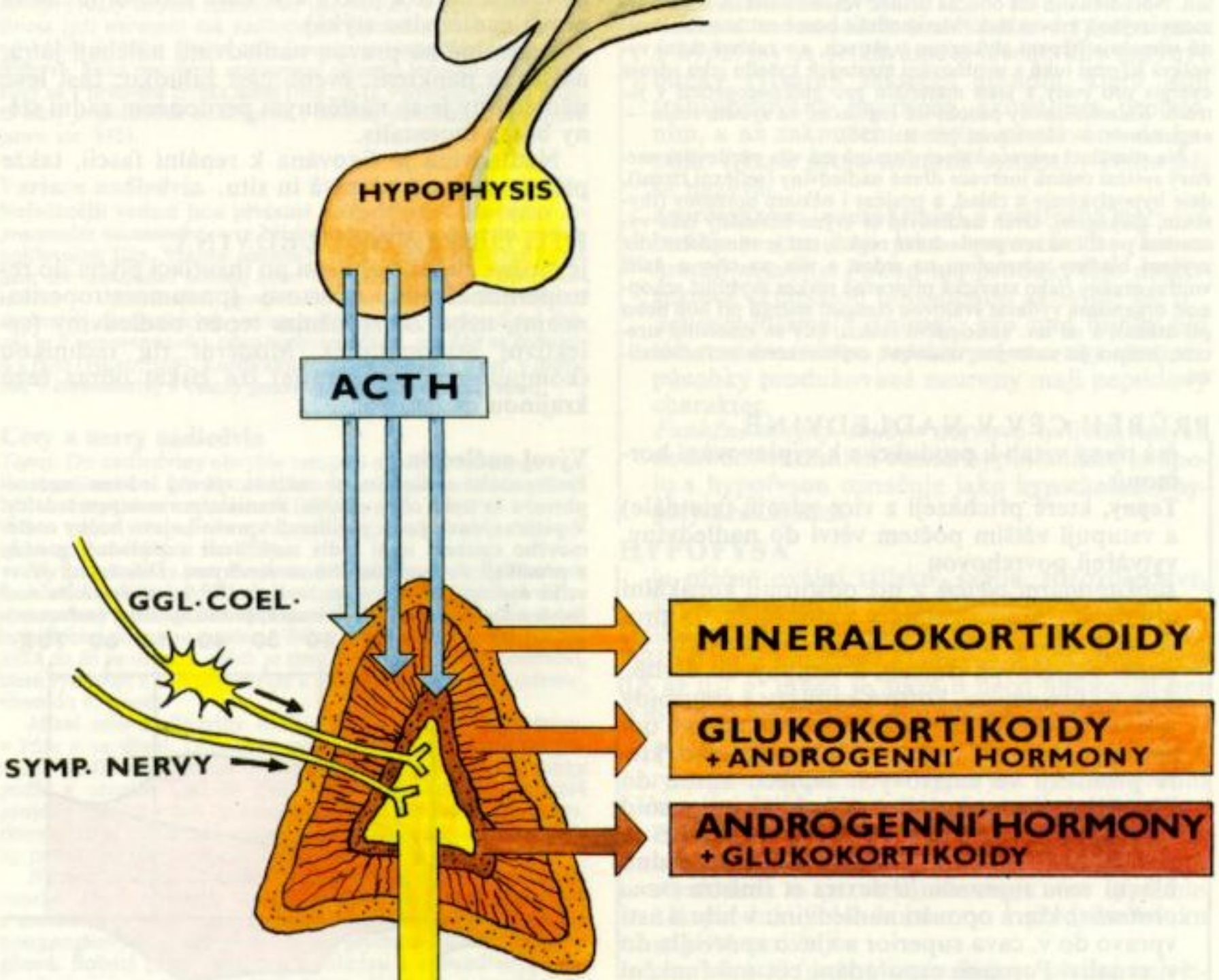
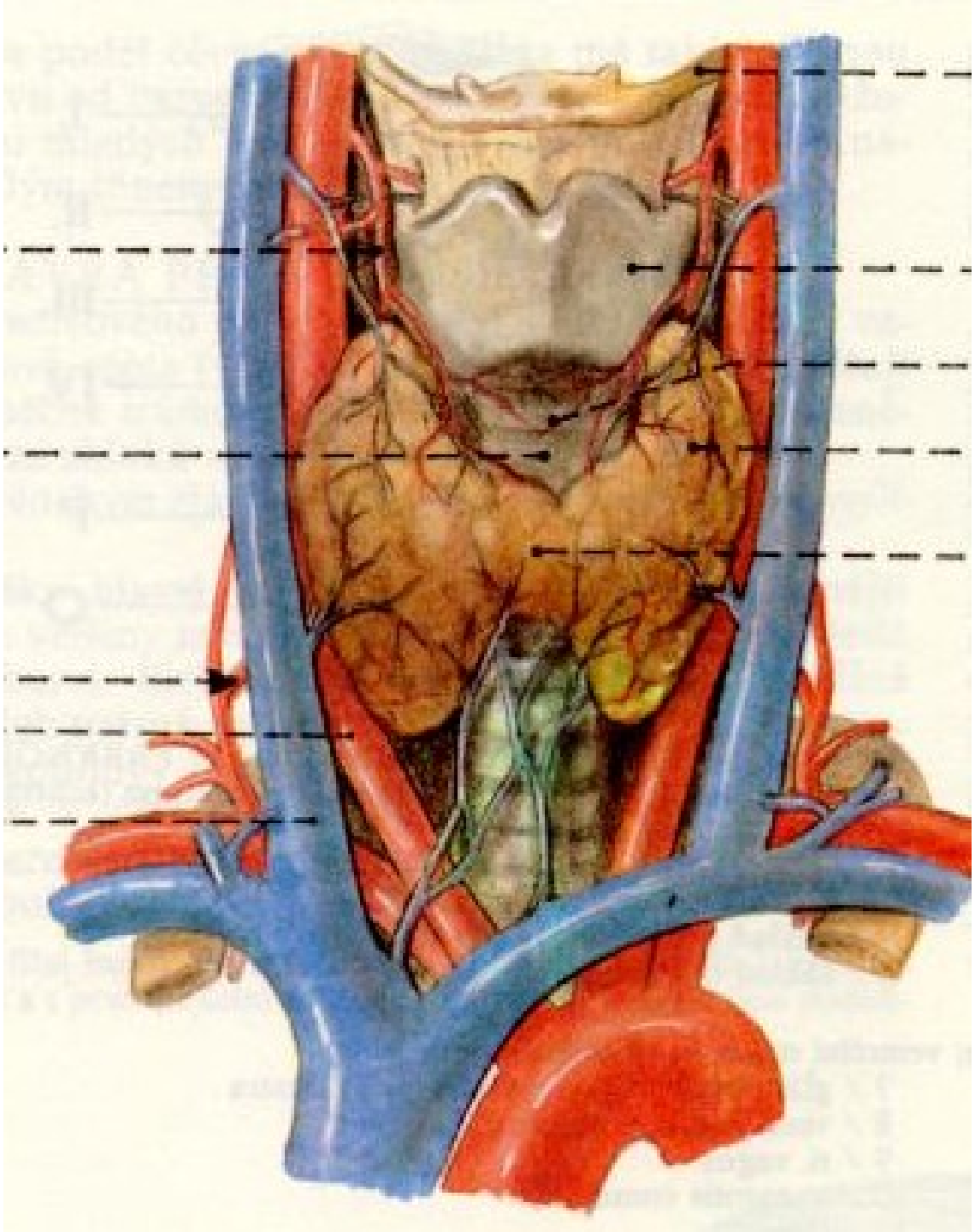
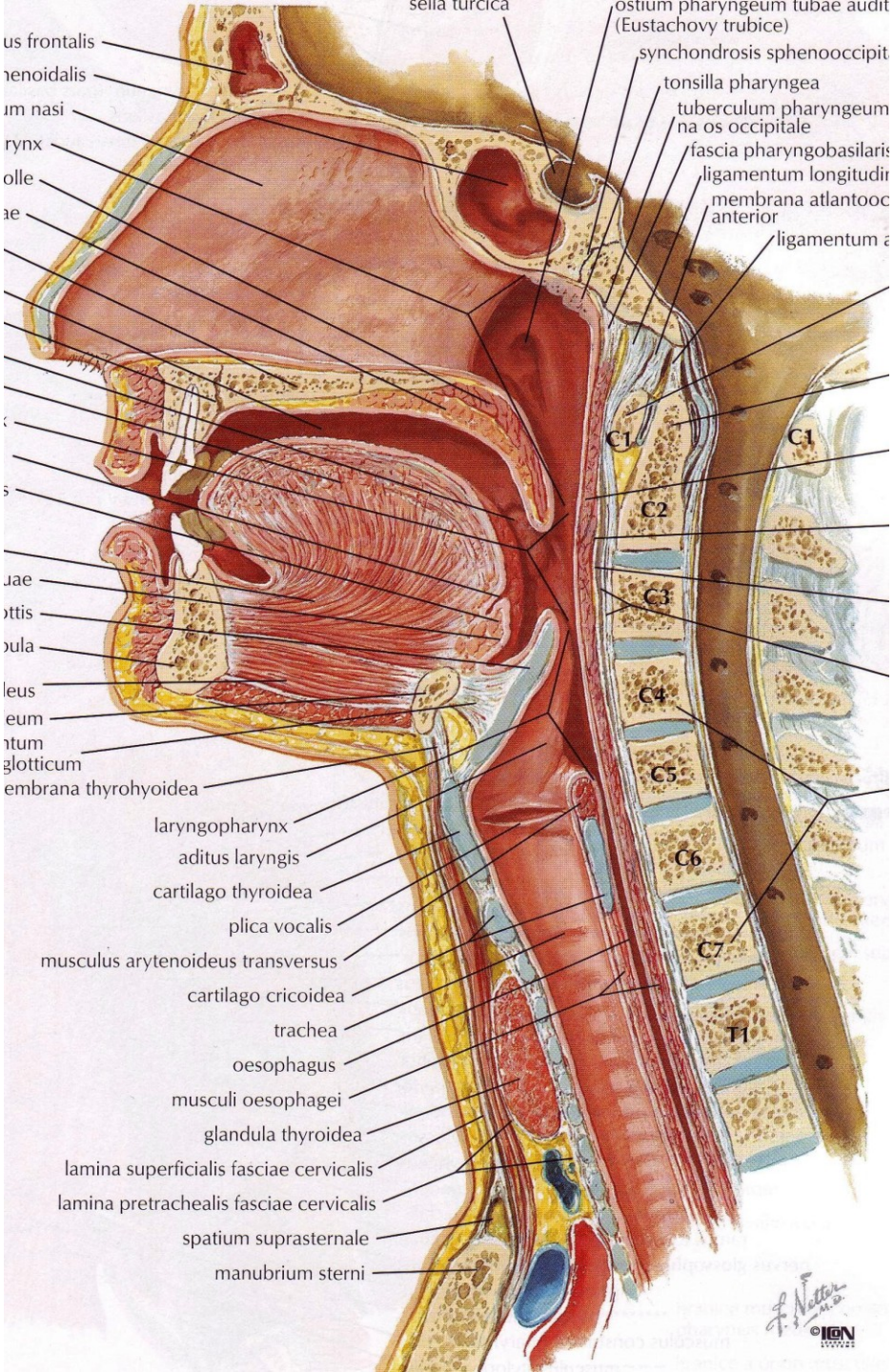

hypothalamus
statiny x liberiny
hypofýza
+/-
„tropní“ hormony
endokrinní žláza
hormon
cílový orgán

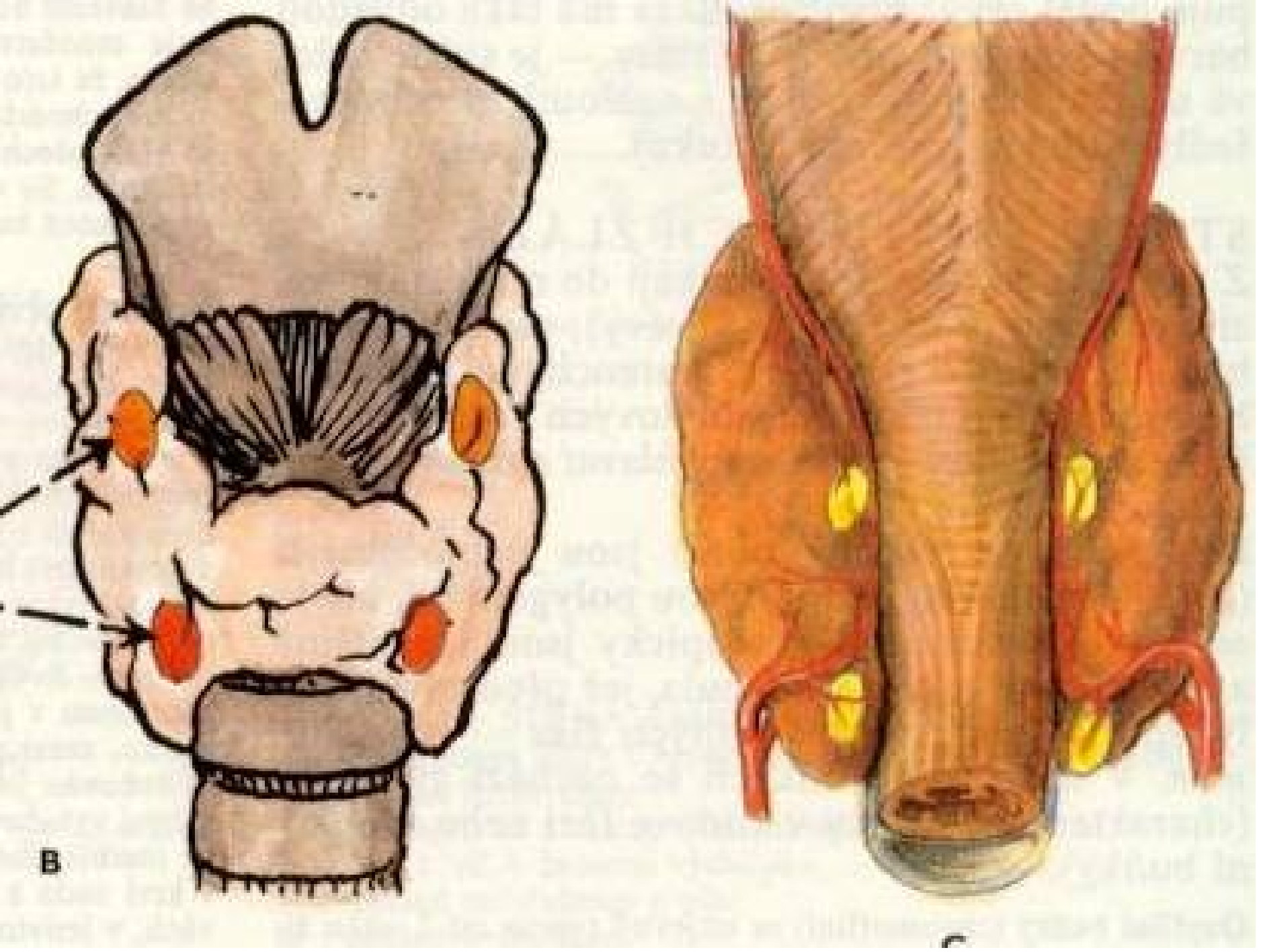

HYPOPHYSIS
ACTH
GGL·COEL·
SYMP. NERVY
MINERALOKORTIKOIDY
GLUKOKORTIKOIDY
+ANDROGENNÍ HORMONY
ANDROGENNÍ HORMONY
+GLUKOKORTIKOIDY

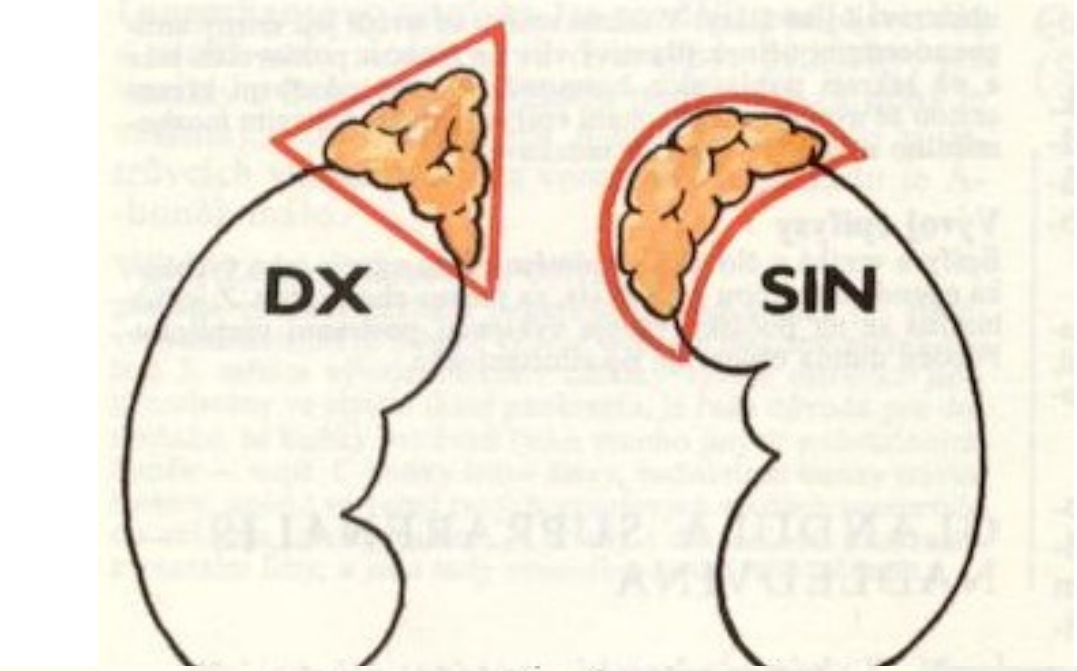
glandula thyroidea

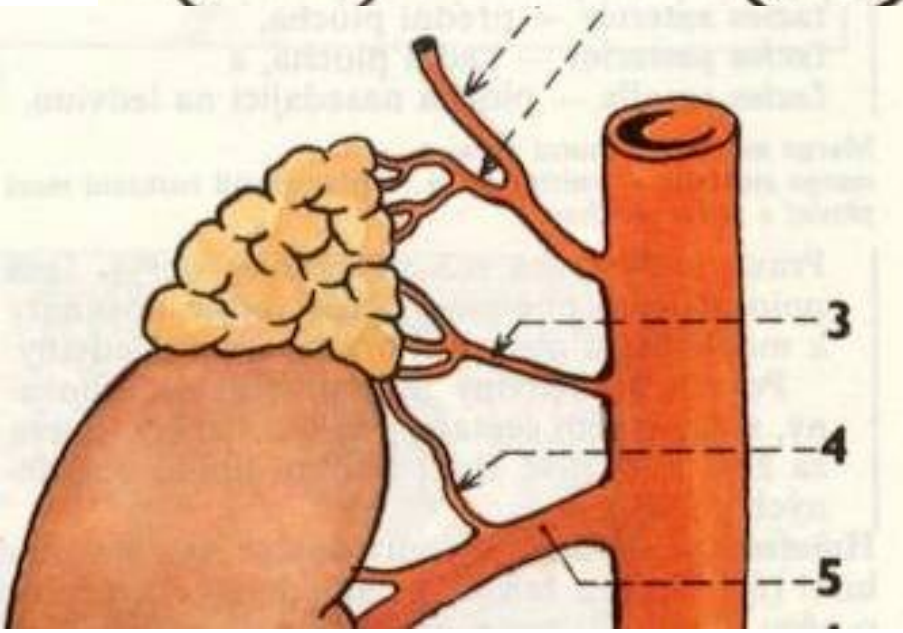
- po stranách průdušnice a hrtanu
- pravý a levý lalok spojeny isthmem
- produkuje thyroxin a kalcitonin




sella turcica
ostium pharyngeum tubae audit
(Eustachovy trubice)
synchondrosis sphenooccipit
tonsilla pharyngea
tuberculum pharyngeum
na os occipitale
fascia pharyngobasilaris
ligamentum longitudi
membrana atlantooc
anterior
ligamentum a
us frontalis
enoidalis
m nasi
rynx
olle
ae
uae
ttis
ula
leus
eum
tum
glotticum
embrana thyrohyoidea
C1
C1
C2
C3
C4
C5
C6
C7
T1
laryngopharynx
aditus laryngis
cartilago thyroidea
plica vocalis
musculus arytenoideus transversus
cartilago cricoidea
trachea
oesophagus
musculi oesophagei
glandula thyroidea
lamina superficialis fasciae cervicalis
lamina pretrachealis fasciae cervicalis
spatium suprasternale
manubrium sterni


B


DX
SIN


3
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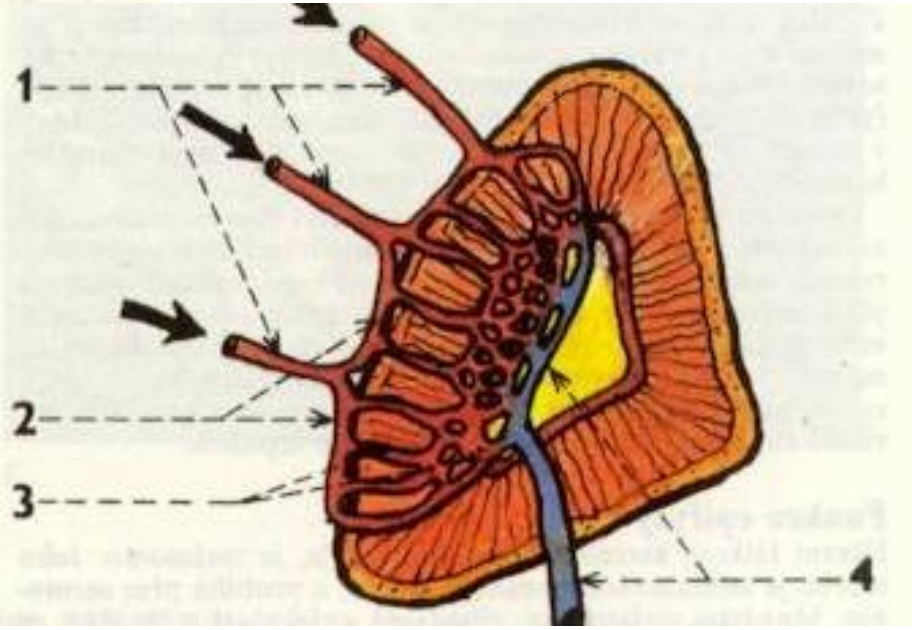
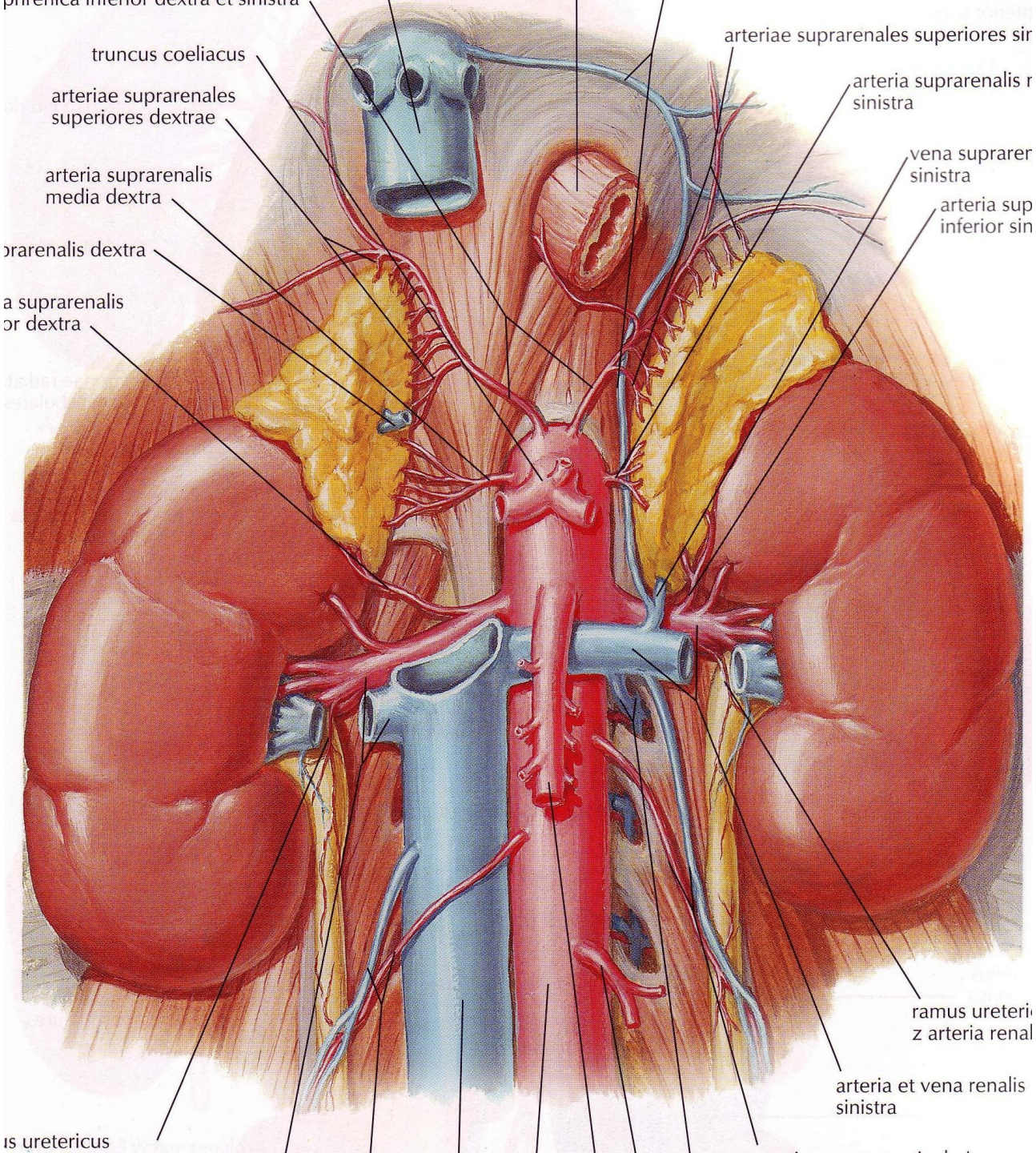
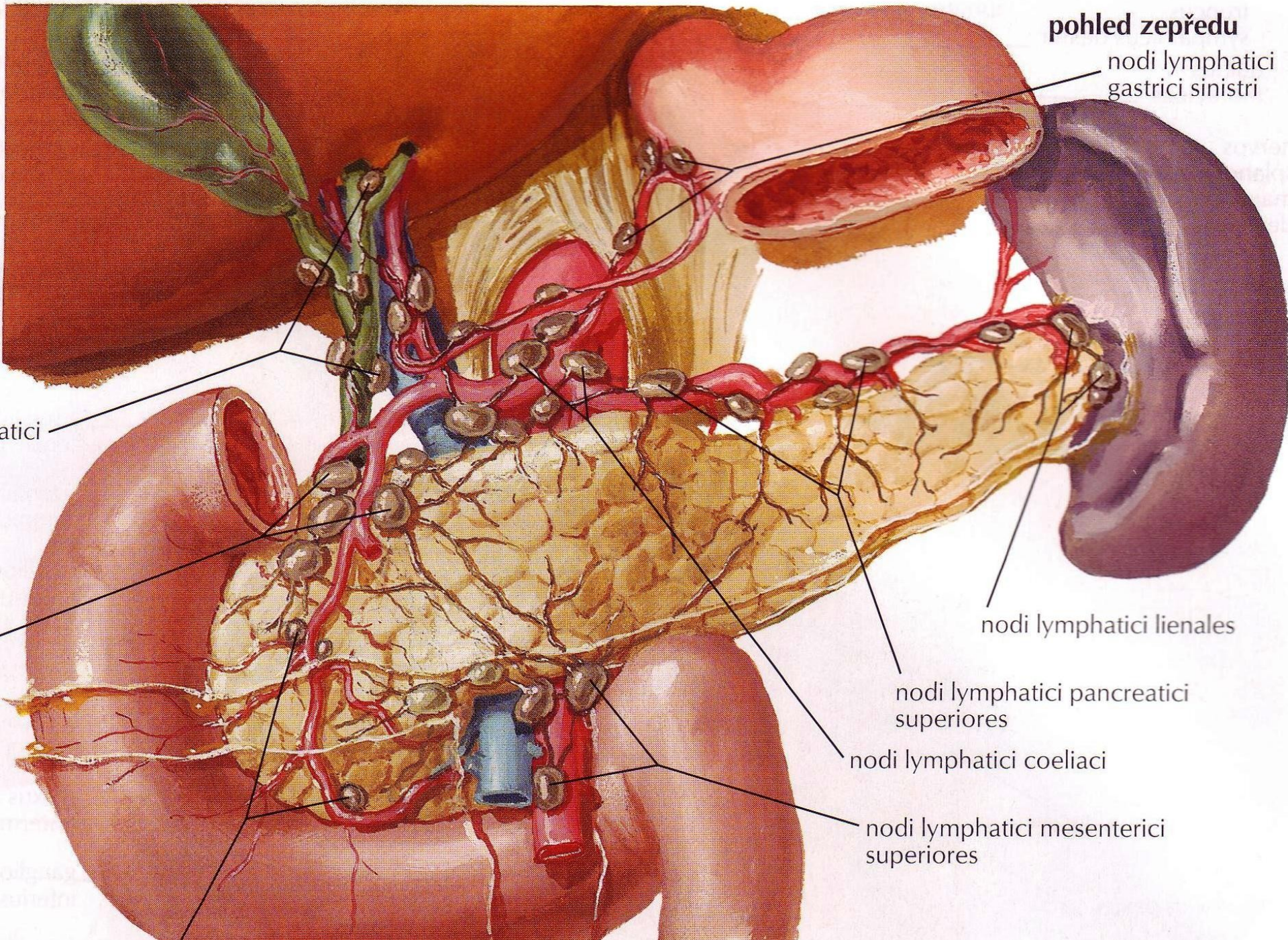
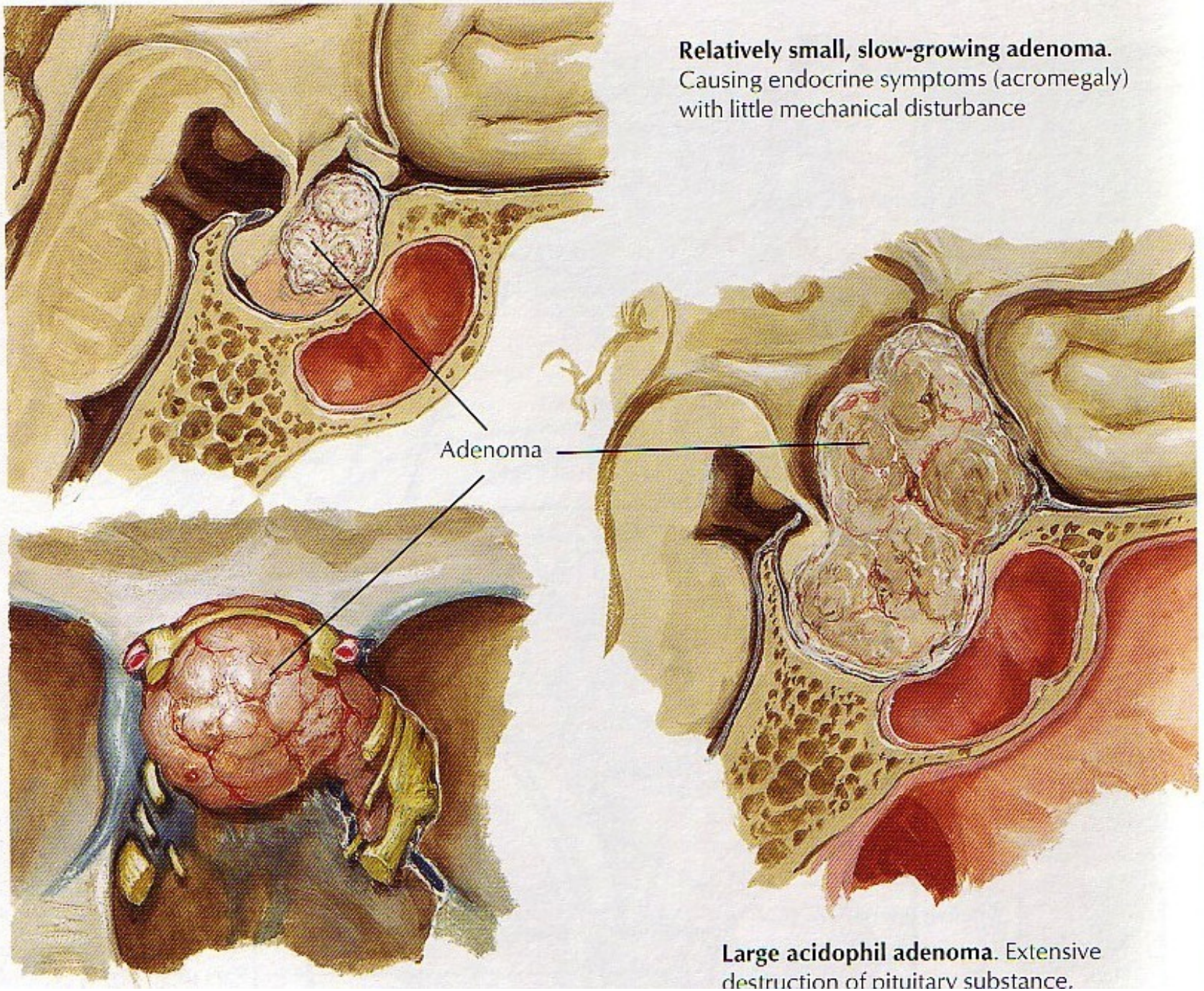

1
2
3
4


truncus coeliacus
arteriae suprarenales superiores dextrae
arteria suprarenalis media dextra
arteriae suprarenales superiores sir
arteria suprarenalis r sinistra
vena suprarer sinistra
arteria sup inferior sin
ramus ureteri z arteria renal
arteria et vena renalis sinistra


pohled zepředu
nodi lymphatici gastrici sinistri
atici
nodi lymphatici lienales
nodi lymphatici pancreatici superiores
nodi lymphatici coeliaci
nodi lymphatici mesenterici superiores

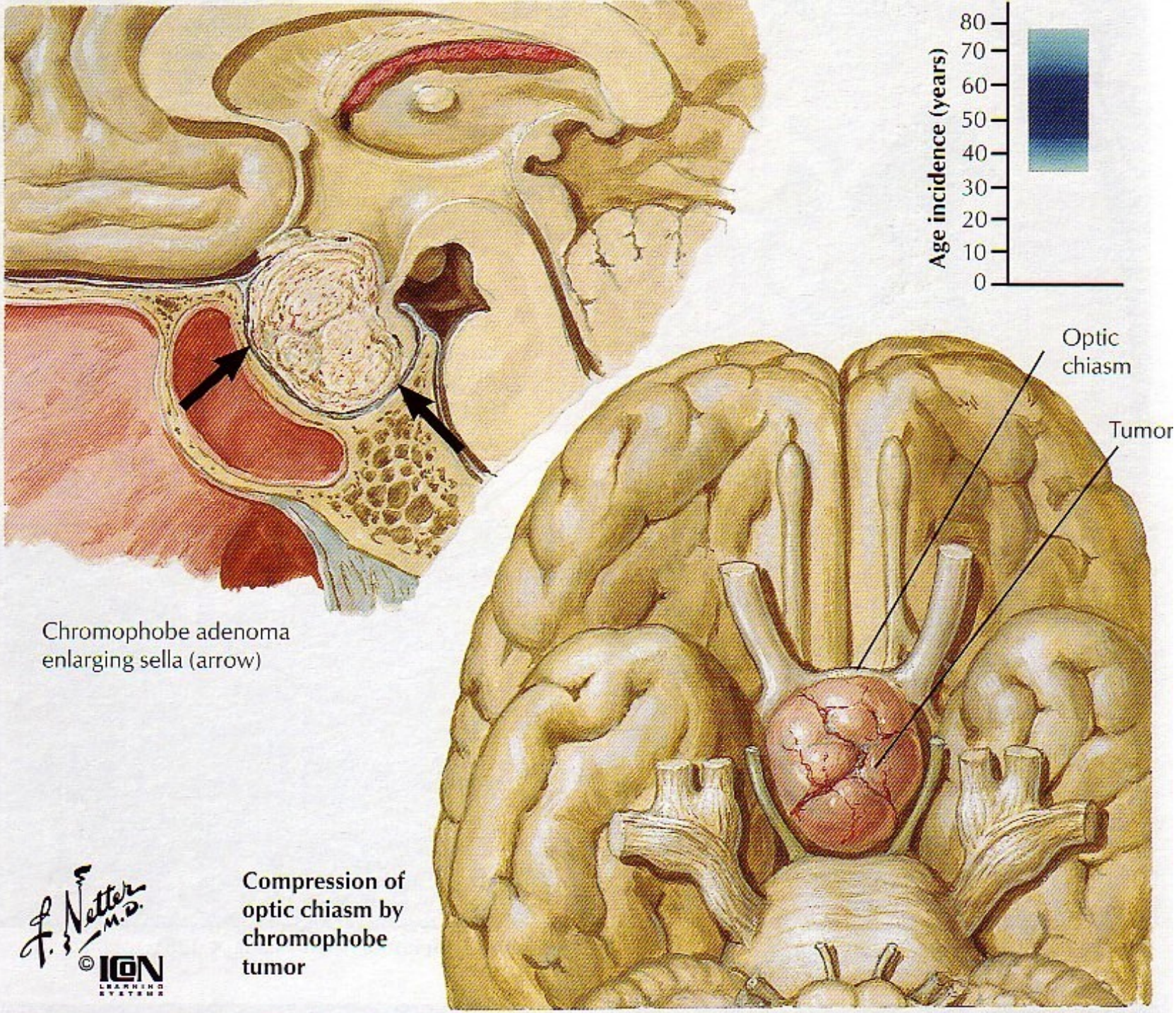
hypofýza

- hyperplázie
- adenomy
  - somatotropní adenom
  - kortikotropní adenom
  - prolaktinom
- panhypopituitarismus
- diabetes insipidus



Relatively small, slow-growing adenoma. Causing endocrine symptoms (acromegaly) with little mechanical disturbance

Large acidophil adenoma. Extensive destruction of pituitary substance.



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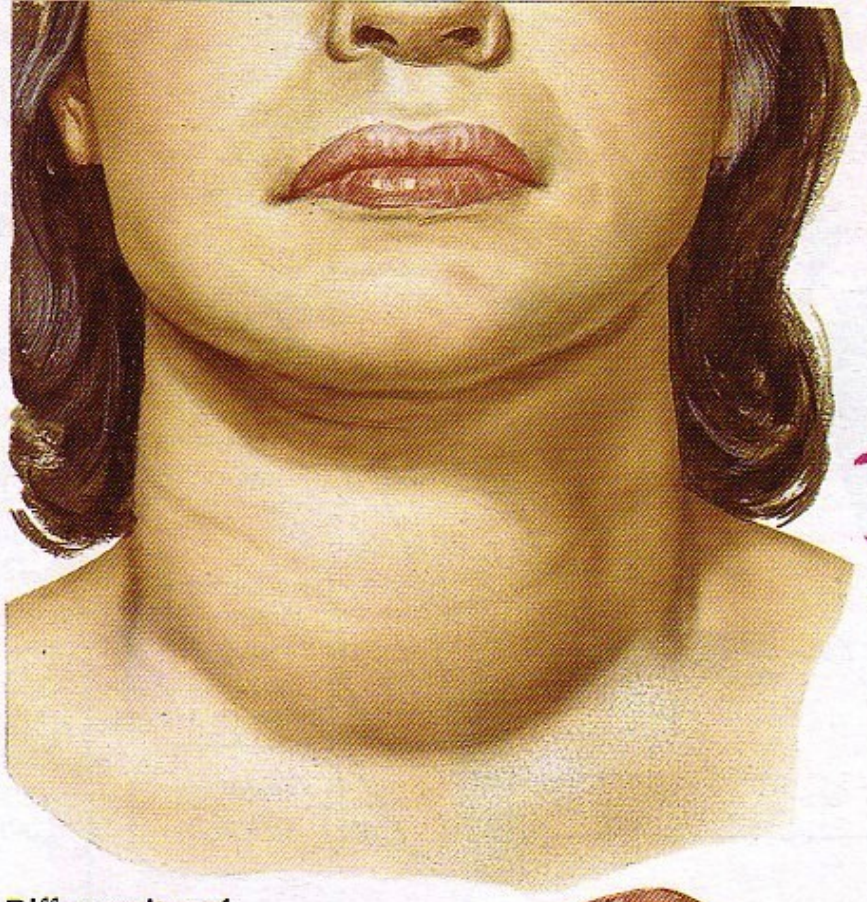
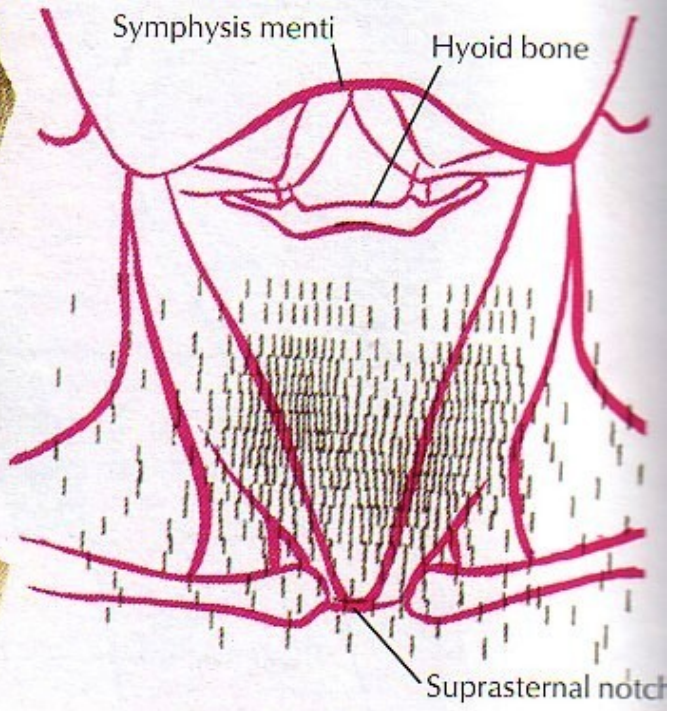
Compression of optic chiasm by chromophobe tumor

gl. thyreoidea

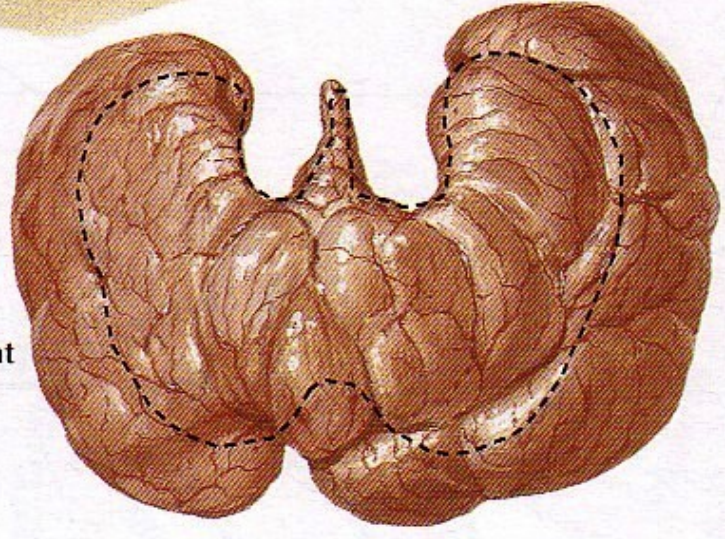
- hyperthyreóza x hypothyreóza
- Hashimotova thyreoiditida
- Graves-Basedowa nemoc
- struma
- adenomy x karcinomy



Diffuse goiter of moderate size



Scintigram



Diffuse enlargement and engorgement of thyroid gland. (Broken line indicates normal size of gland.)

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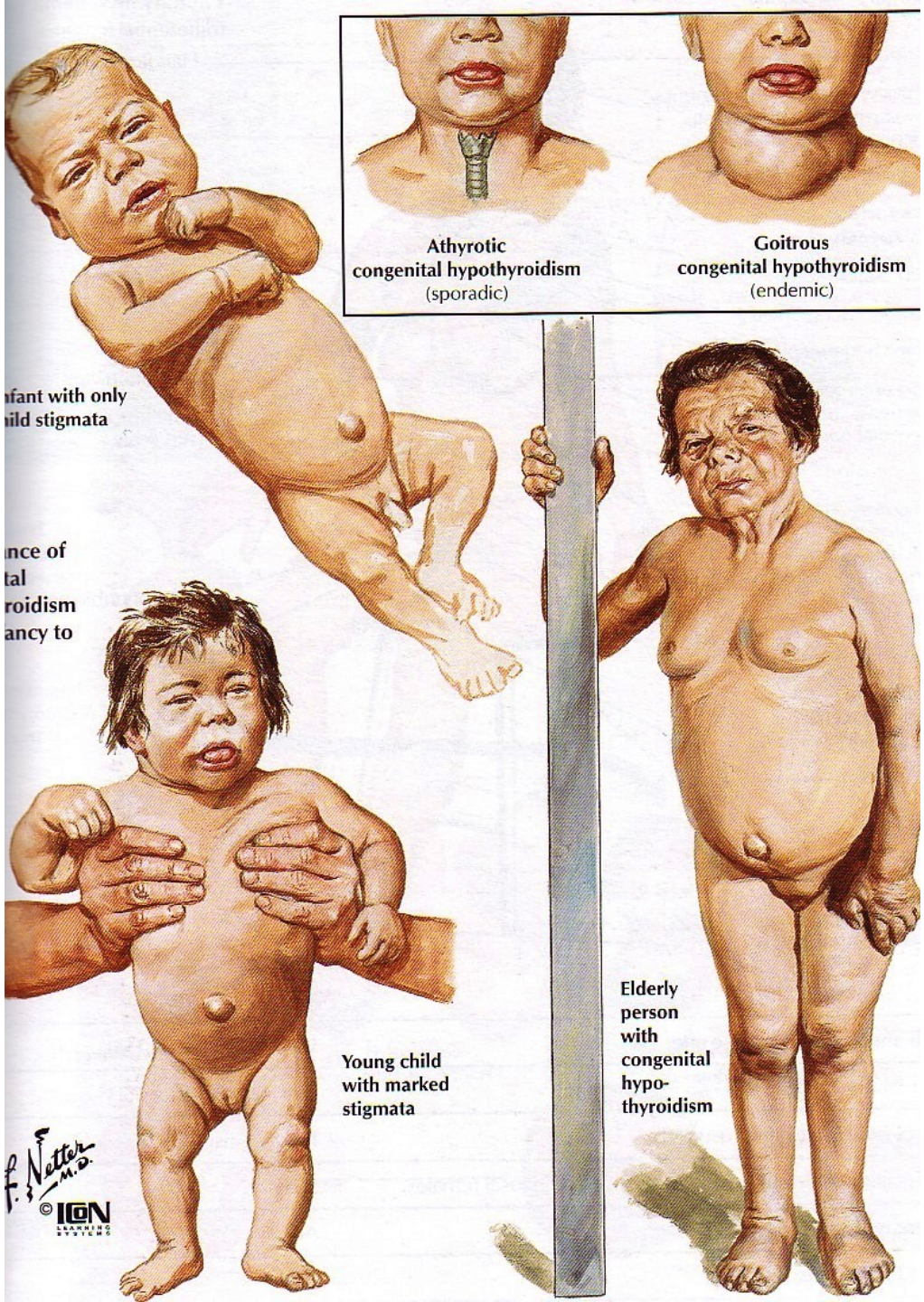
Athyrotic
congenital hypothyroidism
(sporadic)
Goitrous
congenital hypothyroidism
(endemic)
ıfant with only
ıild stigmata
ınce of
tal
roidism
ancy to
Young child
with marked
stigmata
Elderly
person
with
congenital
hypo-
thyroidism
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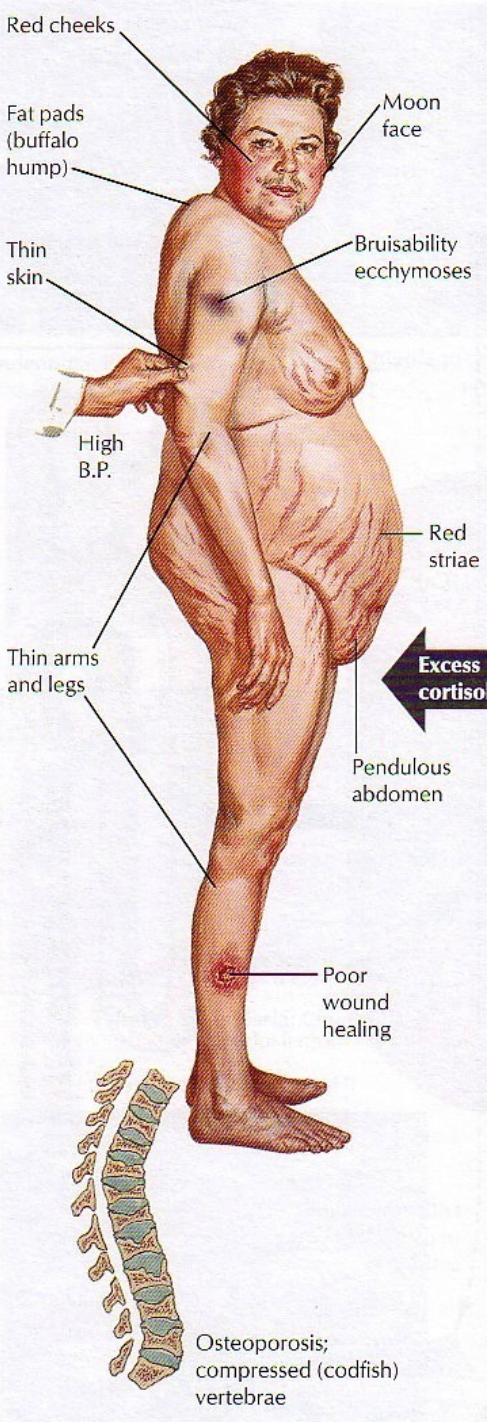
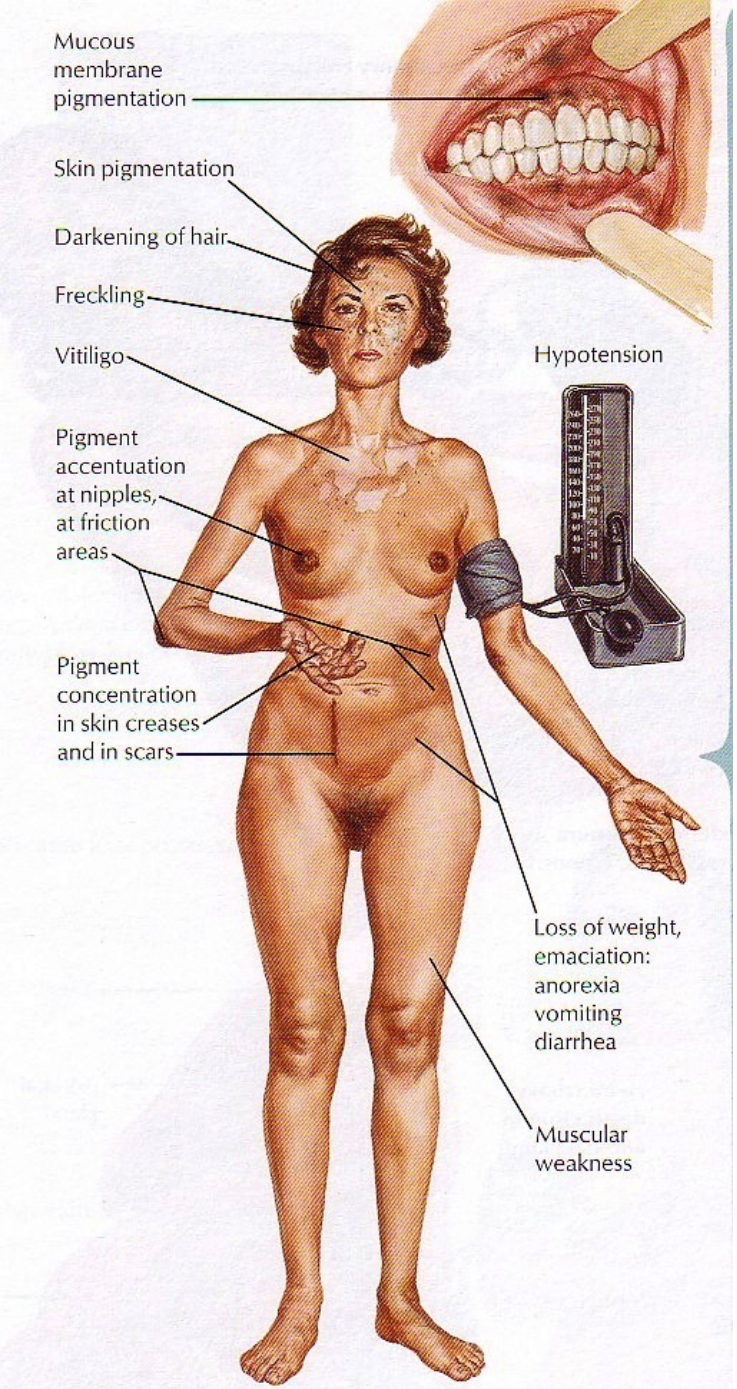
příštitná tělíska

- hypoparatyreoidismus
- hyperparathyreoidismus

nadledviny

- adrenokortikální syndromy
  - Addisonova choroba
  - adrenogenitální syndrom
  - Cushingův syndrom
  - Connův syndrom


Red cheeks
Fat pads (buffalo hump)
Moon face
Thin skin
Bruisability ecchymoses
High B.P.
Red striae
Thin arms and legs
Excess cortiso
Pendulous abdomen
Poor wound healing
Osteoporosis; compressed (codfish) vertebrae


Mucous membrane pigmentation
Skin pigmentation
Darkening of hair
Freckling
Vitiligo
Hypotension
Pigment accentuation at nipples, at friction areas
Pigment concentration in skin creases and in scars
Loss of weight, emaciation: anorexia vomiting diarrhea
Muscular weakness

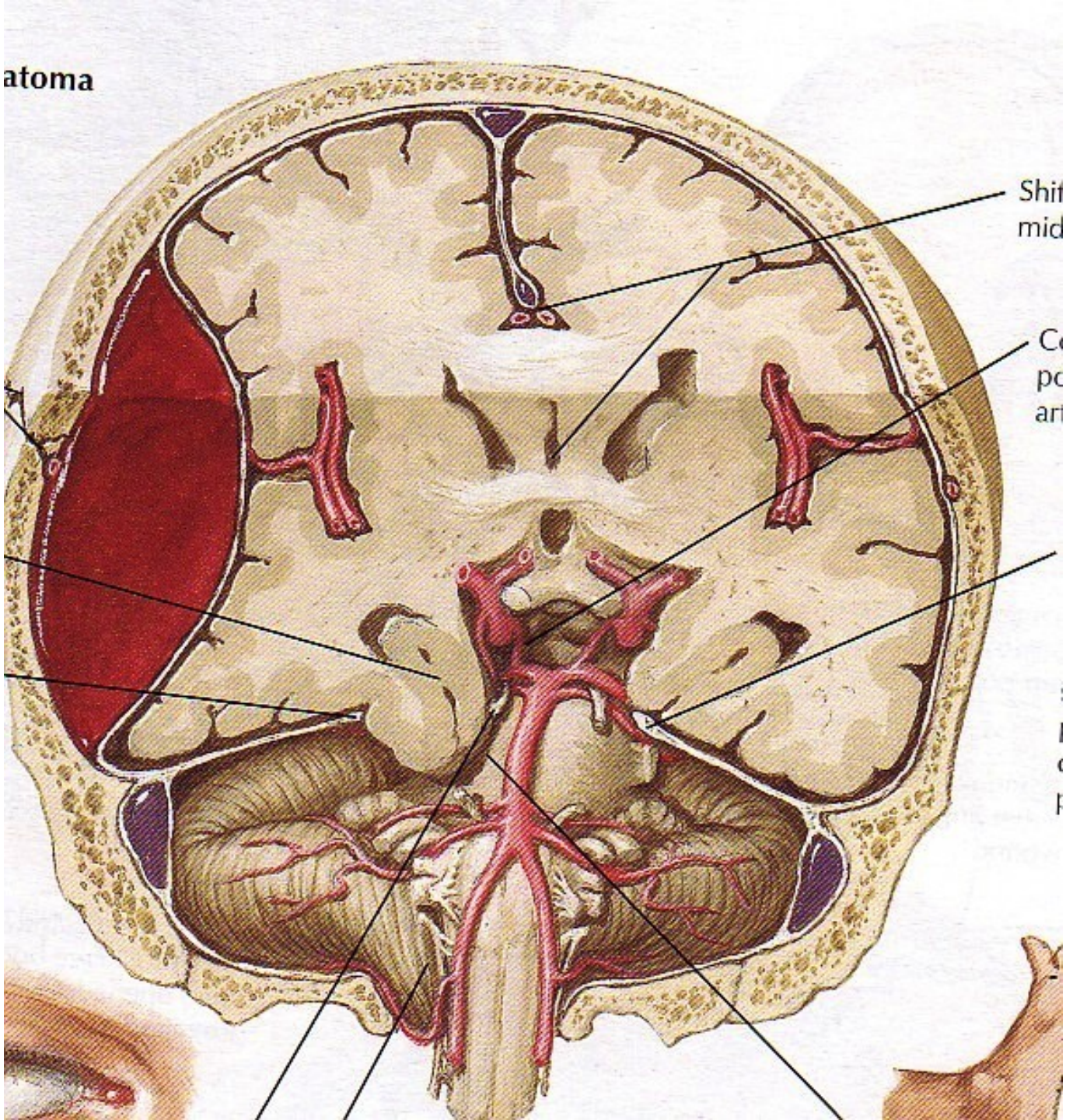
pankreas

- DM
- nesidiomy

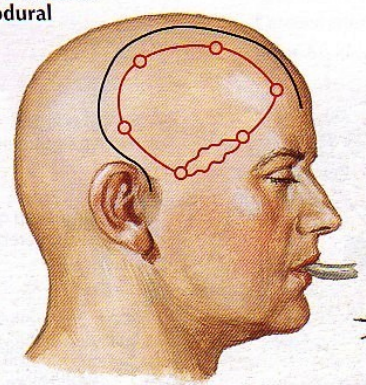
  insulinom, VIPom, gastrinom, glukagonom

patologie CNS

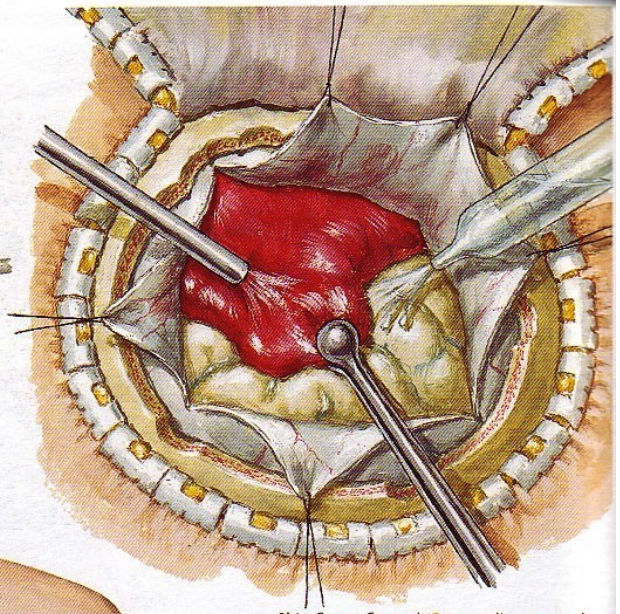
- krvácení
  - epidurální
  - subdurální
  - subarachnoideální
  - intracerebrální


atoma
Shif
mid
C
po
art

te subdural
toma

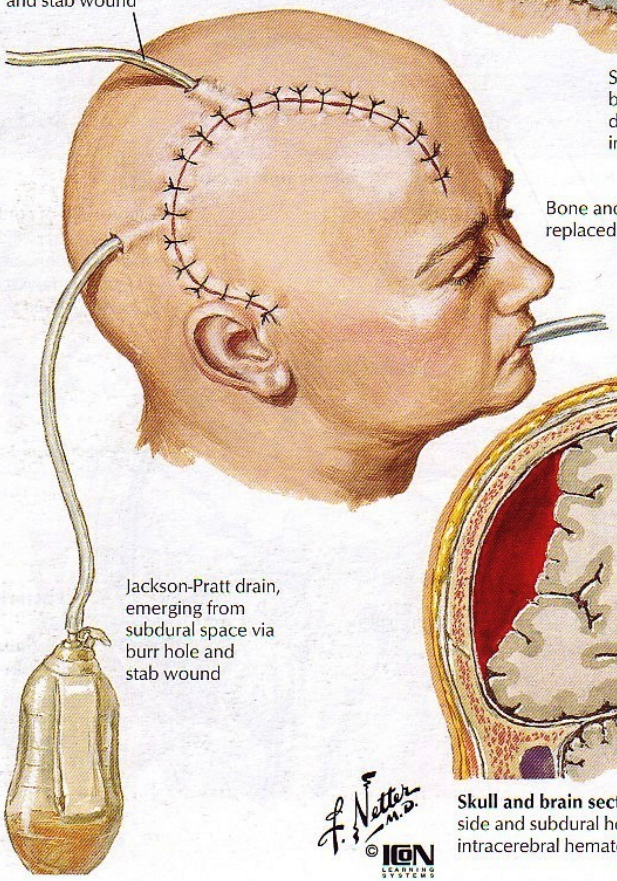


"Question mark" skin incision (black); outline of free bone flap and burr holes (red)



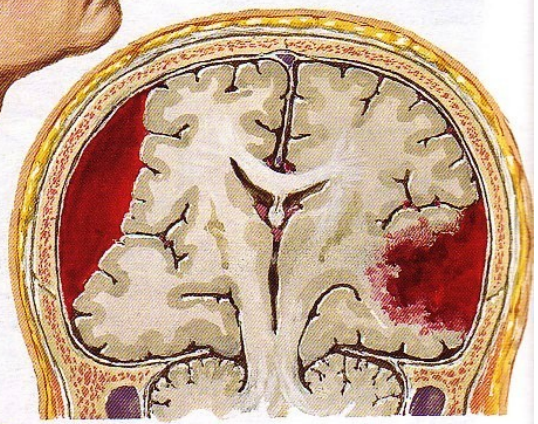
Skin flap reflected (Raney clips control bleeding). Free bone flap removed and dura opened. Clot evacuated by irrigation, suction, and forceps.

Catheter to monitor intracranial pressure, emerging through burr hole and stab wound



Bone and skin flaps replaced and sutured

Jackson-Pratt drain, emerging from subdural space via burr hole and stab wound



Skull and brain section. Acute subdural hematoma on right side and subdural hematoma associated with temporal lobe intracerebral hematoma ("burst" temporal lobe) on left

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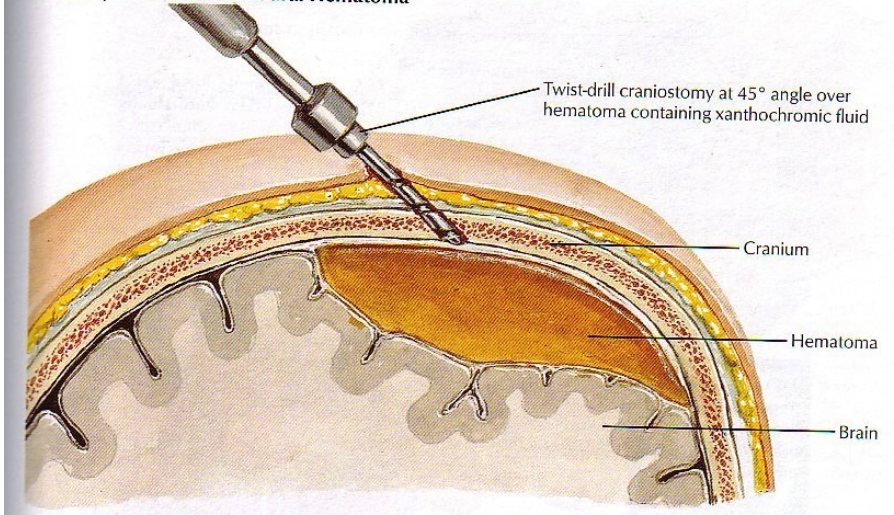
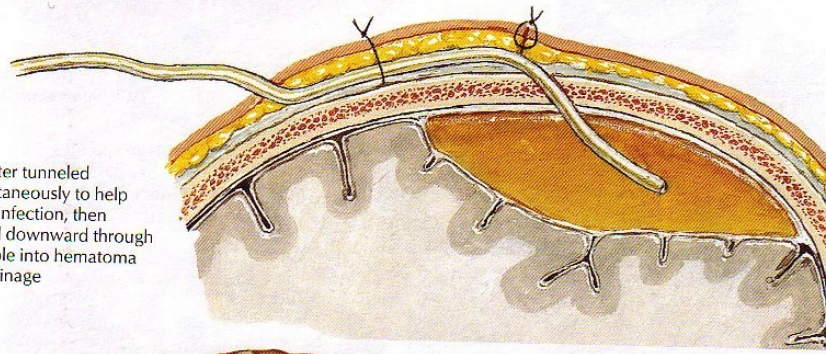
Craniostomy for Chronic Subdural Hematoma

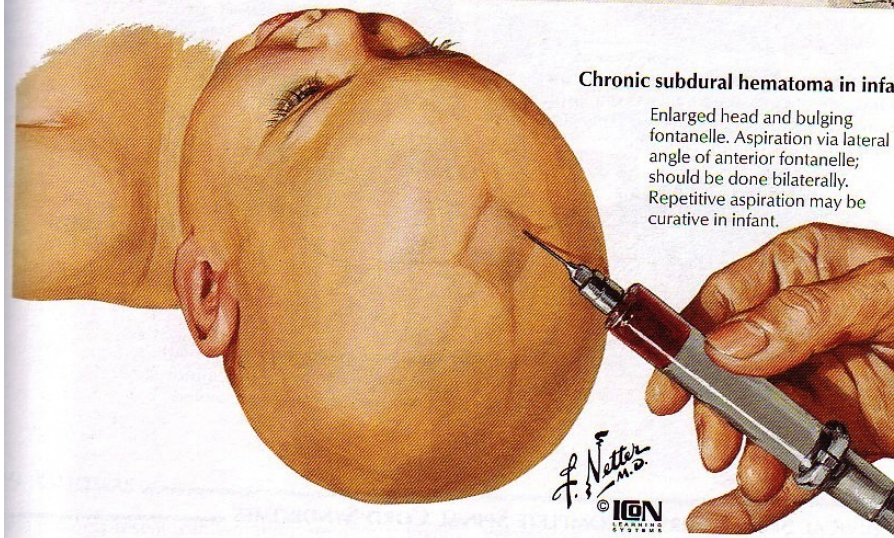




Catheter tunneled subcutaneously to help avoid infection, then angled downward through drill hole into hematoma for drainage

Chronic subdural hematoma in infa

Enlarged head and bulging fontanelle. Aspiration via lateral angle of anterior fontanelle; should be done bilaterally. Repetitive aspiration may be curative in infant.



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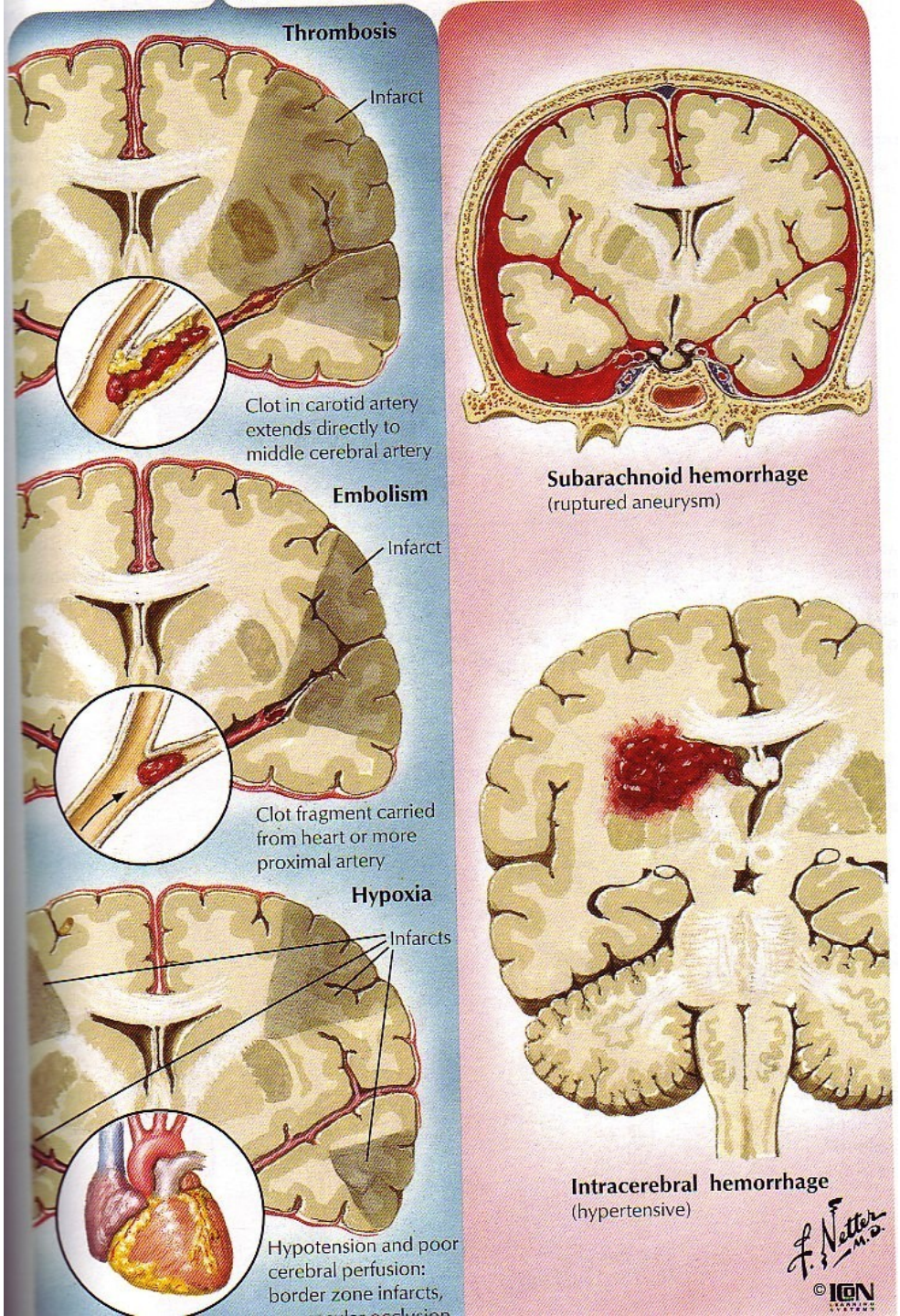
Thrombosis
Infarct
Clot in carotid artery extends directly to middle cerebral artery
Embolism
Infarct
Clot fragment carried from heart or more proximal artery
Hypoxia
Infarcts
Hypotension and poor cerebral perfusion: border zone infarcts,
Subarachnoid hemorrhage
(ruptured aneurysm)
Intracerebral hemorrhage
(hypertensive)
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