

Autonomic nervous system (ANS)

central compartment

peripheral compartment

sympathicus (pars sympathica)

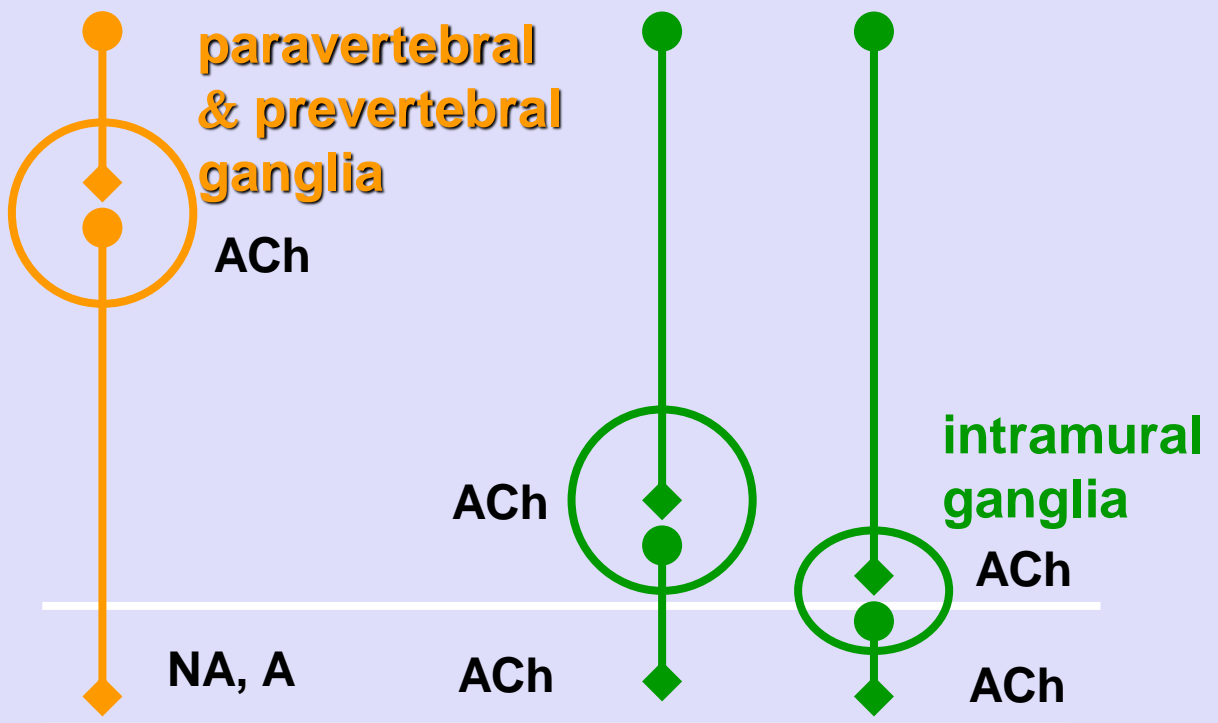
parasympathicus (pars parasympathica)

enteric system

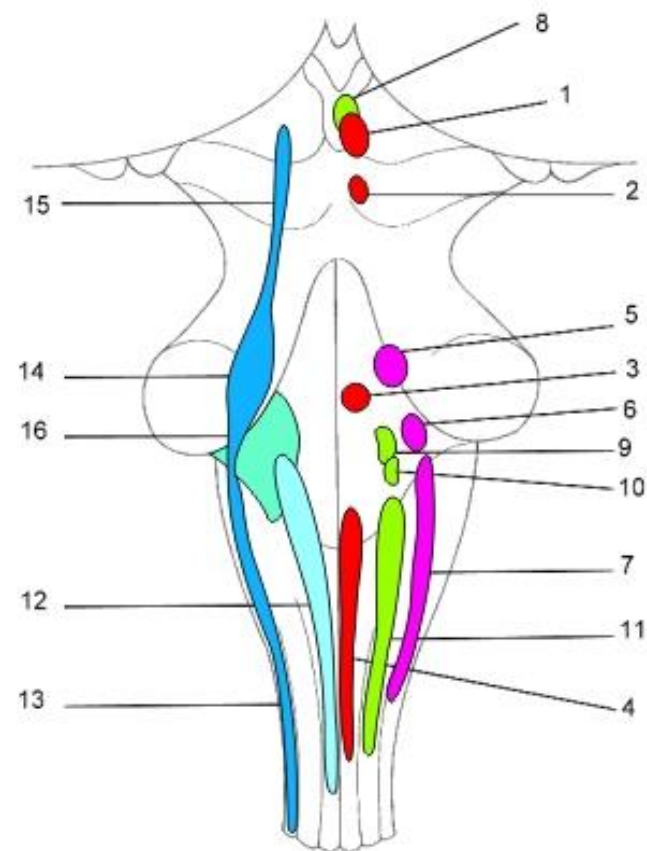
cranio-sacral system (parasympathicus)

thoraco-lumbal system (sympathicus)

cranio-sacral system (parasympathicus)

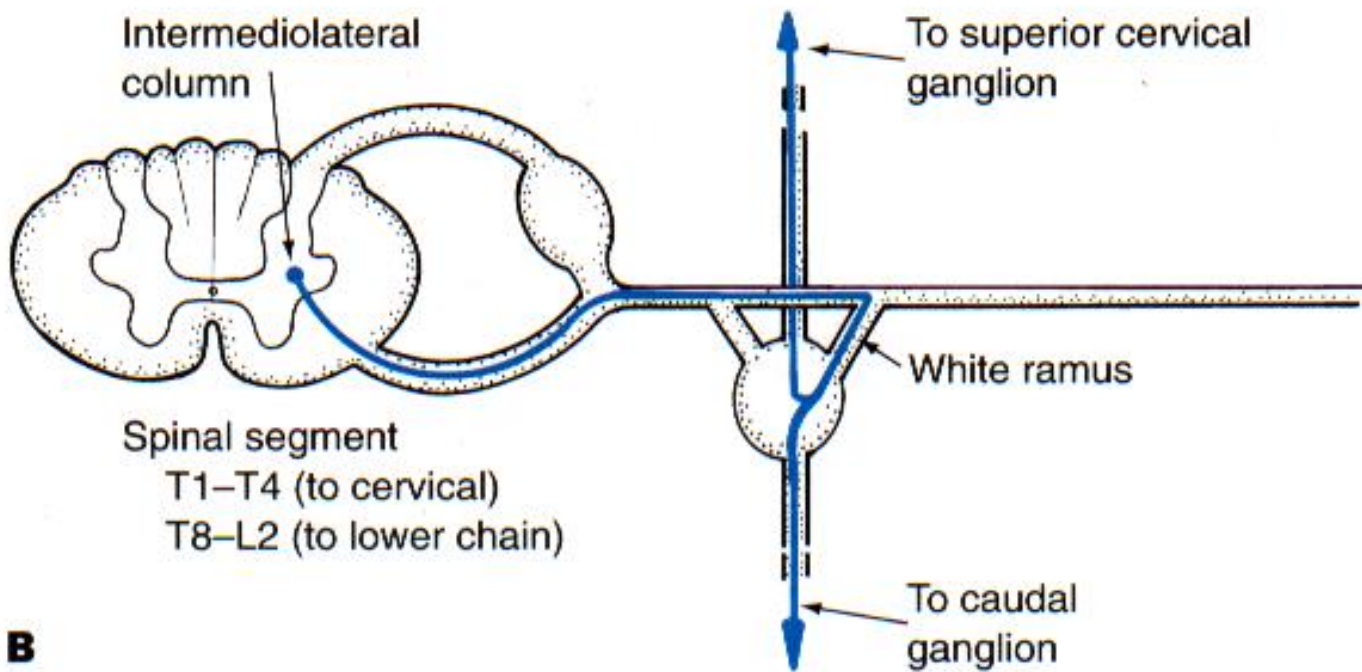
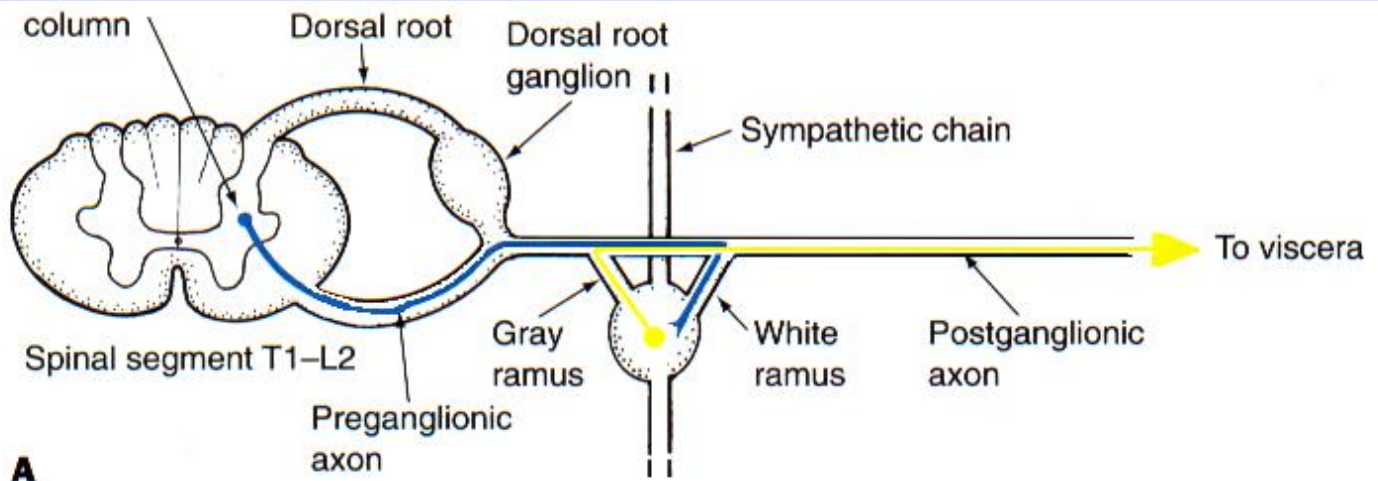


Preganglionic parasympathetic neurons

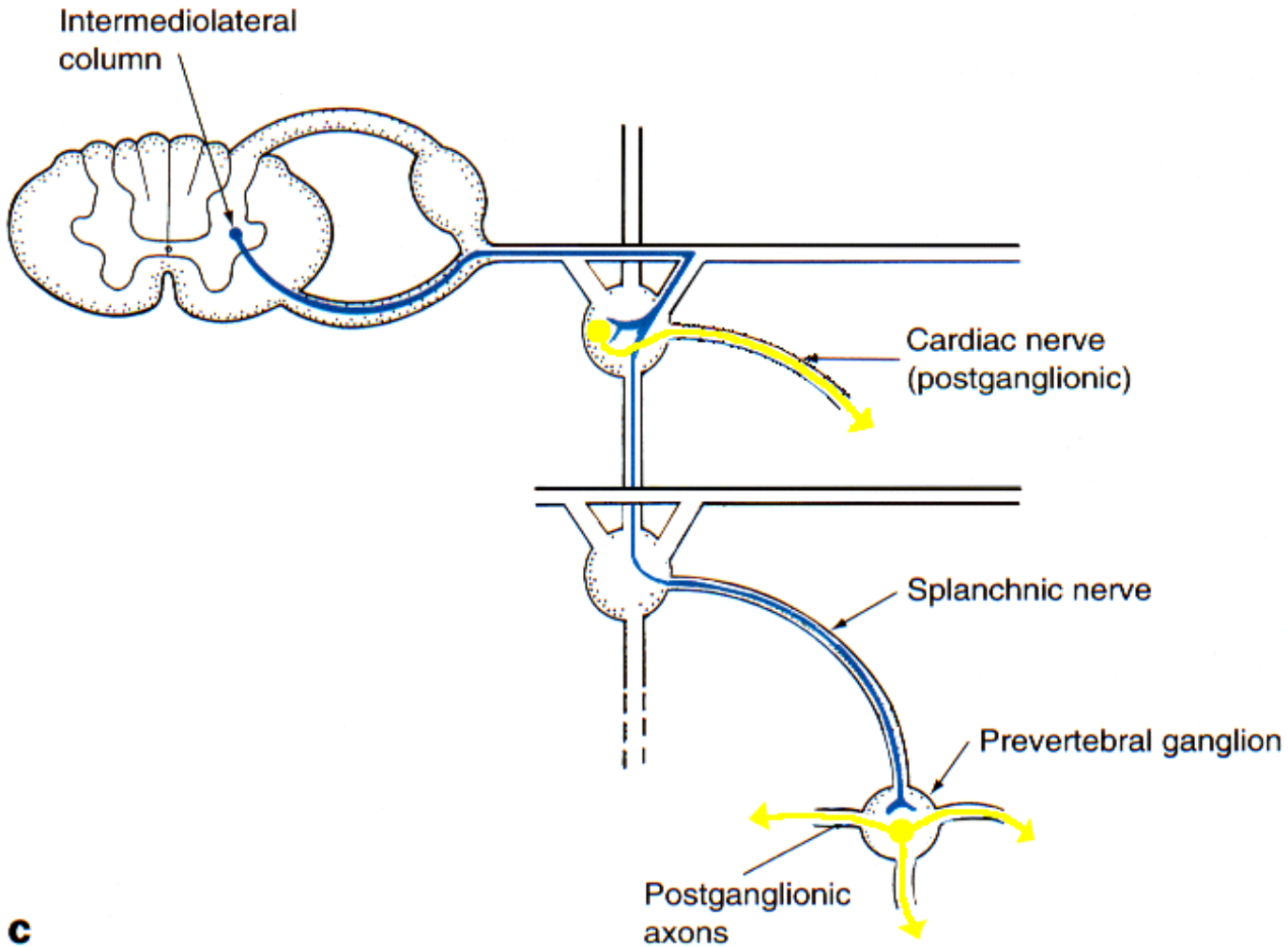


- 1 - ncl. motorius (originis) n. III.
- 2 - ncl. motorius (originis) n. IV.
- 3 - ncl. motorius (originis) n. VI.
- 4 - ncl. motorius (originis) n. XII.
- 5 - ncl. motorius (masticatorius) n. V.
- 6 - ncl. motorius (originis) n. VII.
- 7 - ncl. motorius (originis) n. IX., X., et XI.
(ncl. ambiguus)
- 8 - ncl. parasympathicus n. III (ncl. E.W.)
- 9 - ncl. parasympathicus n. VII.
- 10 - ncl. parasympathicus n. IX.
- 11 - ncl. parasympathicus n. X.
- 12 - ncl. solitarius
- 13 - ncl. spinalis n. V.
- 14 - ncl. principalis n. V.
- 15 - ncl. mesencephalicus n. V.
- 16 - ncll. cochleares et vestibulares

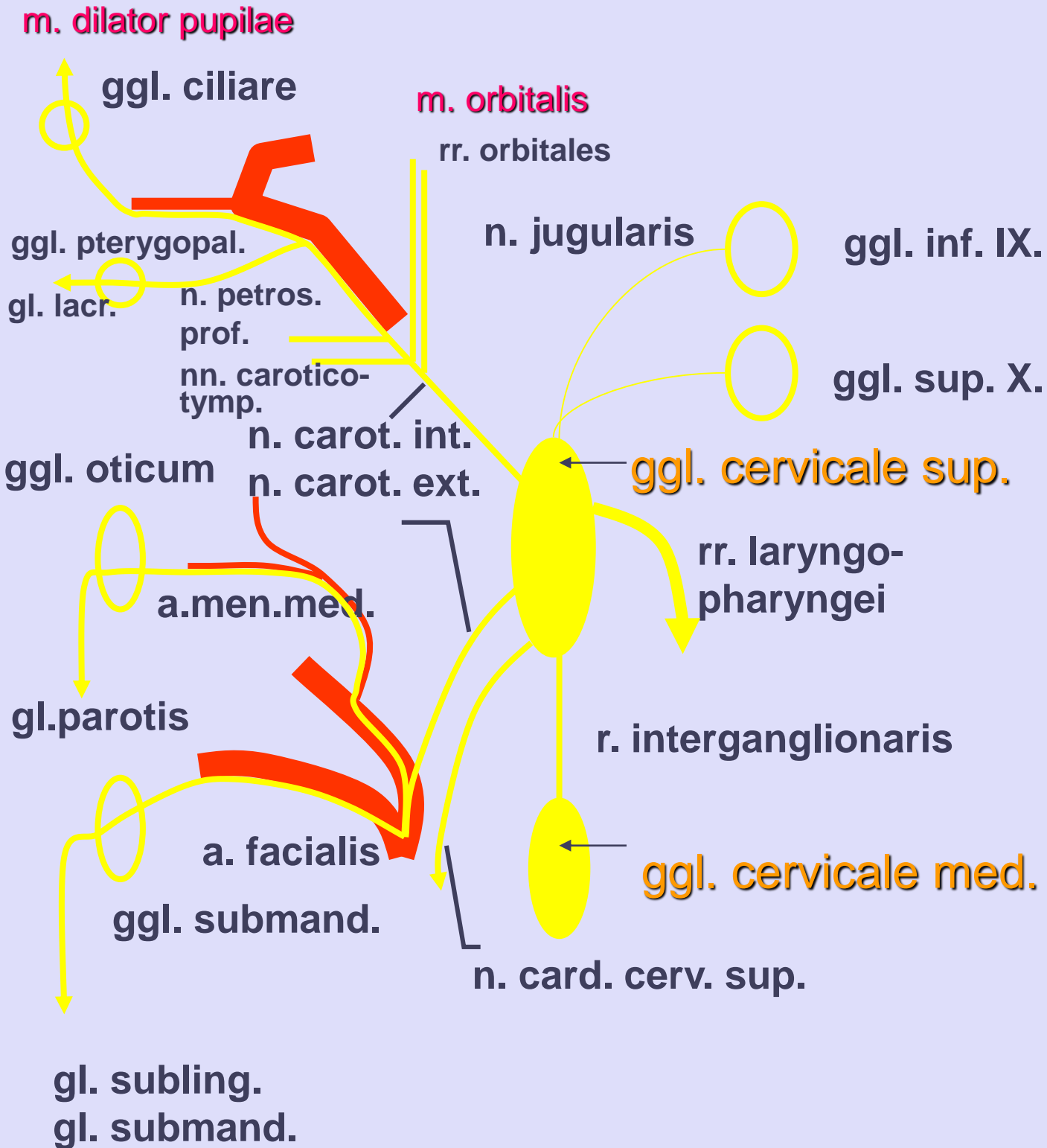
A pattern of connections of sympathetic preganglionic axons I-II



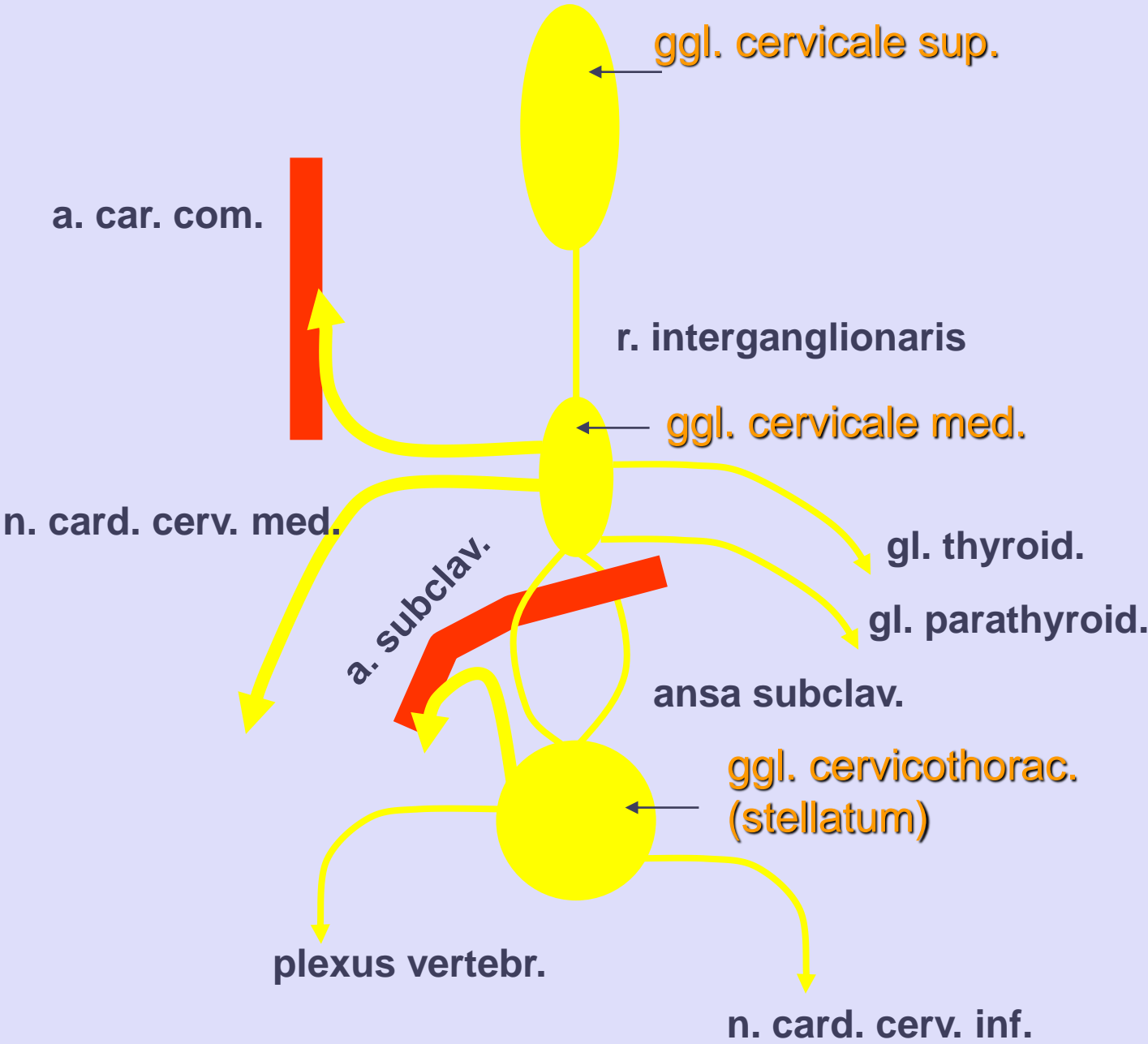
A pattern of connections of sympathetic preganglionic axons III



Ggl. cervicale sup.



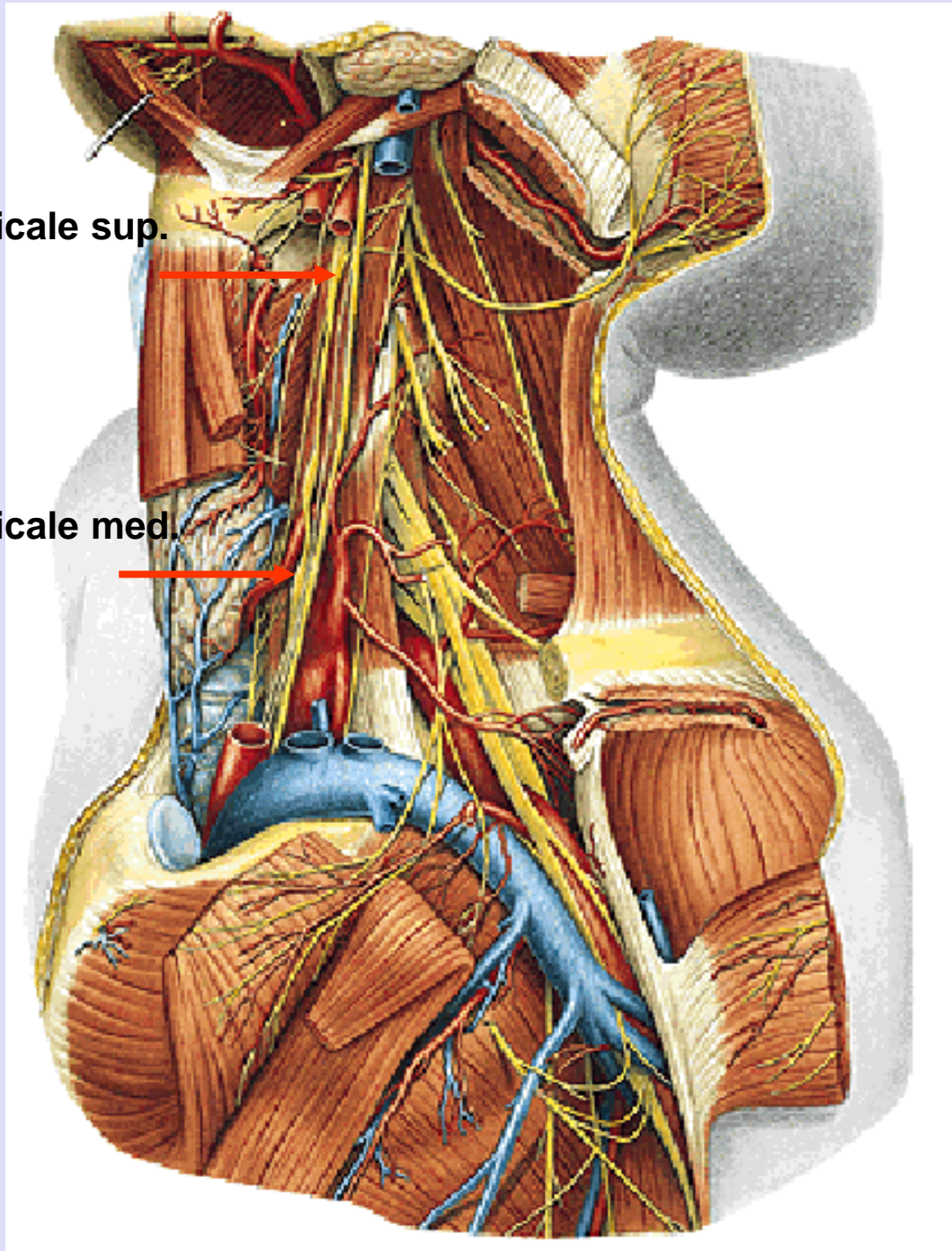
Ggl. cervicale med. et stellatum



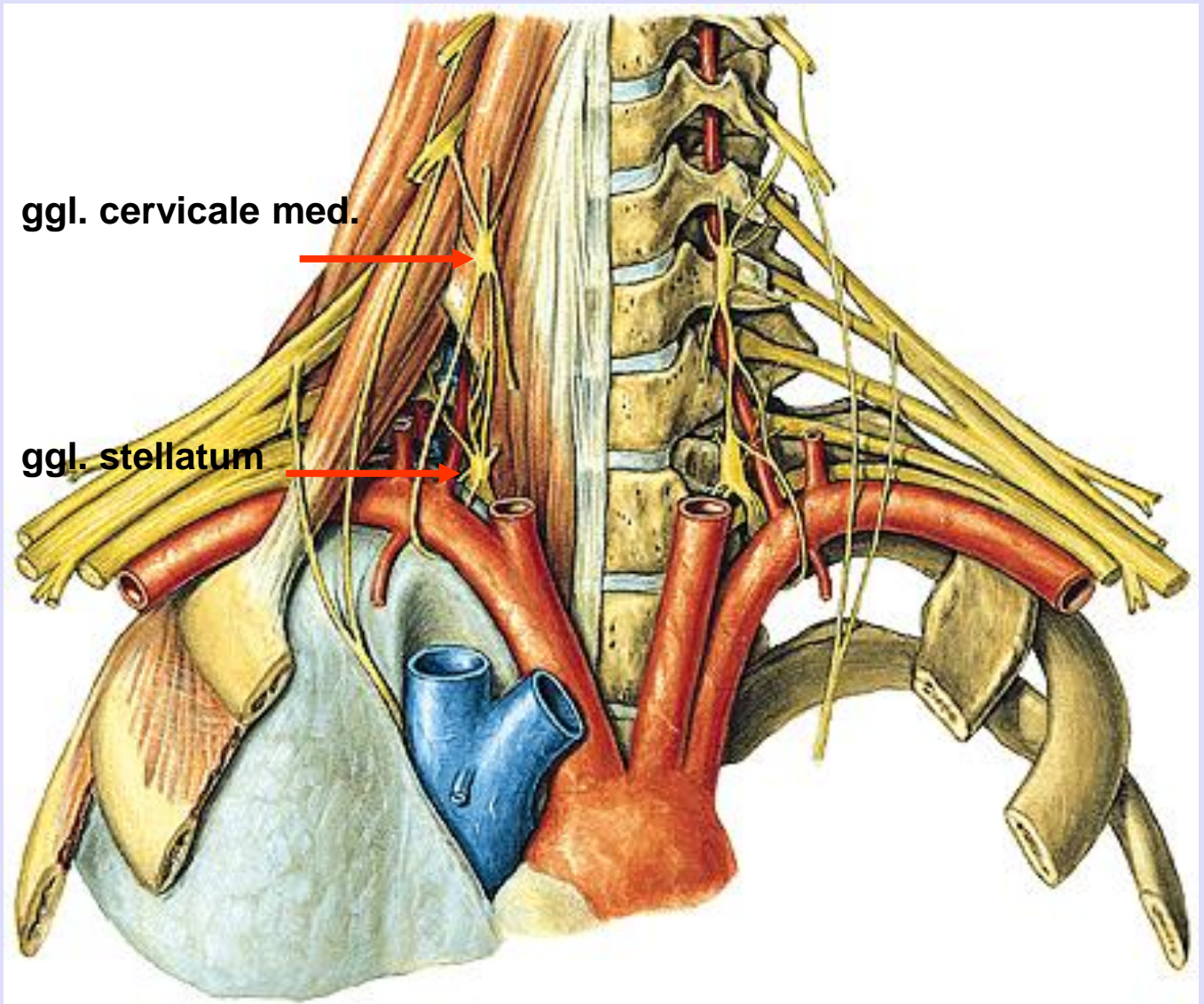
Ganglion cervicale sup. et med.

ggl. cervicale sup.

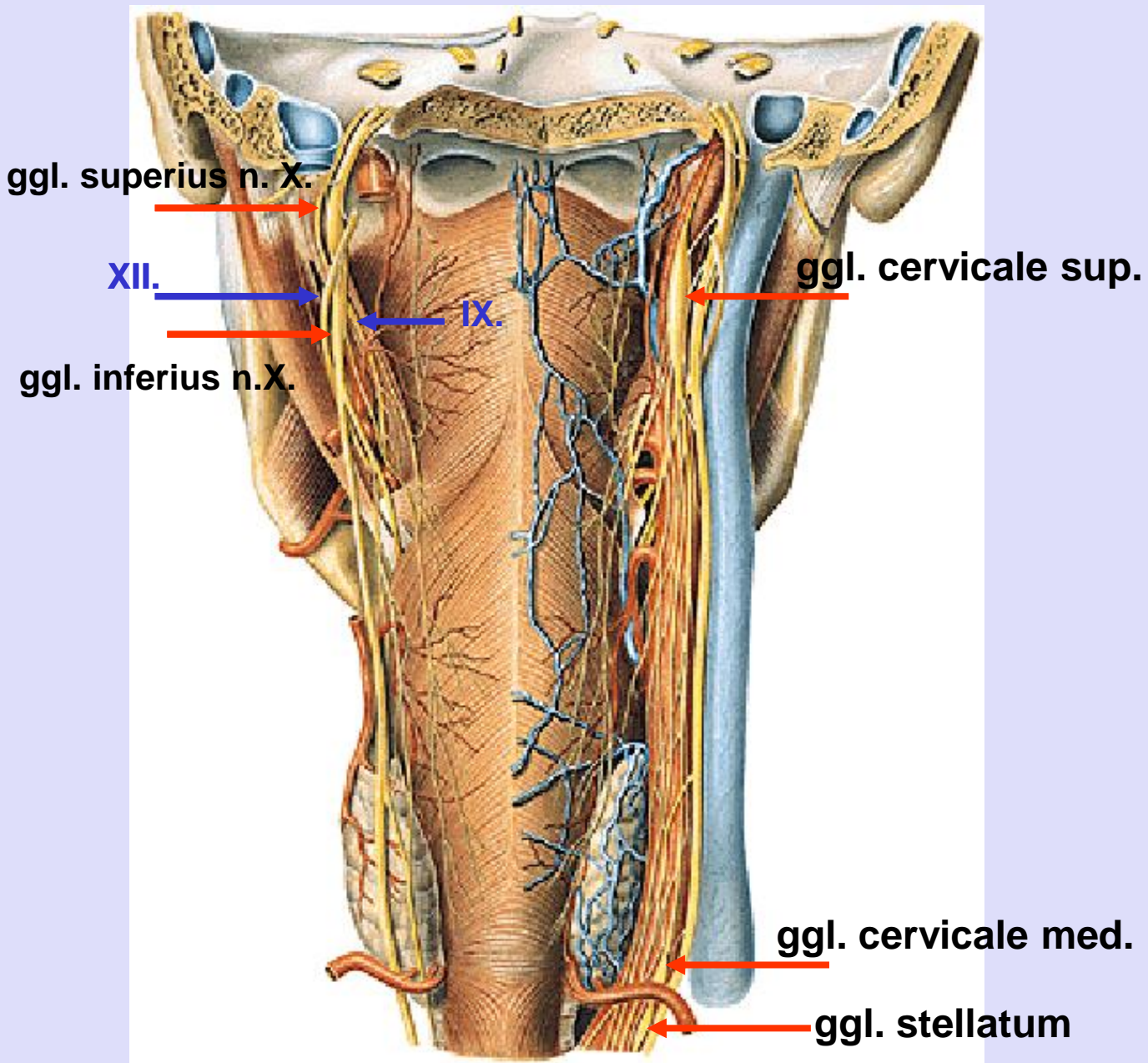
ggl. cervicale med.



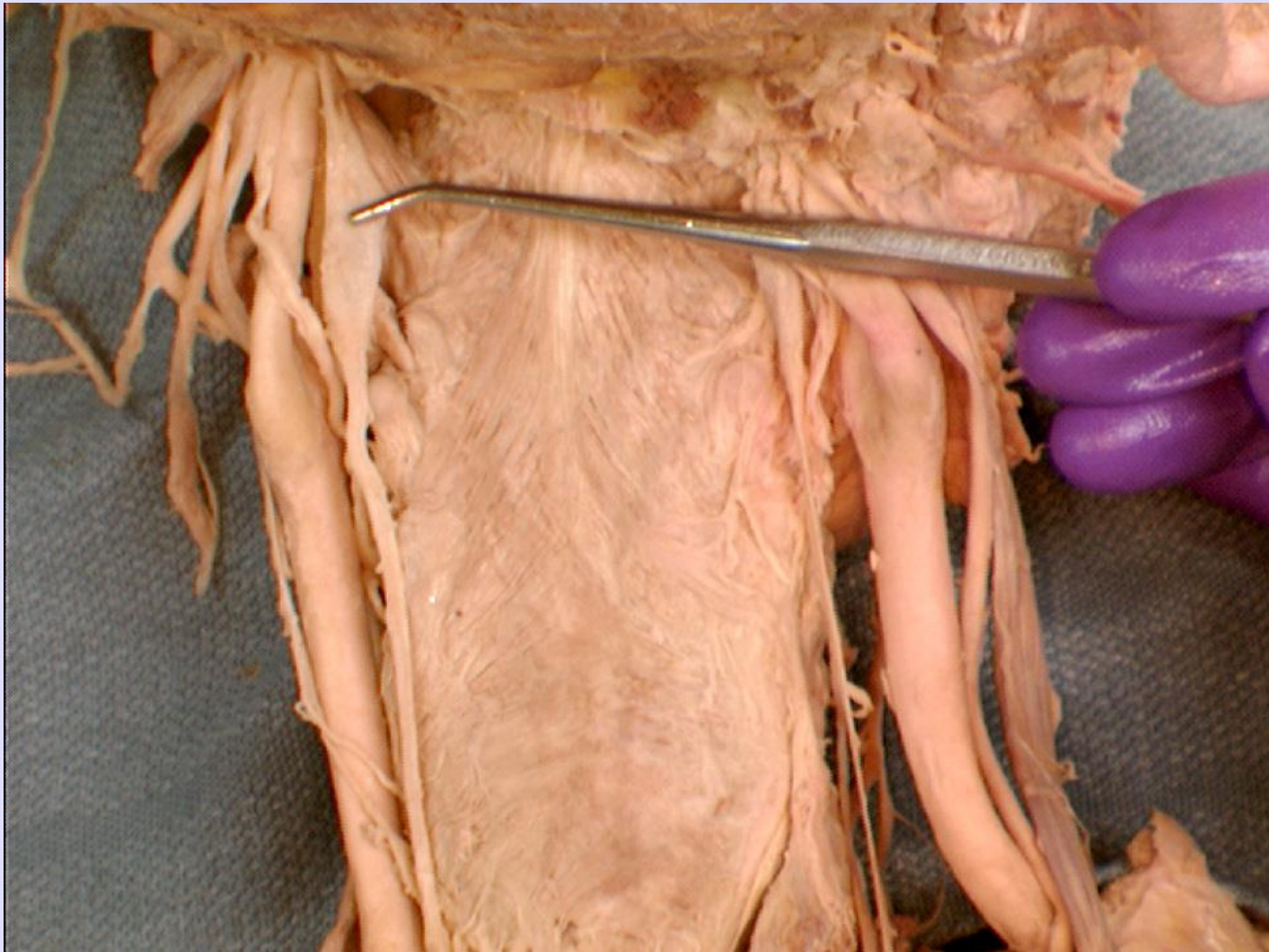
Ganglion cervicale med. et stellatum



Ganglion cervicale sup. et med.



GANGLION CERVICALE SUP.



INNERVATION OF THE HEART

ggl. cervicale sup.



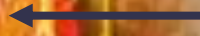
ggl. cervicale med.



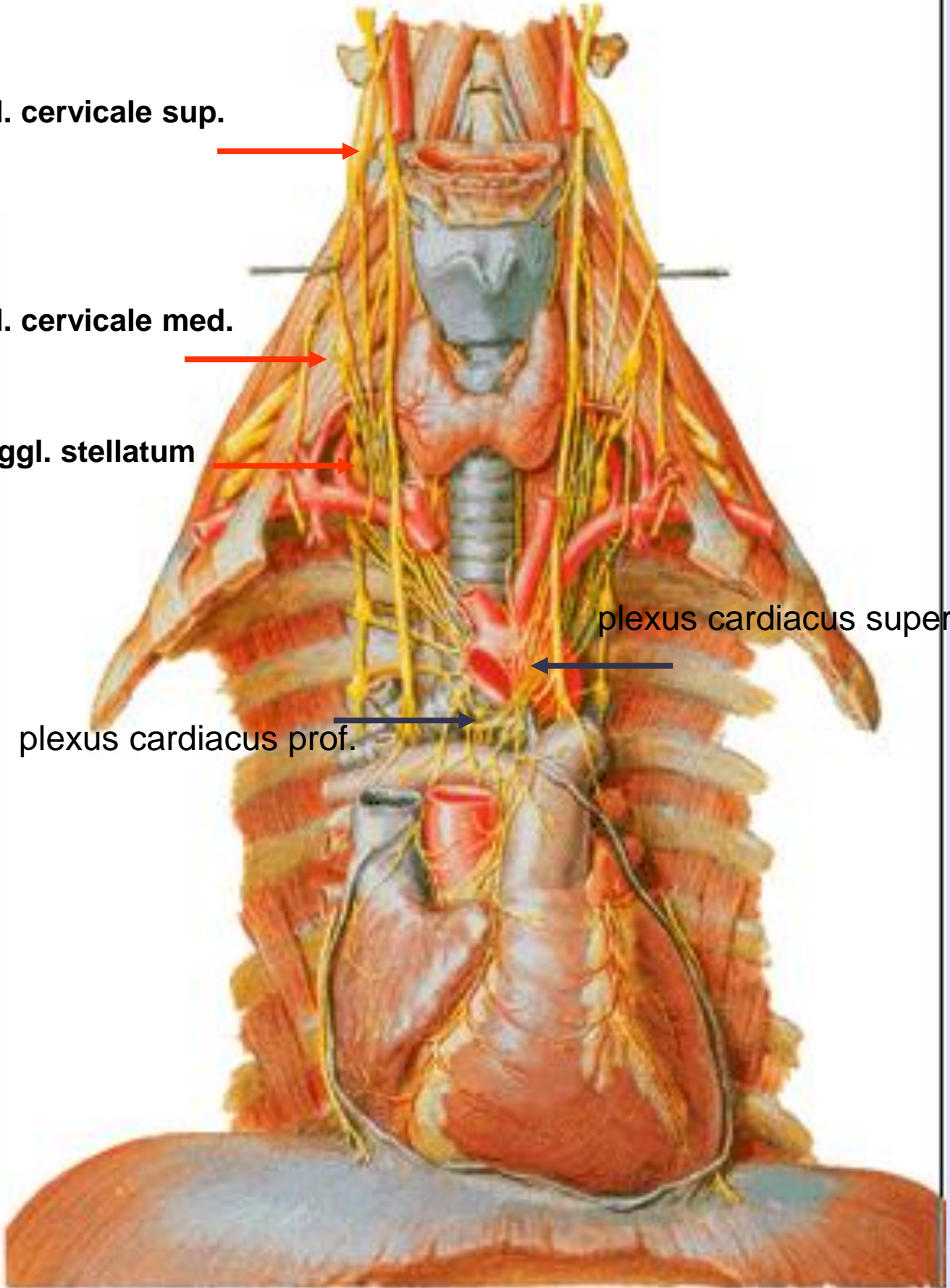
ggl. stellatum

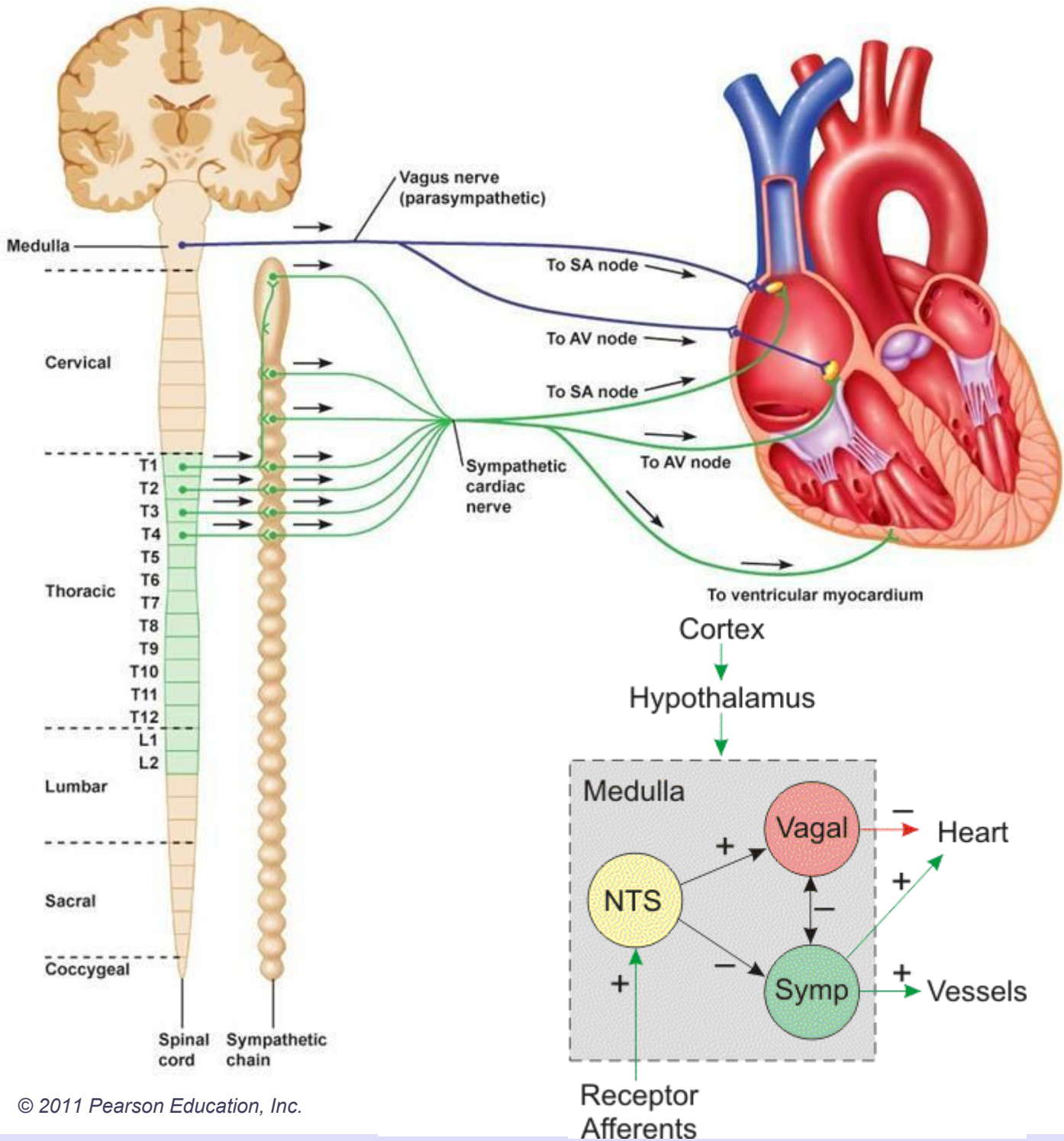


plexus cardiacus superf.



plexus cardiacus prof.



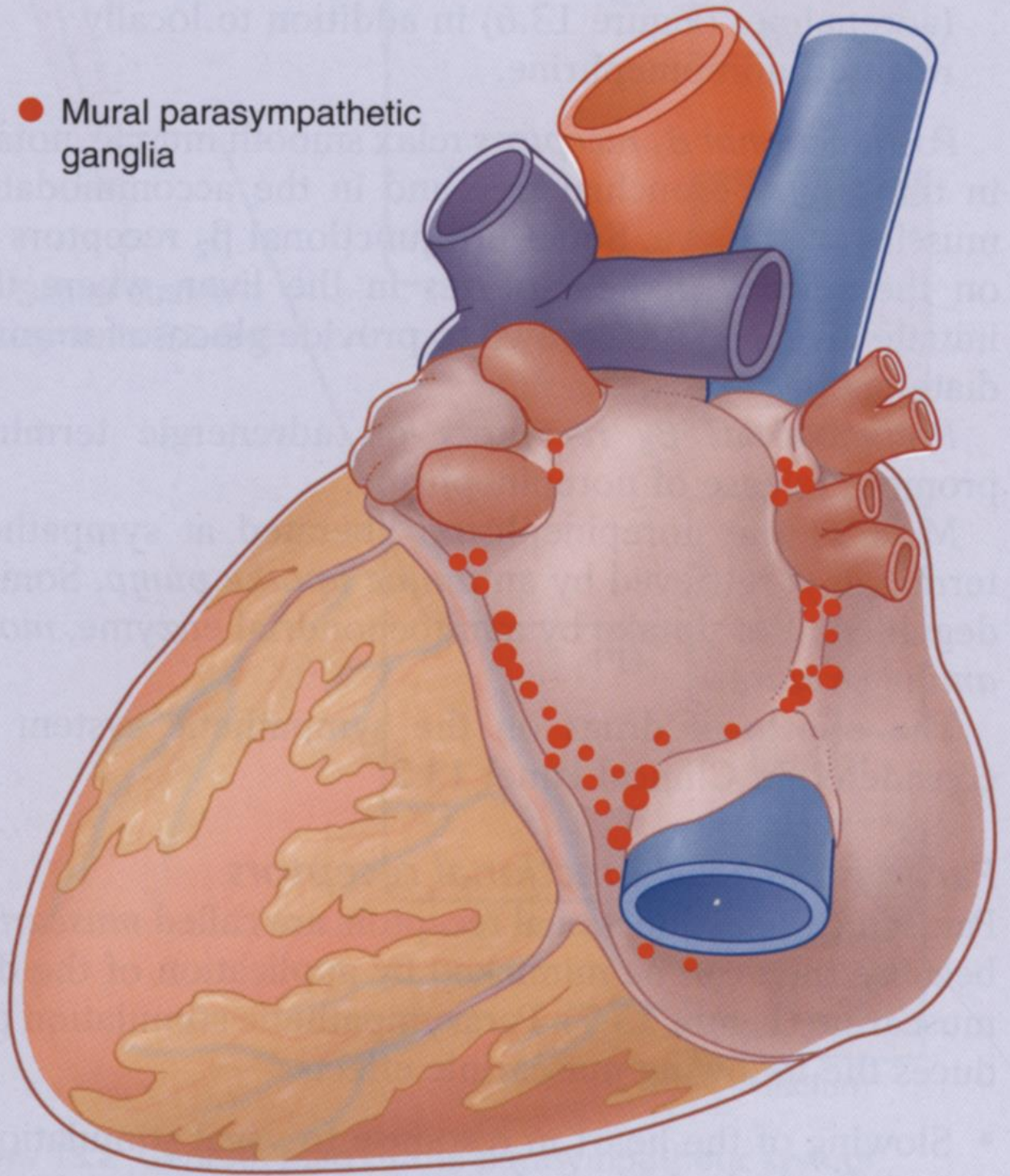


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nucleus tractus solitarius (NTS)

<https://cvphysiology.com/>

- Mural parasympathetic ganglia



PARAVERTEBRAL GANGLIA

Th1

rr. vasculares
- from all ganglia

nn. cardiaci th.
rr. pulmonares th.
rr. oesophagei

Th6

rr. comm. grisei
- from all ganglia

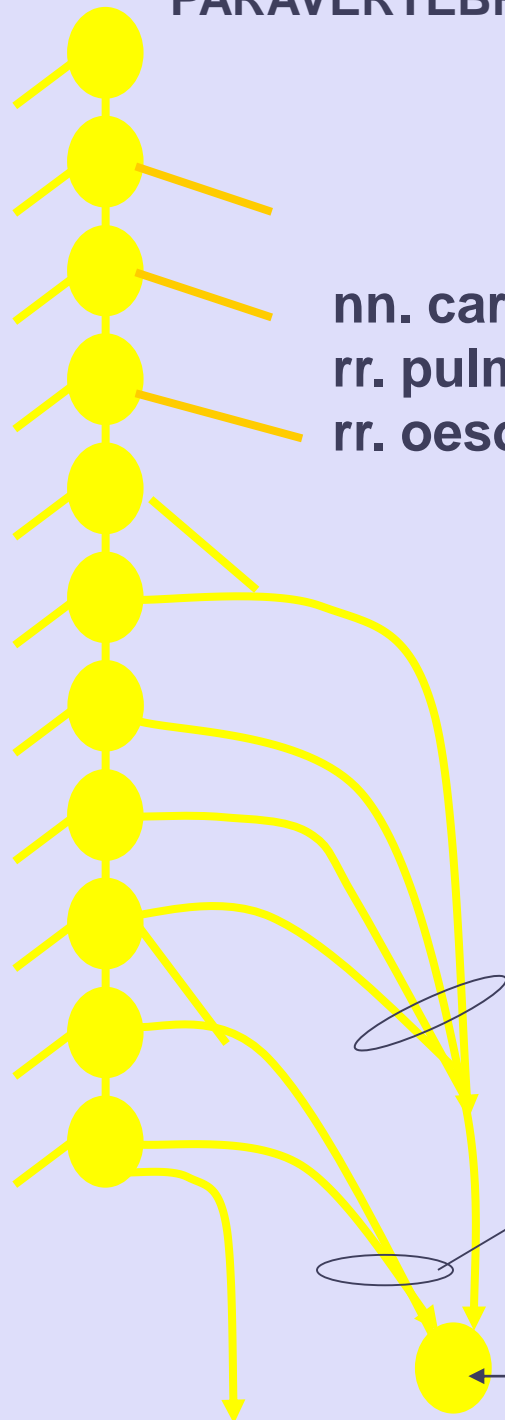
Th9

n. splanchnicus
major

n. splanchnicus
minor

ggl. coeliacum
(prevertebral ggl.)

n. splanchnicus
imus (1/3)



Prevertebral ganglia

ggl. coeliacum

ggl. mesentericum superius

ggl. mesentericum inferius

ggl. aorticorenale

Plexus aorticus lumbalis

ggl./plexus coeliacus

plexus gastricus dx., sn.

plexus hepaticus

plexus lienalis

plexus duodenalis

plexus pancreaticus

plexus uretericus

plexus testicularis/ovaricus

ggl. mesentericum superius

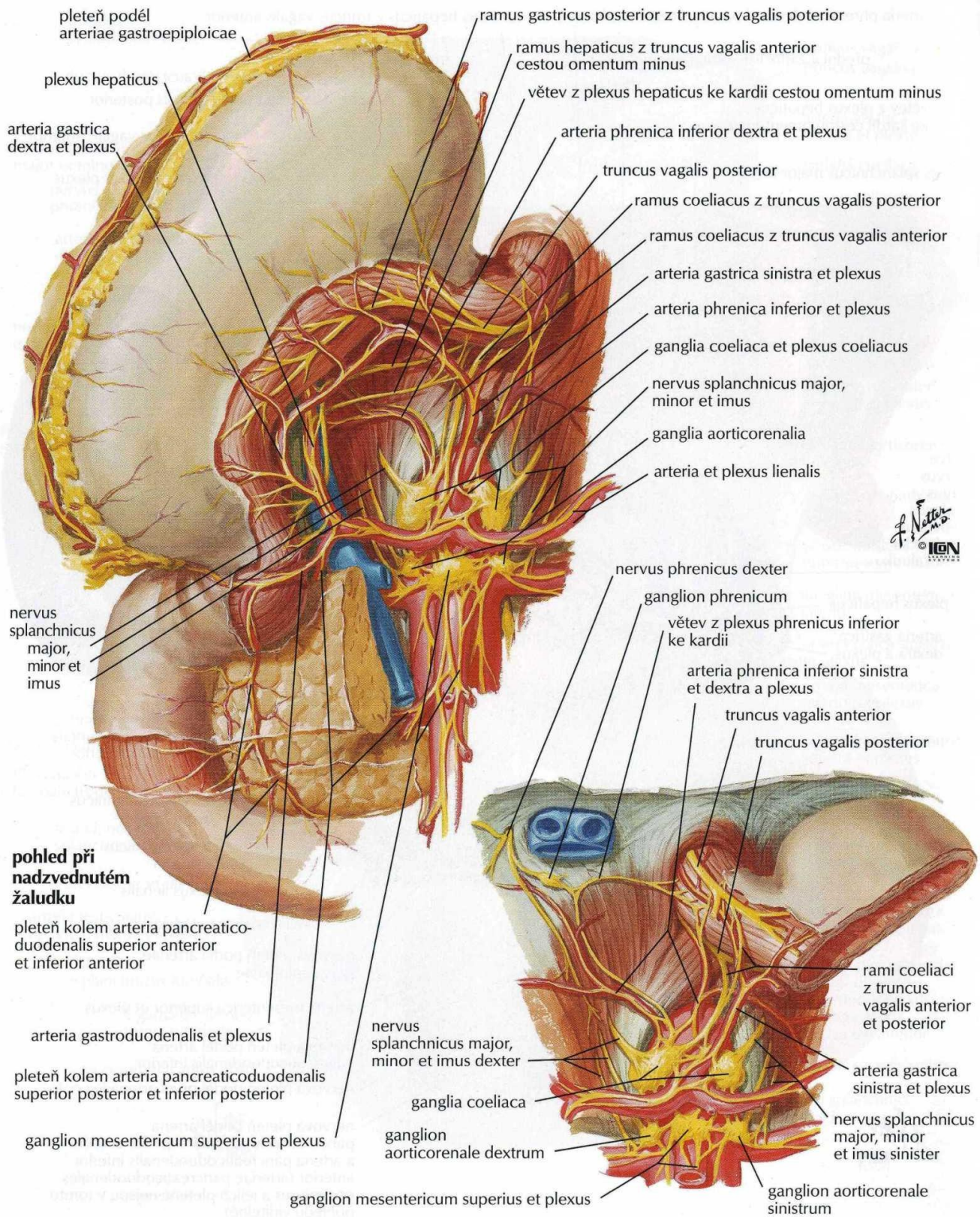
plexus mesentericus superior

ggl. mesentericum inferius

plexus mesentericus inferior

plexus rectalis superior

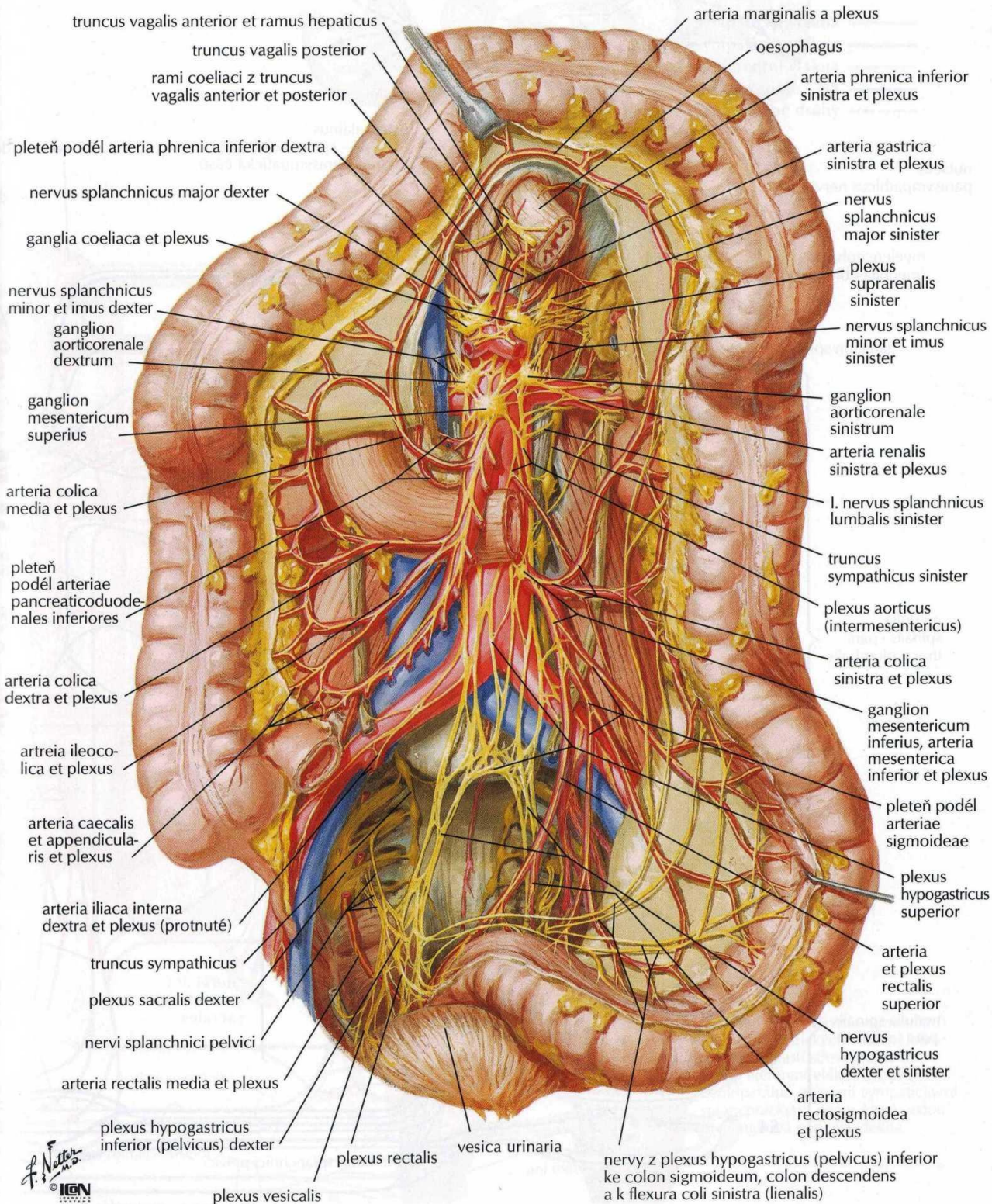
Plexus hypogastricus superior et inferior

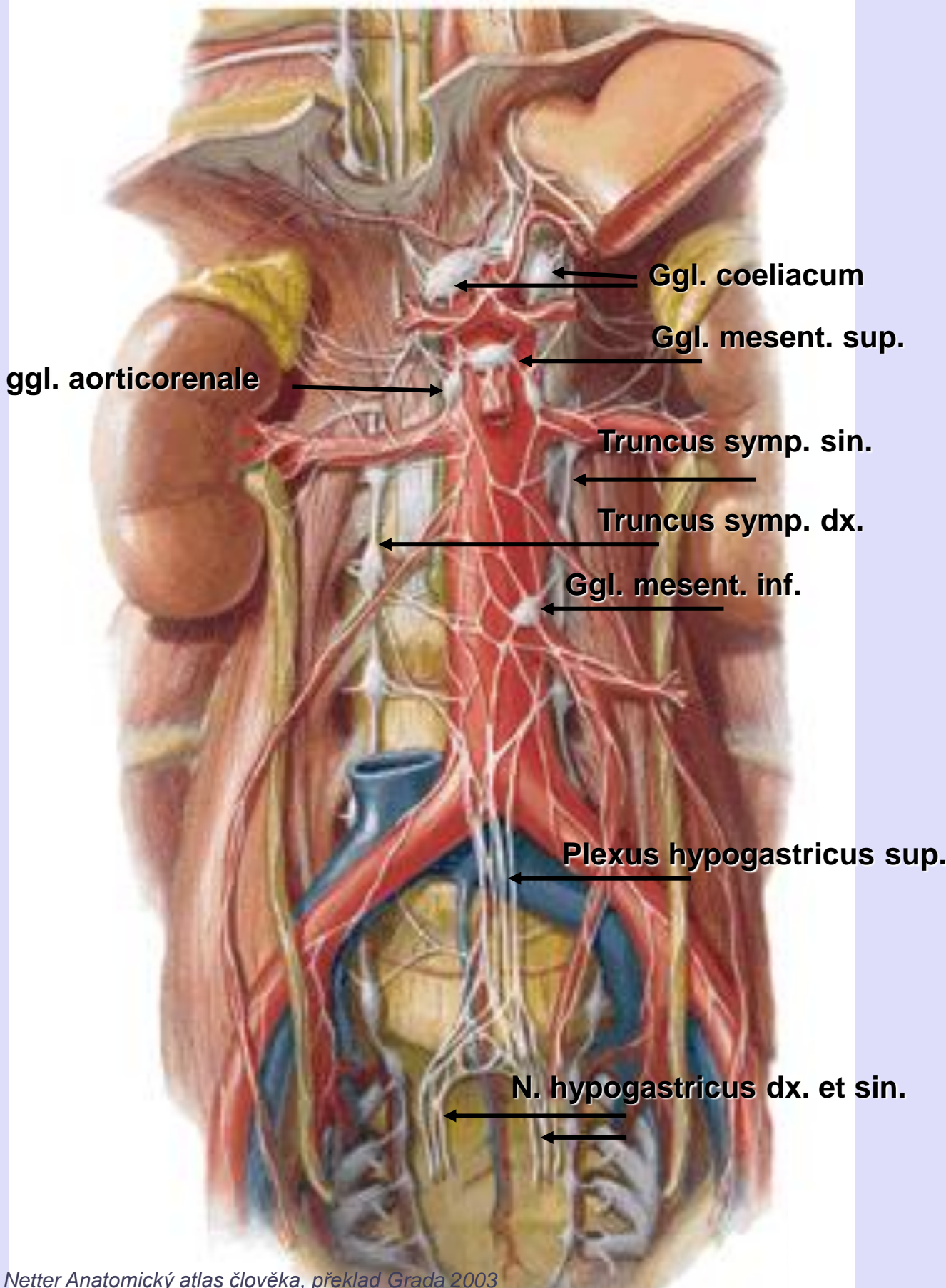


F. H. Netter M.D.
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 WASHINGTON

Nervy tlustého střeva

NERVY KONEČNÍKU VIZ TAKÉ TABULE 159, 390 – 393





Ggl. coeliacum

Ggl. mesent. sup.

ggl. aorticorenale

Truncus symp. sin.

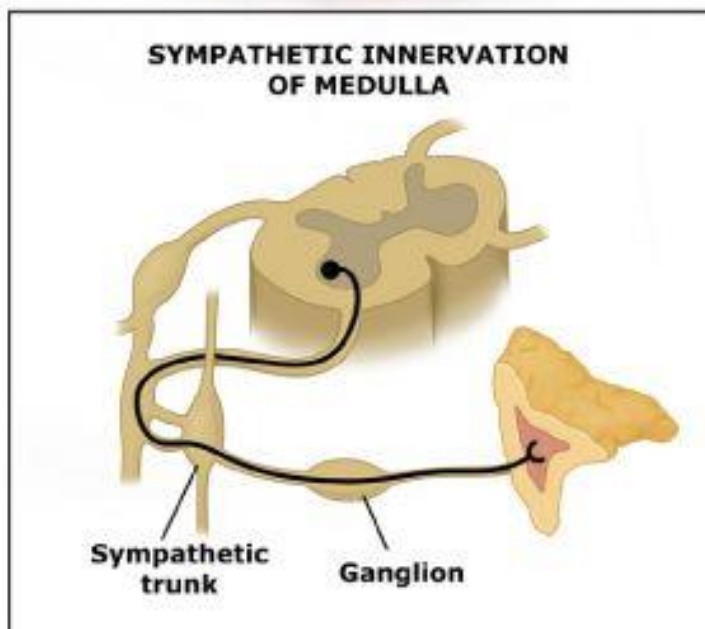
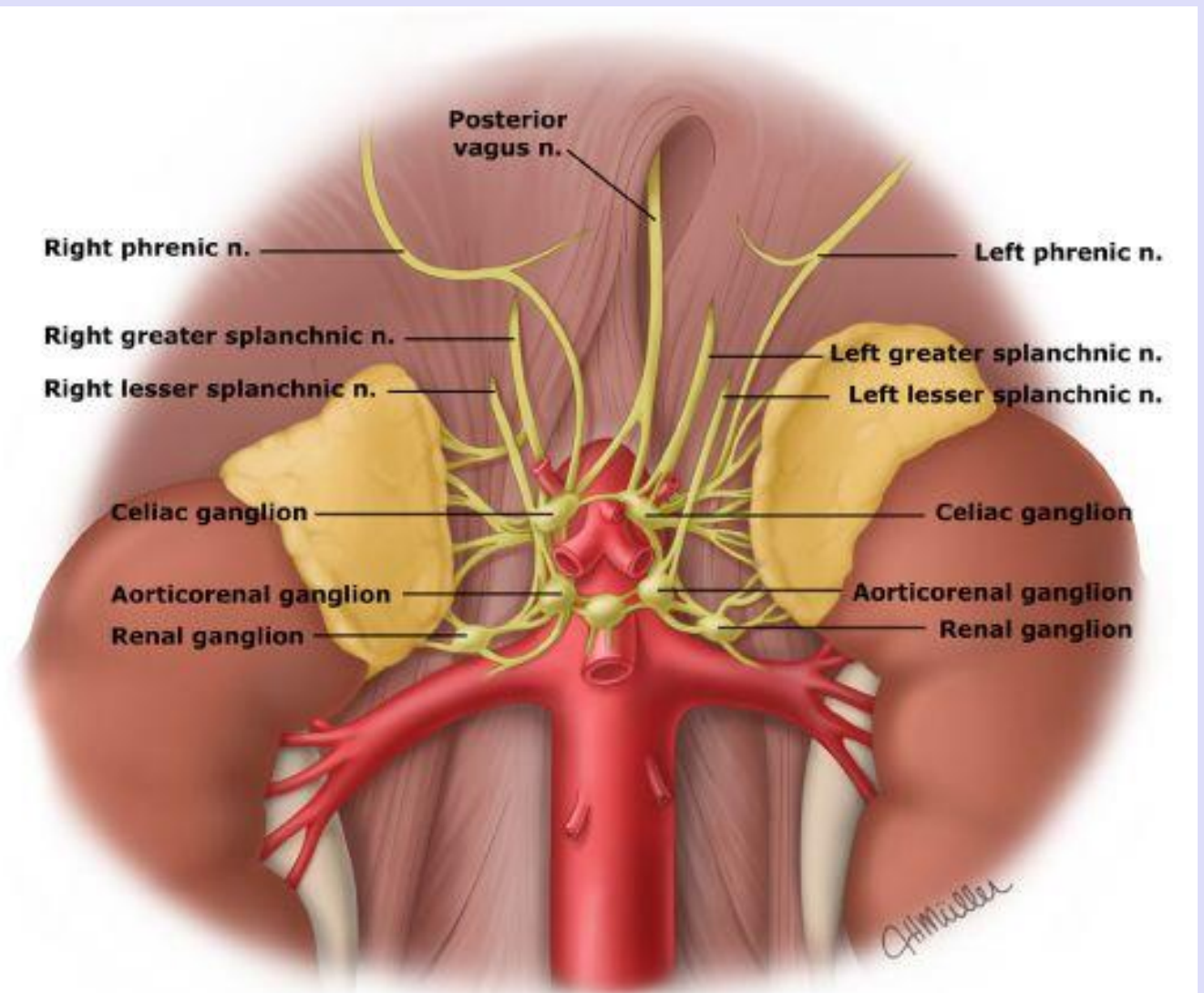
Truncus symp. dx.

Ggl. mesent. inf.

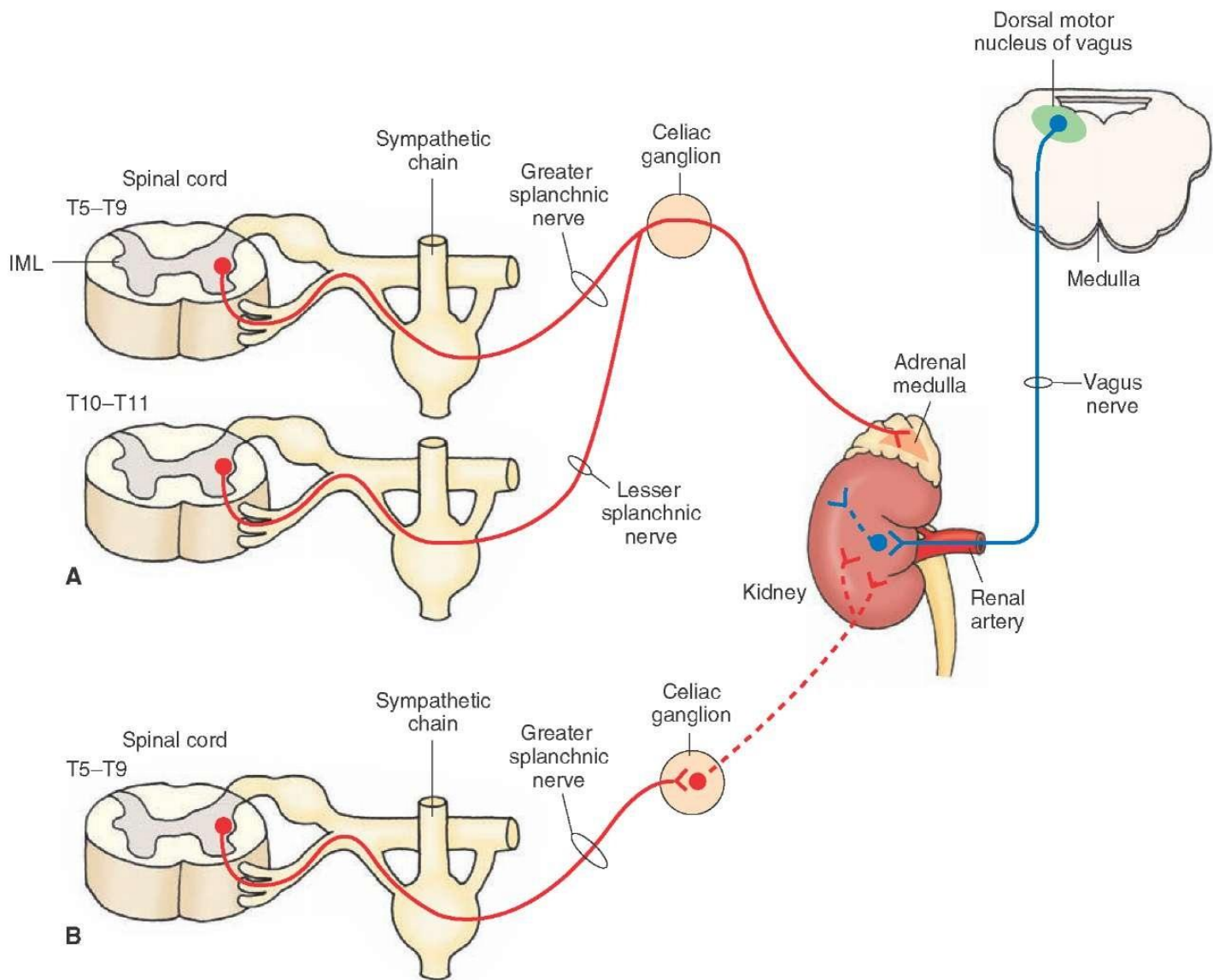
Plexus hypogastricus sup.

N. hypogastricus dx. et sin.

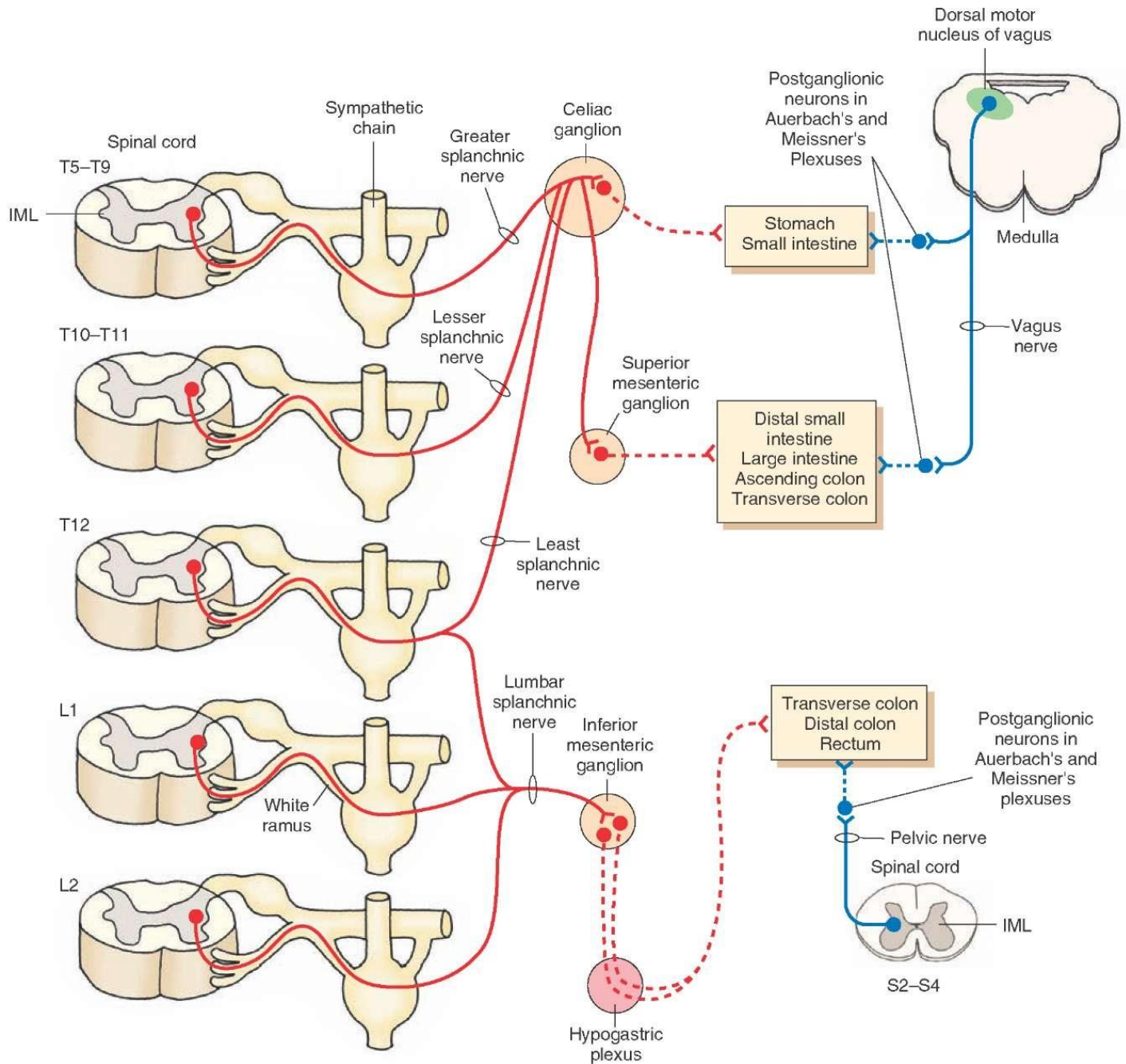
Sympathetic innervation of the suprarenal gland medulla



Sympathetic innervation of the suprarenal gland medulla

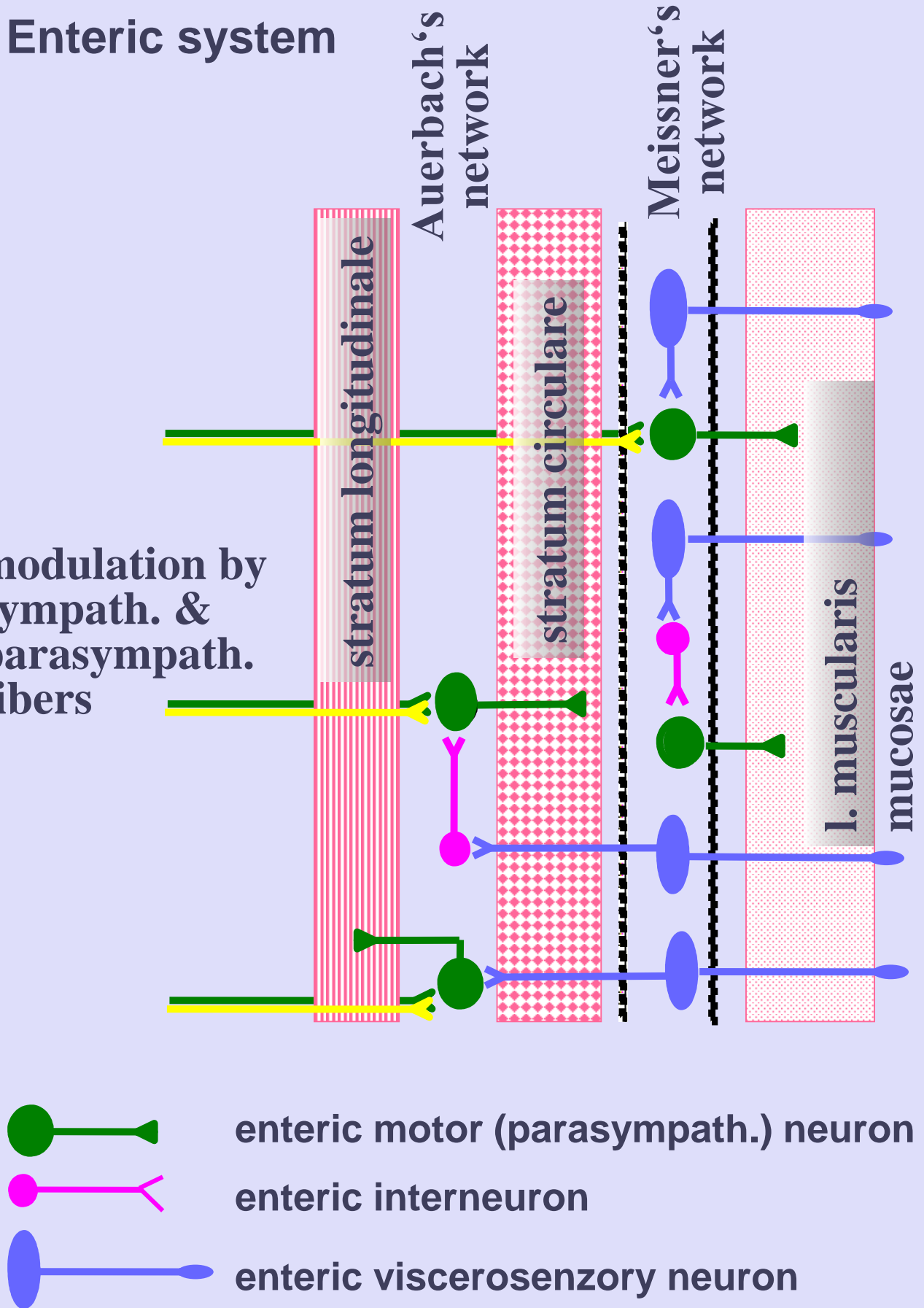


ANS innervation of the alimentary tube



Enteric system

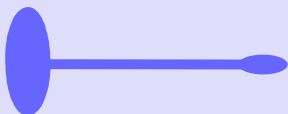
modulation by
sympath. &
parasympath.
fibers



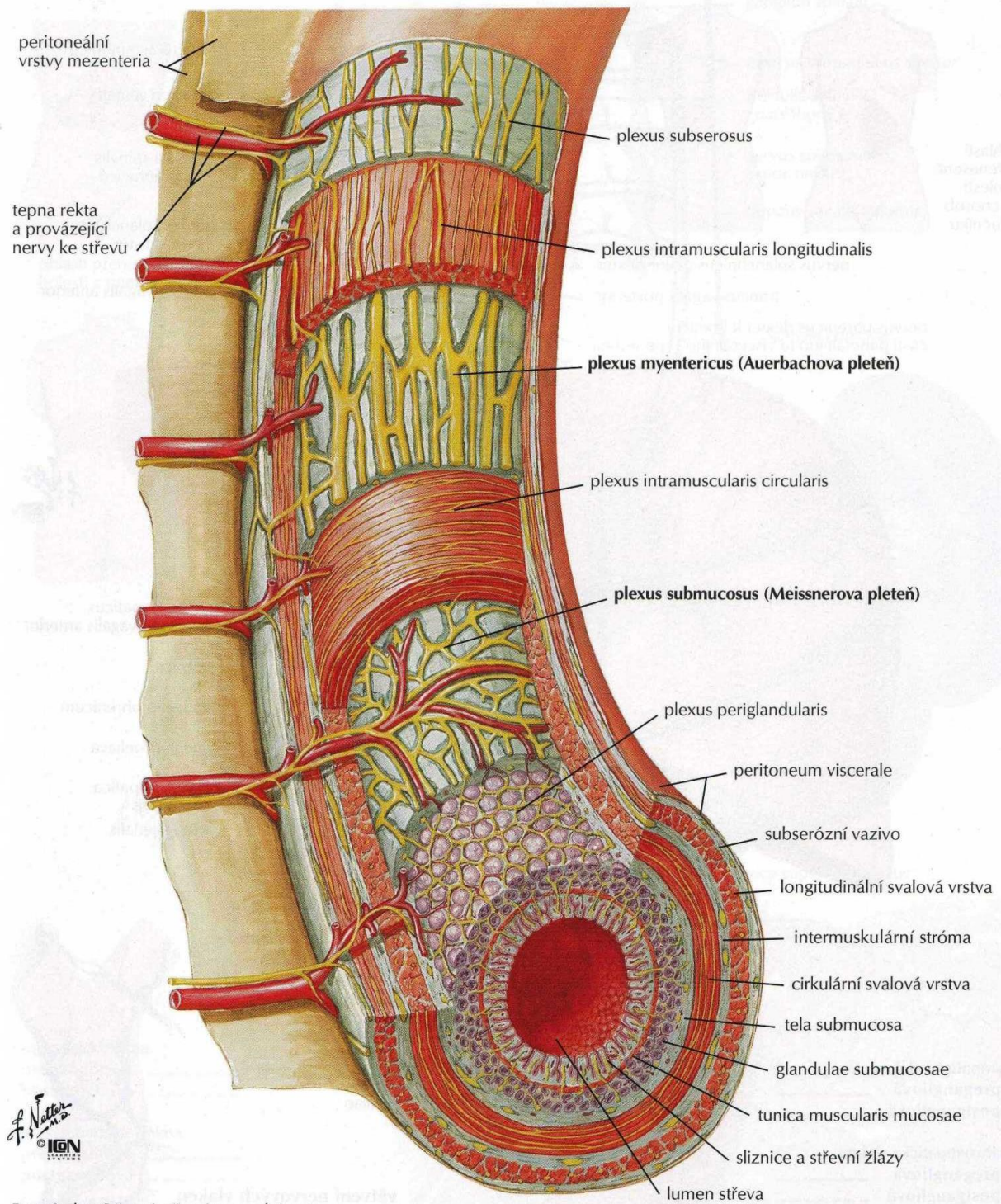
enteric motor (parasympath.) neuron



enteric interneuron



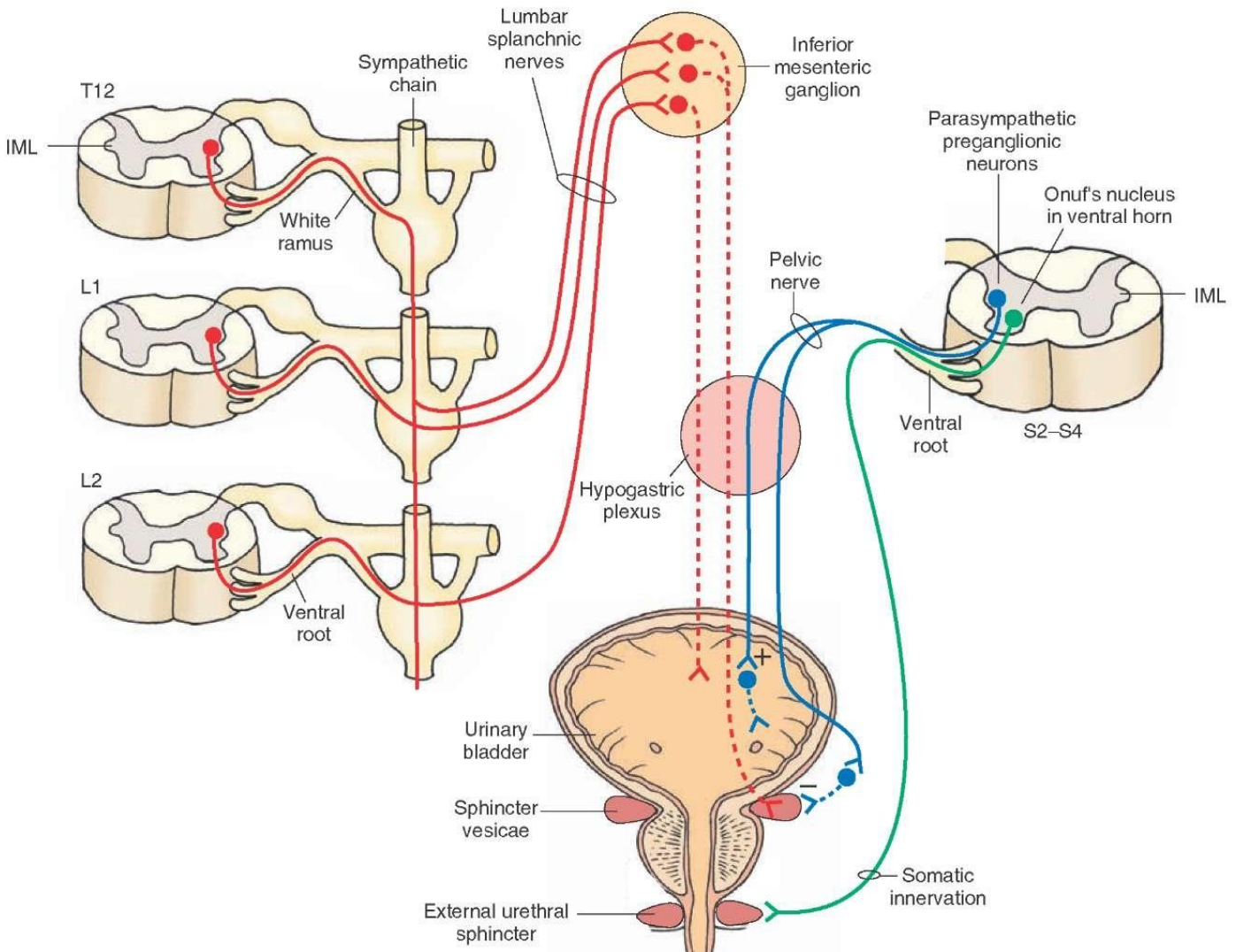
enteric viscerosensory neuron



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Poznámka: Střevní stěna je na schématu znázorněna mnohem silnější než je ve skutečnosti.

Micturation



Traditionally, activation of sympathetic fibers results in relaxation of the detrusor muscle and contraction of the sphincter located at the neck of the bladder.

Recently, sympathetic fibers are primarily distributed to the blood vessels in the bladder. The sympathetic fibers play an important role during ejaculation in the male.

Sympathetic activation causes contraction of the sphincter vesicae during ejaculation and prevents seminal fluid from entering the bladder.

Activation of parasympathetic fibers results in contraction of the detrusor muscle of the bladder and relaxation of the sphincter vesicae muscle.

Somatomotor innervation of the external urethral sphincter.