

**PERIPHERES NERVENSYSTEM
(SYSTEMA NERVOSUM PERIPHERICUM)
ARMGEFLECHT (PLEXUS BRACHIALIS)**

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24. September 2019**

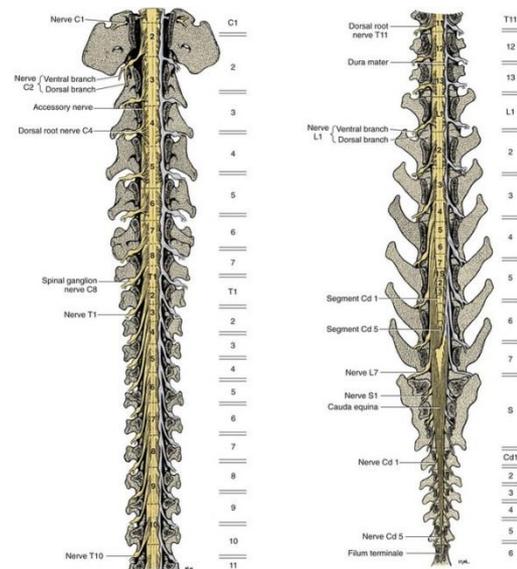
RÜCKENMARK (MEDULLA SPINALIS) ÄUßERE GESTALT, LAGE, GLIEDERUNG

- verbindet das Gehirn mit dem peripheren Nervensystem des Körpers

- liegt im **Canalis vertebralis**
- von **Liquor cerebrospinalis** und von den **Rückenmarkshäute** umgeben
- von **Atlas** bis in die Höhe des **1-2 Lumbalwirbels**

beinhaltet:

1. in **Kernen angeordneten Neurone**
2. **Faserbahnen**
3. **Eigenapparat**
4. **Fasern, die verschiedene Segmente des Rückenmark miteinander verbinden**



<https://criticalcaredvm.com/degenerative-myelopathy-spinal-cord-dogs/>

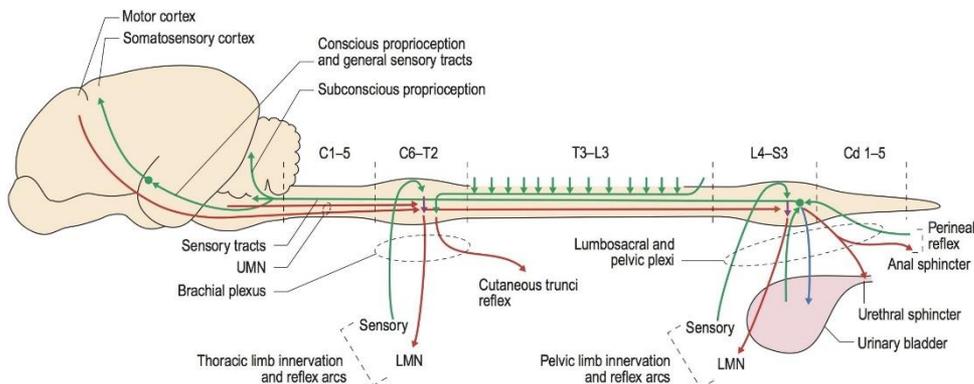
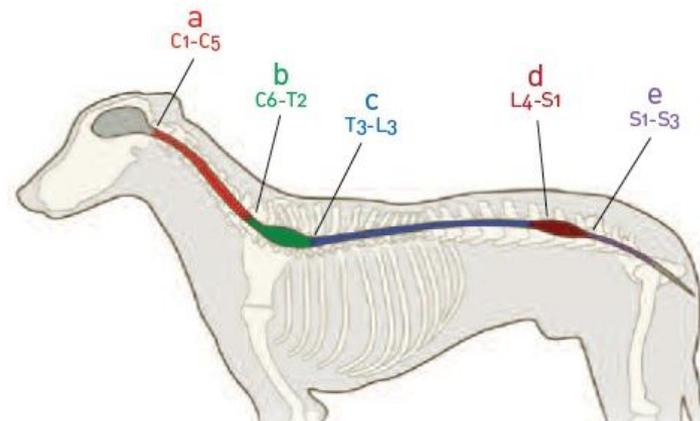


Fig. 13.15 **NeuroMap of the spinal cord.** Green indicates sensory systems (conveying tactile, thermal, proprioceptive and nociceptive stimuli), red identifies motor systems and blue identifies autonomic systems. UMN = upper motor neuron, LMN = lower motor neuron

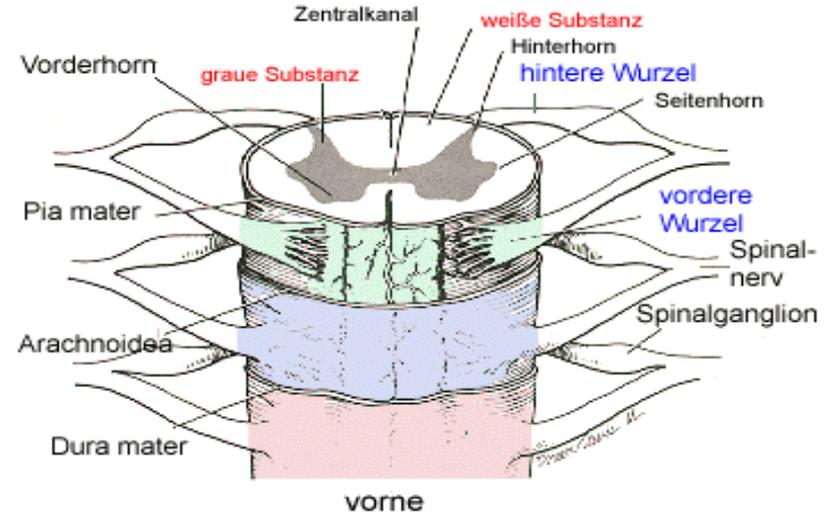
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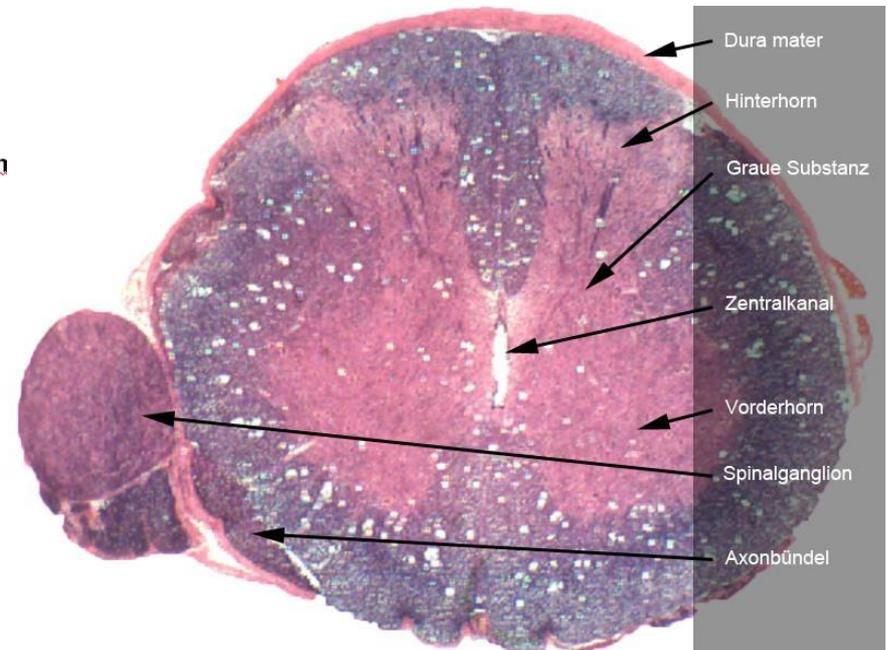
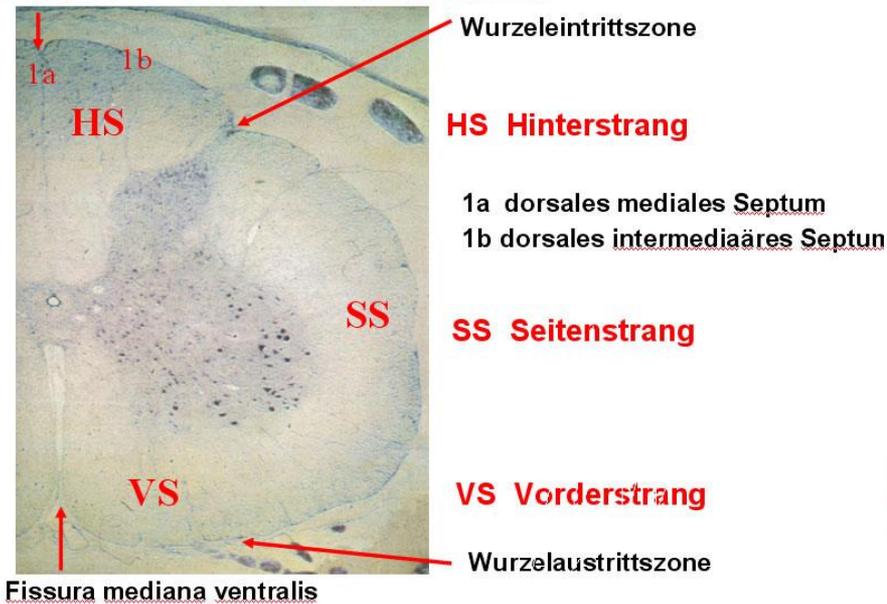
<https://vetgrad.com/show10MinuteTopUp.php?type=&Entity=10MinuteTopUps&ID=21>

RÜCKENMARKSQUERSCHNITT

1. SUBSTANTIA GRISEA (graue Substanz)
2. SUBSTANTIA ALBA (weiße Substanz)
3. CANALIS CENTRALIS
4. SUBSTANTIA INTERMEDIA CENTRALIS



Rückenmark: weiße Substanz



RÜCKENMARKSQUERSCHNITT

I. SUBSTANTIA GRISEA

- schmetterlingsähnliche Konfiguration
- enthält die Perikaryen der Rückenmarksneurone

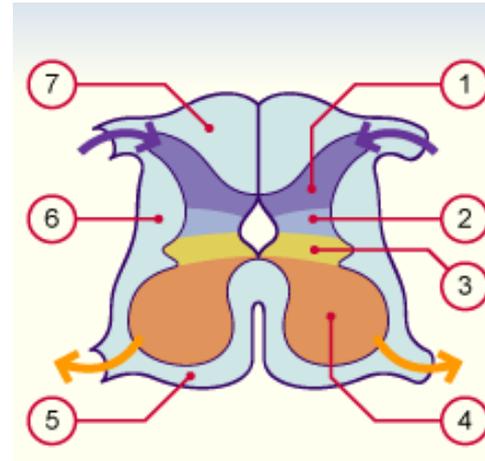
TEILE:

1. CORNU ANTERIUS (VORDERHORN)

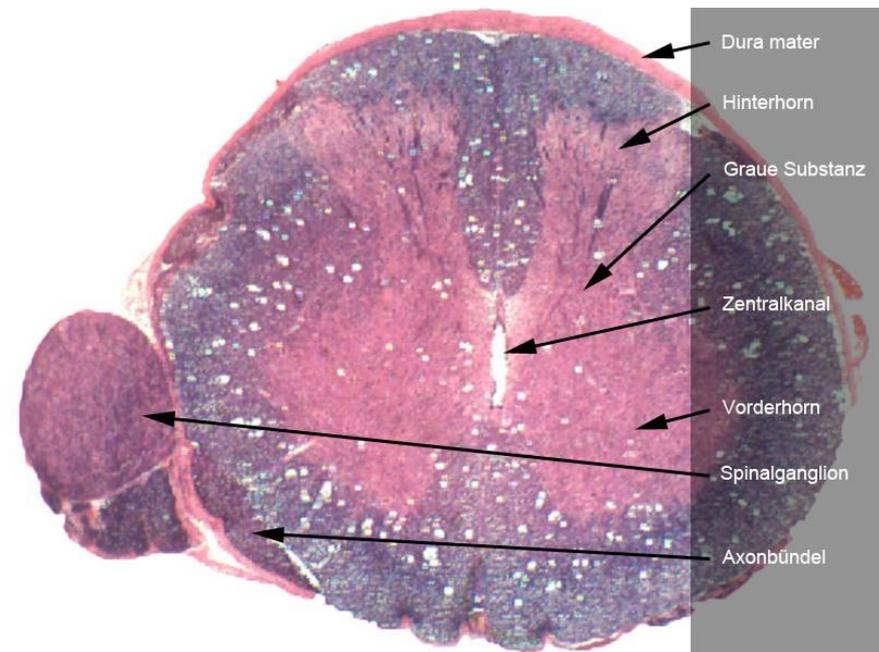
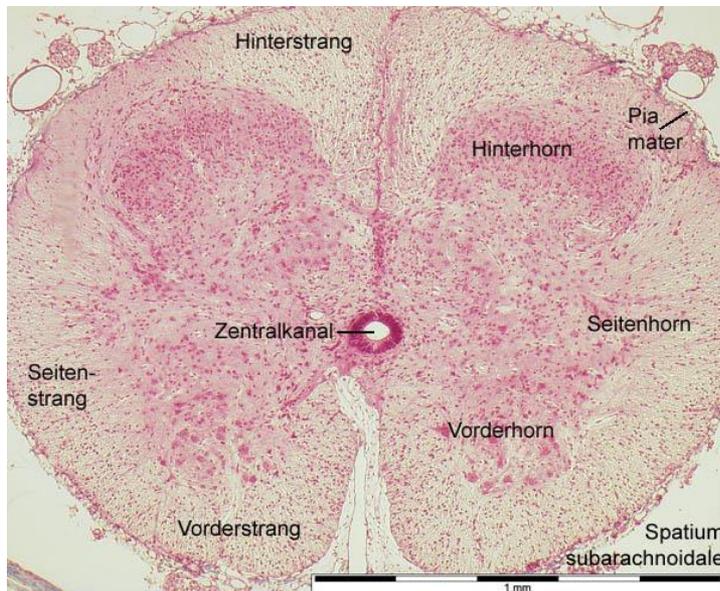
- enthält Motoneurone
- motorische Vorderwurzeln

2. CORNU POSTERIUS (HINTERHORN)

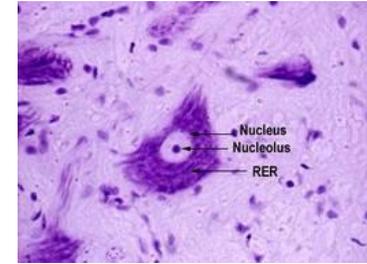
- enthält Neurone, die im Dienst der Sensibilität stehen
- sensible Hinterwurzeln



1. Hinterhorn
2. viscerosensibler Teil des Seitenhorns
3. visceromotorischer Teil des Seitenhorns
4. Vorderhorn
5. Vorderstrang
6. Seitenstrang
7. Hinterstrang



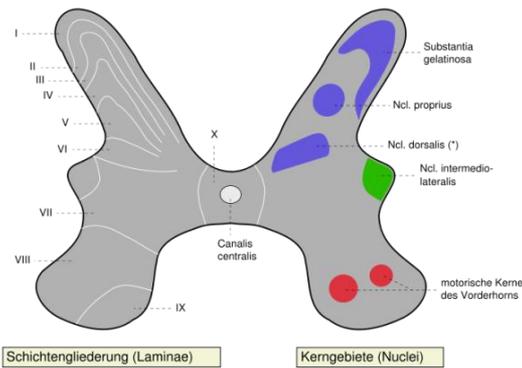
MIKROSKOPISCHE ANATOMIE DES RÜCKENMARKS VORDERHORN



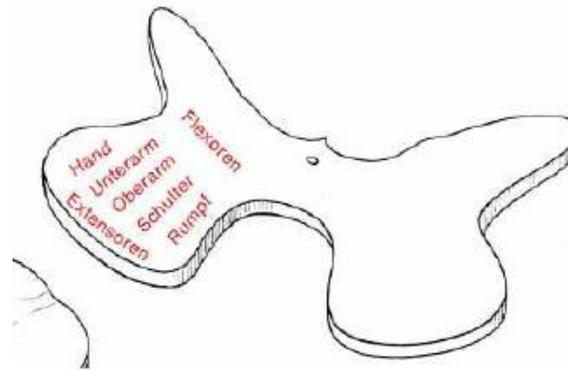
α -Motoneuron

ALPHA - MOTONEURONEN

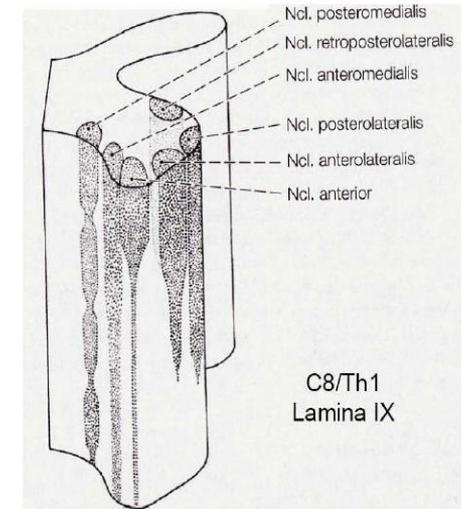
- große multipolare Motoneuronen
- die Axonen der Zellen verlassen das Rückenmark über die ventrale Wurzel zur quergestreiften Skelettmuskulatur
- die Motoneurone voneinander abgrenzbaren Kernen bilden – die einzelnen Muskelgruppen in der Peripherie
- zugeordnet werden - SOMATOTOPIE
- Transmitter der Motoneurone ist Acetylcholin



* auch Ncl. thoracicus posterior bzw. Stilling-Clarke



Die Motoneurone für die Flexoren (Beuger) liegen dorsal
Die Motoneurone für die Extensoren (Strecker) liegen ventral

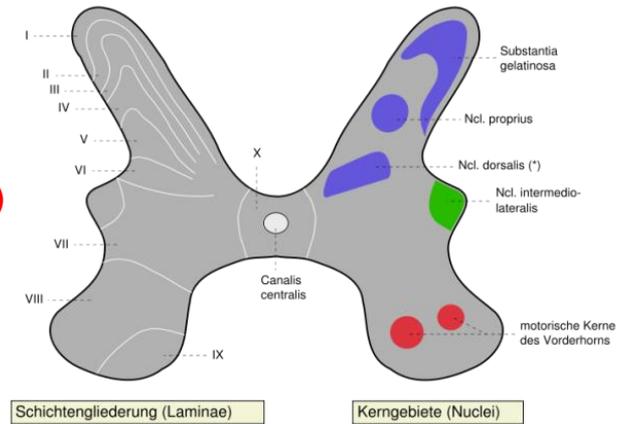


RÜCKENMARKSQUERSCHNITT

I. SUBSTANTIA GRISEA

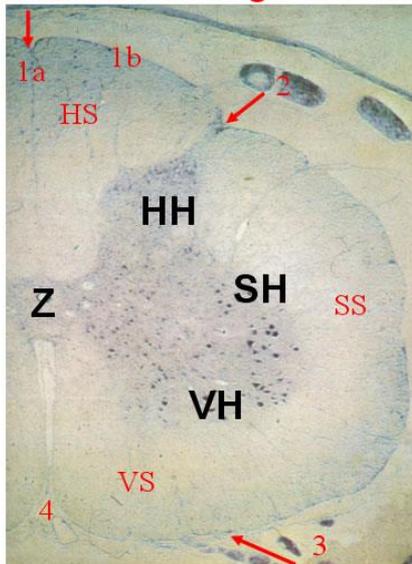
3. CORNU LATERALAE (SEITENHORN)

- im Bereich des Thorakalmarks und des Lumbalmarks (C8-L2)
- zwischen Vorder – und Hinterhorn
- enthält Neuronengruppen des vegetativen Nervensystems



* auch Ncl. thoracicus posterior bzw. Stilling-Clarke

Rückenmark: graue Substanz



HH Hinterhorn

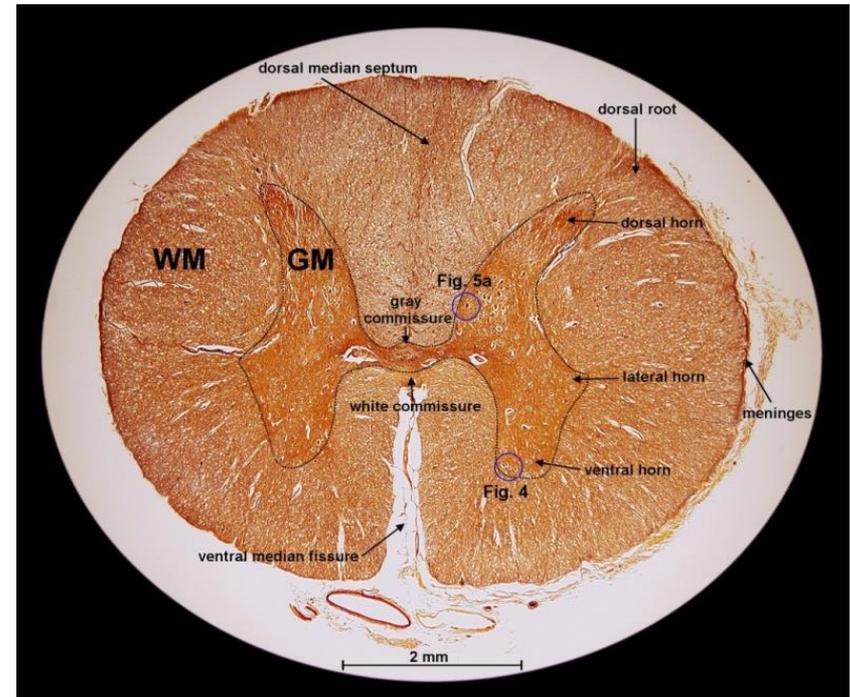
Randzone
Substantia gelatinosa
Ncl. Proprius

SH Seitenhorn
(laterale Zellsäule)

VH Vorderhorn

Z Zentralkanal

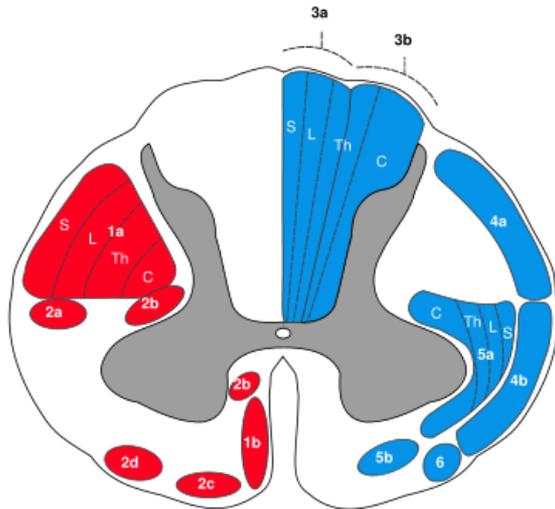
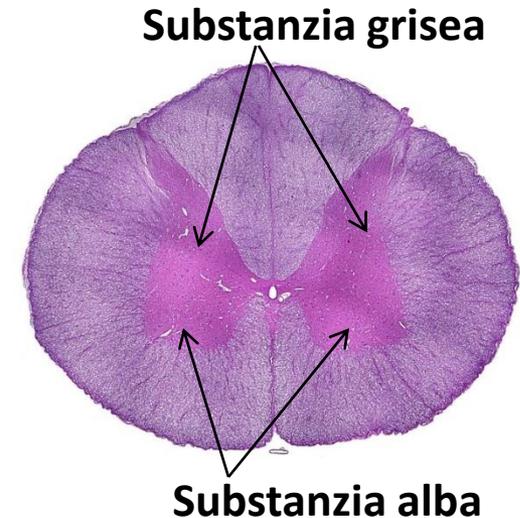
Eigenapparat (Elementarapparat)



RÜCKENMARKSQUERSCHNITT

II. SUBSTANTIA ALBA

- umgibt die graue Substanz
- enthält die Fortsätze (Axone) der Rückenmarksneuronen
- aufsteigende Bahnen vom Rückenmark zum Gehirn
- absteigende Bahnen vom Gehirn zum Rückenmark



Motorische bzw. absteigende Bahnen
(links, rot)

1. Pyramidenbahn

- 1a. Tractus corticospinalis lateralis
- 1b. Tractus corticospinalis anterior

2. Extrapyramidale Bahnen

- 2a. Tractus rubrospinalis
- 2b. Tractus reticulospinalis
- 2c. Tractus vestibulospinalis
- 2d. Tractus olivospinalis

Somatotopische Gliederung:

S: Fasern aus Sakralmark, L: aus Lumbalmark
Th: aus Thorakalmark, C: aus Zervikalmark

Sensible bzw. aufsteigende Bahnen
(rechts, blau)

3. Hinterstrangbahnen

- 3a. Fasciculus gracilis
- 3b. Fasciculus cuneatus

4. Kleinhirnseitenstrangbahnen

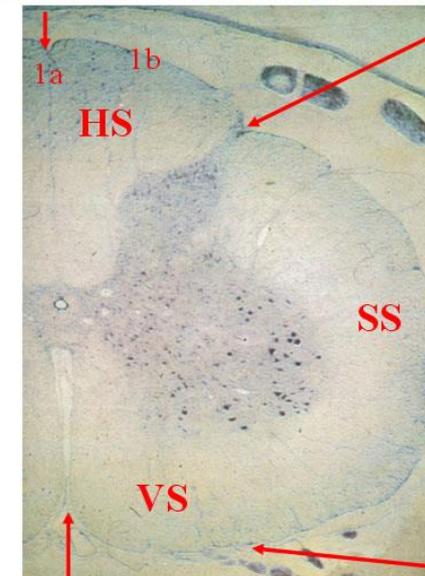
- 4a. Tractus spinocerebellaris posterior
- 4b. Tractus spinocerebellaris anterior

5. sensible Vorderseitenstrangbahnen

- 5a. Tractus spinothalamicus lateralis
- 5b. Tractus spinothalamicus anterior

- 6. Tractus spinoolivaris

Rückenmark: weiße Substanz



Wurzeintrittszone

HS Hinterstrang

1a dorsales mediales Septum

1b dorsales intermediaäres Septum

SS Seitenstrang

VS Vorderstrang

Wurzelaustrittszone

Fissura mediana ventralis

RÜCKENMARKSQUERSCHNITT

II. SUBSTANTIA ALBA

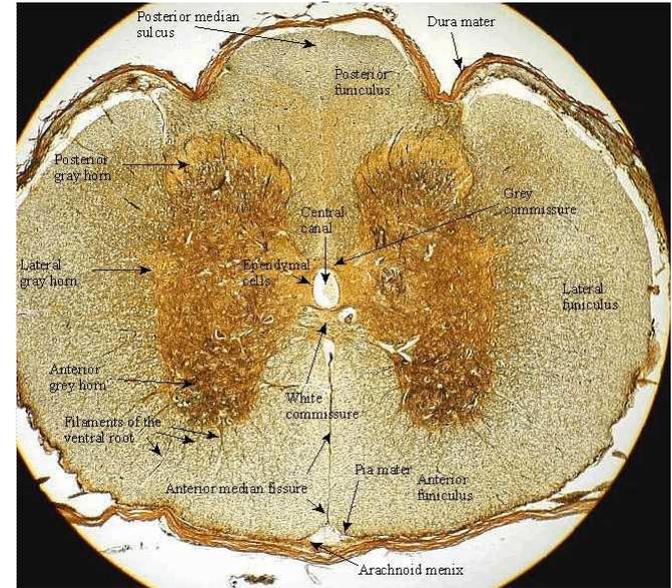
TEILE:

1. FUNICULUS ANTERIOR (VENTRALIS, VORDERSTRANG)

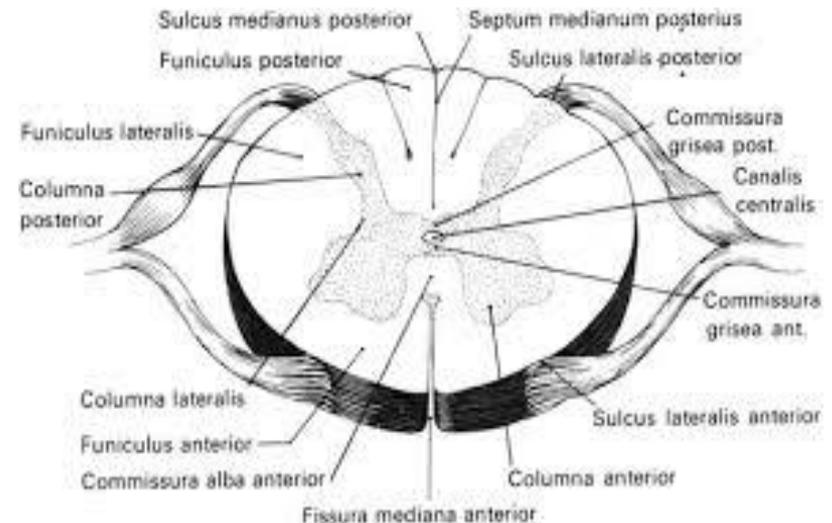
- zwischen Vorderwurzel und Fissura mediana anterior

2. FUNICULUS POSTERIOR (DORSALIS, HINTERSTRANG)

- zwischen der Hinterwurzel und dem Sulcus medianus posterior



Rückenmark: weiße Substanz



RÜCKENMARKSQUERSCHNITT

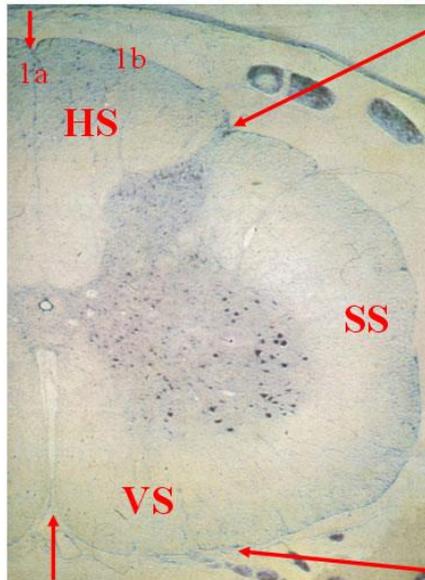
II. SUBSTANTIA ALBA

TEILE:

3. FUNICULUS LATERALIS (SEITENSTRANG)

- vom Hinterhorn bis zum Vorderhorn

Rückenmark: weiße Substanz



Wurzelaustrittszone

HS Hinterstrang

1a dorsales mediales Septum

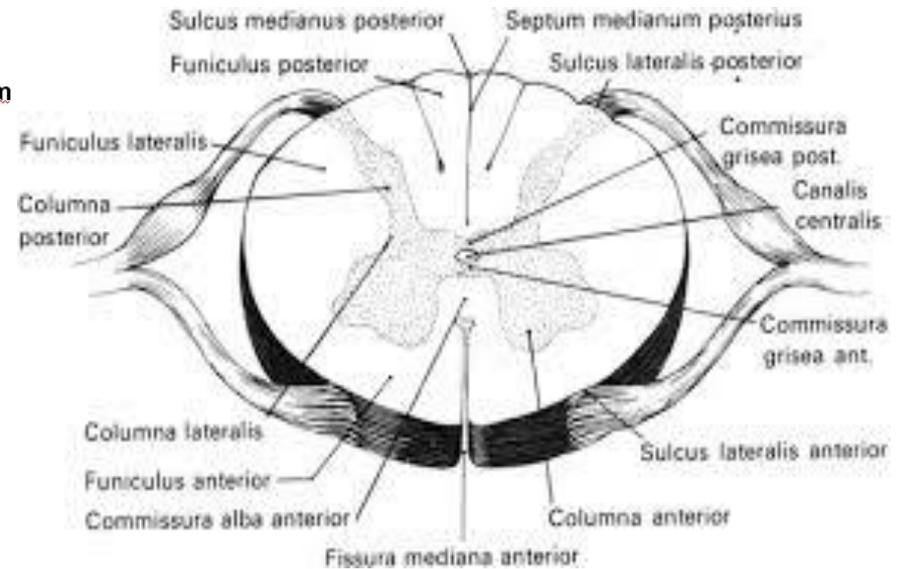
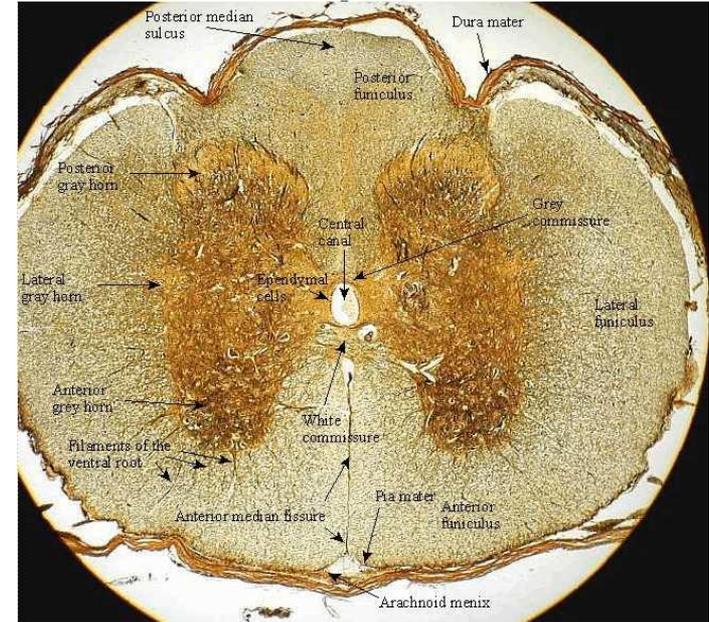
1b dorsales intermediaäres Septum

SS Seitenstrang

VS Vorderstrang

Wurzelaustrittszone

Fissura mediana ventralis

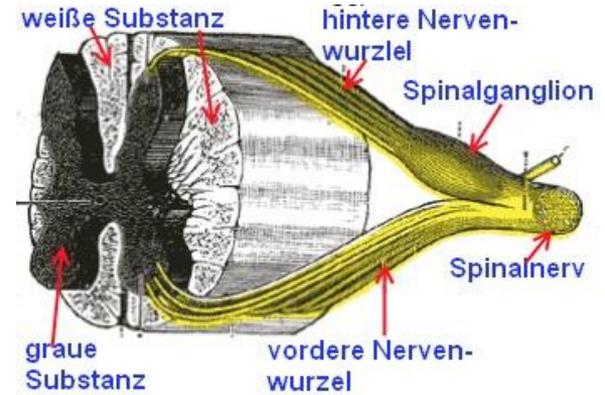


SPINALNERV (NERVUS SPINALIS)

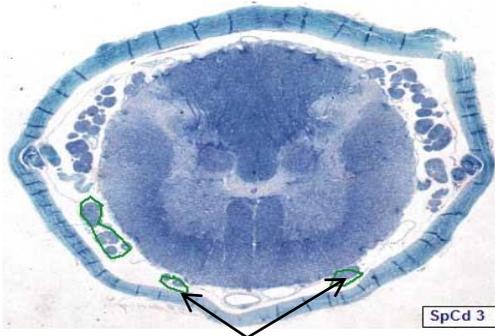
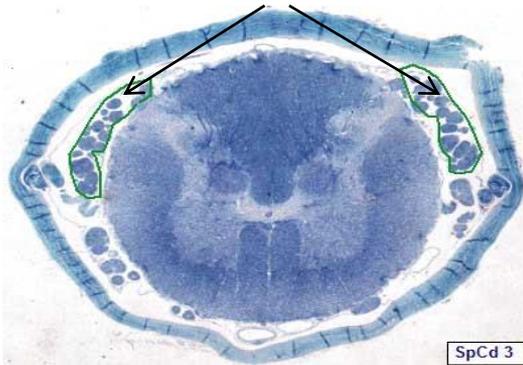
Spinalnerven sind die Leitungsbahnen zur Informationsübertragung zwischen den peripheren Organen und dem Rückenmark

ANTEILE EINES SPINALNERVS:

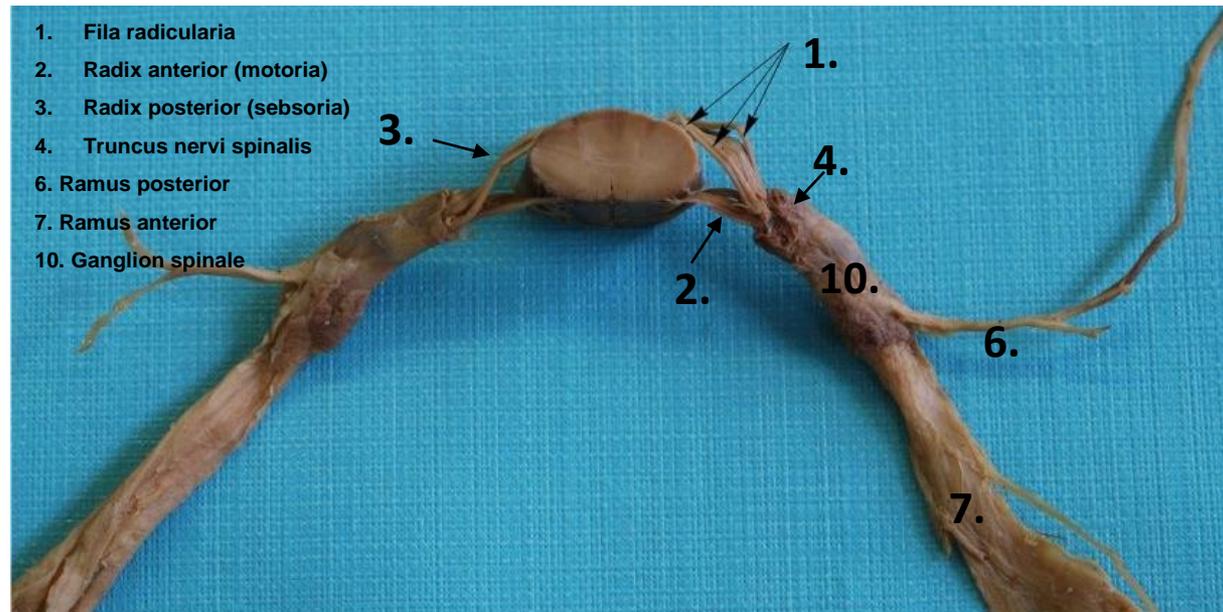
1. HINTERWURZEL (RADIX POSTERIOR oder DORSALIS)
2. VORDERWURZEL (RADIX ANTERIOR oder VENTRALIS)



Radices dorsales



Radices ventrales

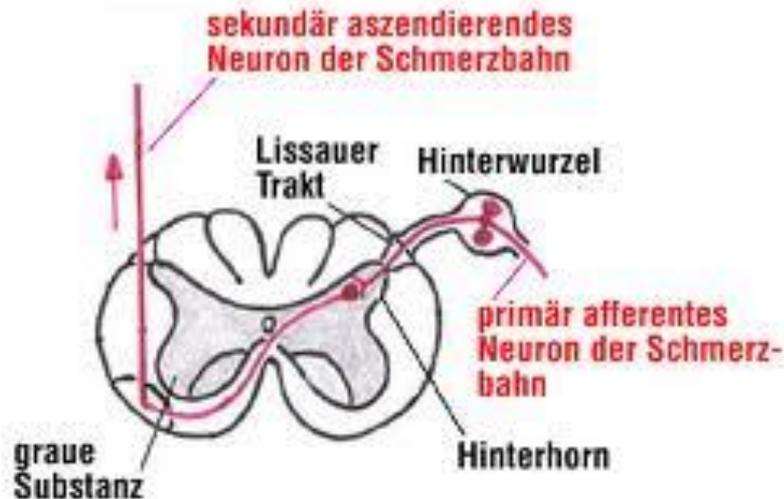


SPINALNERV (NERVUS SPINALIS)

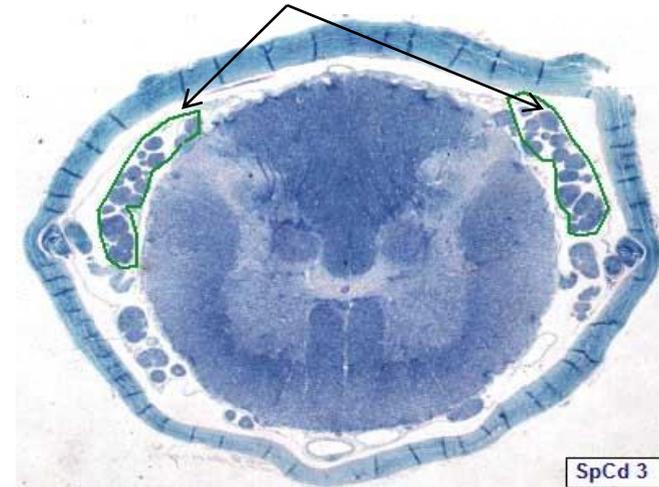
1. HINTERWURZEL (RADIX POSTERIOR oder DORSALIS, SENSORIA)

- afferente (**sensorische Fasern**)
- leiten Informationen aus dem Körperinneren und von der Körperoberfläche zum Rückenmark
- ihre Zellkörpern liegen im Spinalganglion (*Ganglion spinale*)
- ihre Axone ziehen über die Hinterwurzel, *Radix posterior*, in die graue Substanz des Rückenmarks oder über dessen weiße Substanz zum Gehirn, wo die weitere Verarbeitung erfolgt

Rückenmarksquerschnitt



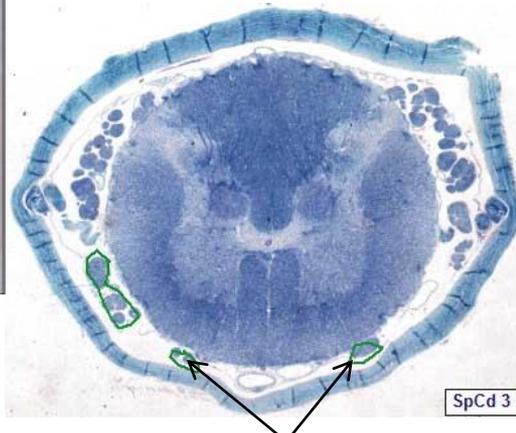
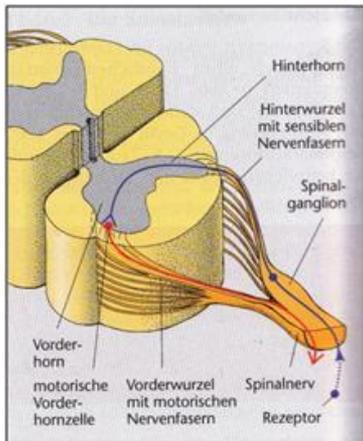
Radices dorsales



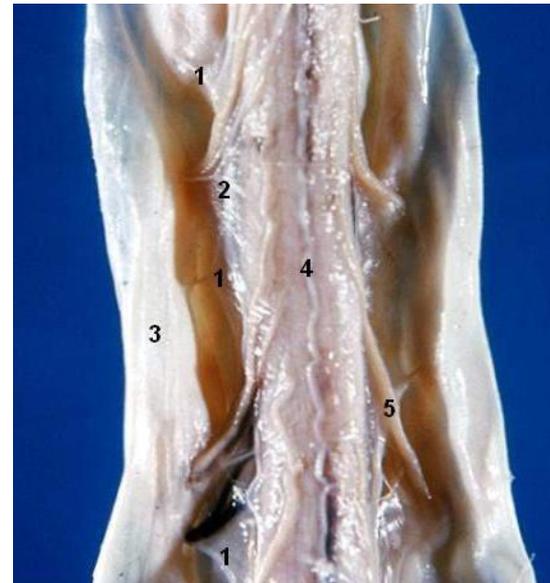
SPINALNERV (NERVUS SPINALIS)

2. VORDERWURZEL (RADIX ANTERIOR oder VENTRALIS, MOTORIA)

- **motorische efferente Axone sind Teil der Motoneurone** - deren Somata liegen im Vorderhorn
- die Motoneurone eines Muskels liegen locker gruppiert in Form eines spindelförmigen Kerns im Vorderhorn
- über die gesamte Länge des Rückenmarks betrachtet bilden diese Kerne die sogenannte **motorische Kernsäule**



Radices ventrales

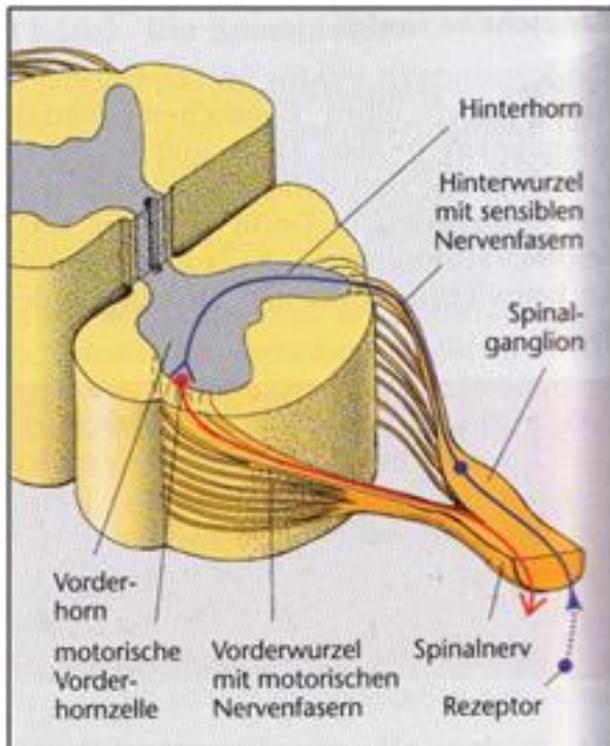


- 1.Ligamentum denticulatum
- 2.Arachnoidea mater spinalis
- 3.Dura mater spinalis
- 4.Arteria spinalis anterior
- 5.Nervus spinalis, Radix anterior

SPINALNERV (NERVUS SPINALIS)

2. VORDERWURZEL (RADIX ANTERIOR oder VENTRALIS, MOTORIA)

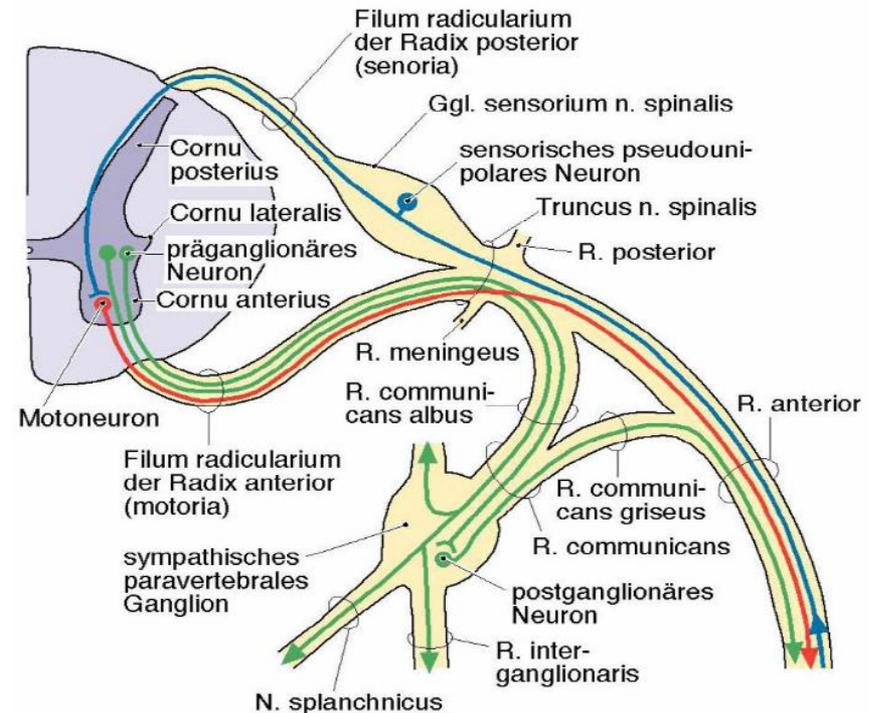
In jedem Segment treten efferente Axone über die Vorderwurzel aus dem Rückenmark und vereinigen sich mit den ankommenden Afferenzen zu einem gemeinsamen Spinalnervenstamm (*Truncus nervi spinalis*)



1. Ligamentum denticulatum
2. Arachnoidea mater spinalis
3. Dura mater spinalis
4. Arteria spinalis anterior
5. Nervus spinalis, Radix anterior

SPINALNERV (NERVUS SPINALIS)

im Bereich des Brust- und Lendenabschnitts des Rückenmarks gibt es sympathische Wurzelzellen sie liegen im **Nucl. Intermediolateralis** und ziehen ebenfalls in der Vorderwurzel **zum Truncus nervi spinalis** über einen weißen Verbindungsast (**Ramus communicans albus**) ziehen sie dann **zum Grenzstrang**, in dessen Ganglien ein Teil der Fasern umgeschaltet wird. Die umgeschalteten Anteile ziehen typischerweise in einem grauen Verbindungsast (**Ramus communicans griseus**) wieder zu einem **Spinalnervenstamm** zurück



SPINALNERV (NERVUS SPINALIS) VERLAUF AUßERHALB DES WIRBELKANALS

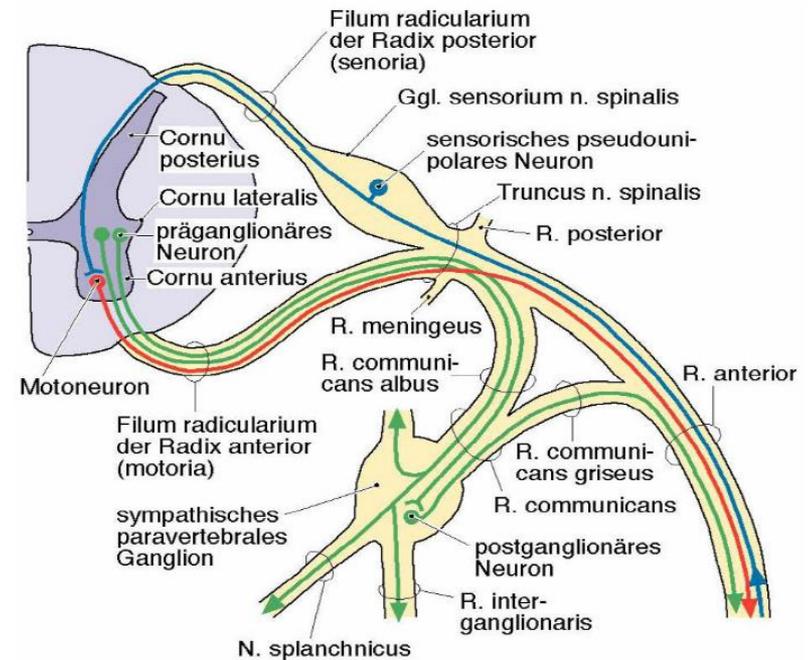
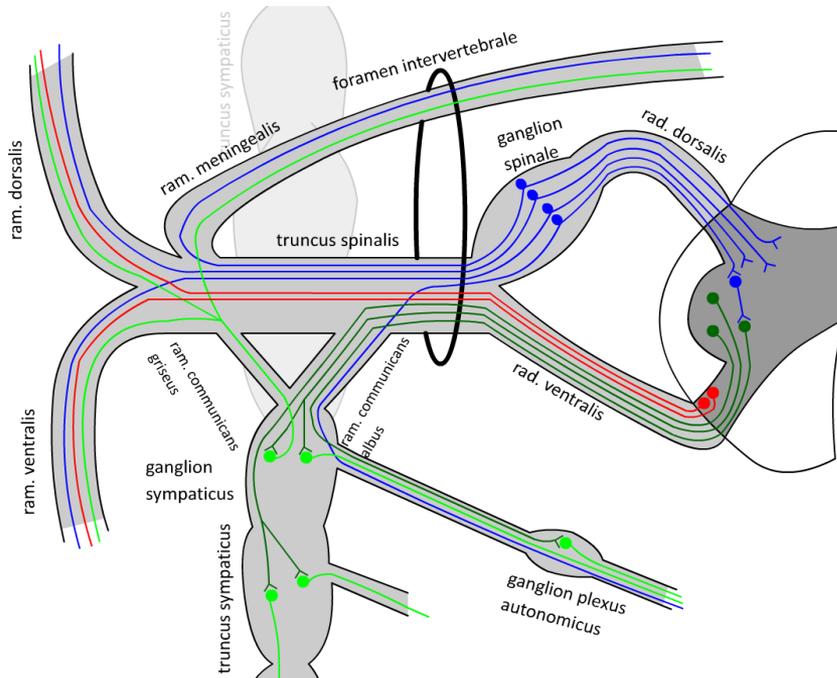
der Truncus nervi spinalis verlässt den Wirbelkanal über dem *Foramen intervertebrale* und zweigt sich dann jeweils in folgende Äste auf:

1. Ramus posterior oder dorsalis

2. Ramus anterior oder ventralis

3. Ramus communicans albus und Ramus communicans griseus

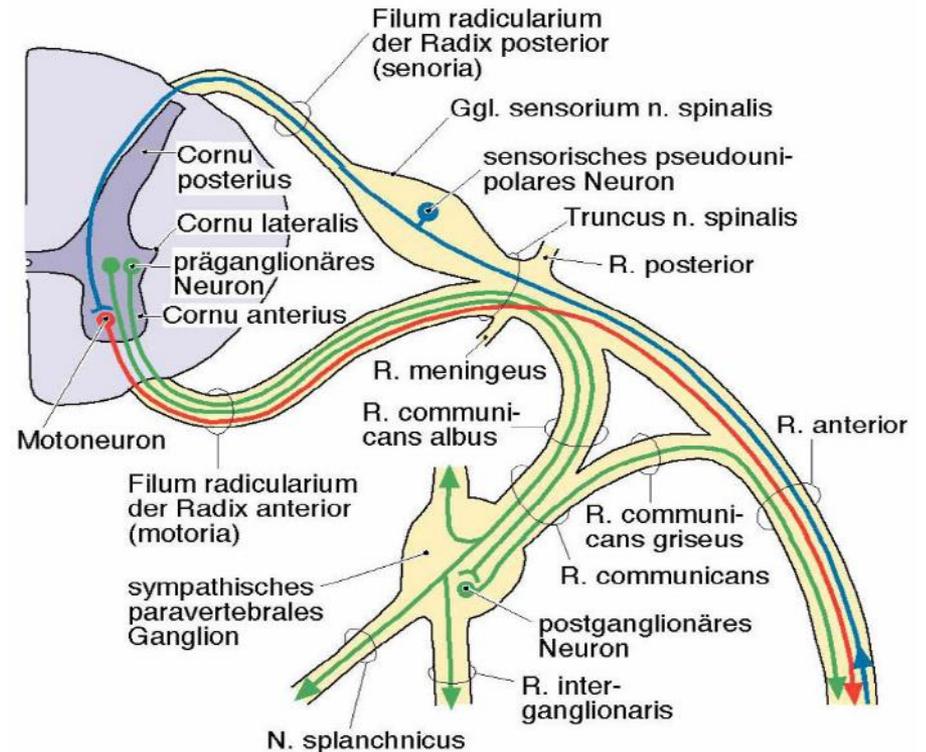
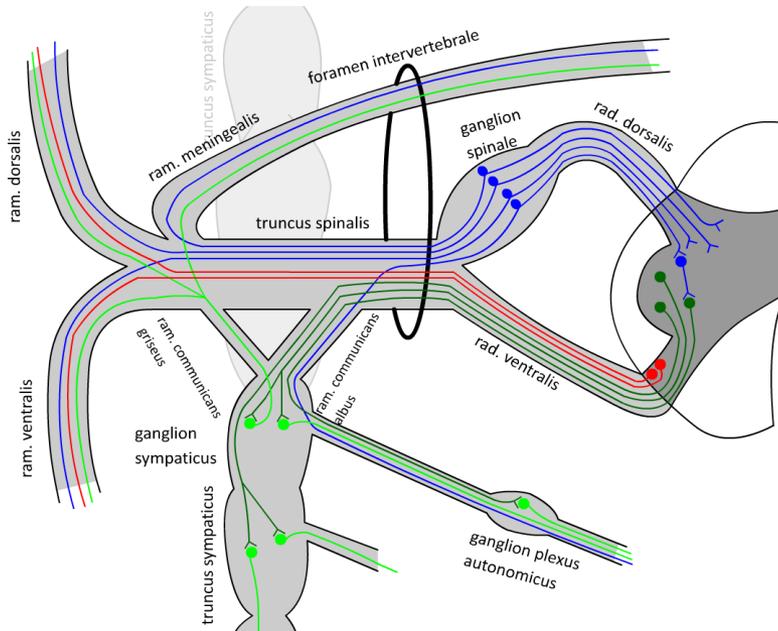
4. Ramus meningeus



SPINALNERV (NERVUS SPINALIS) VERLAUF AUßERHALB DES WIRBELKANALS

1. Ramus posterior oder dorsalis:

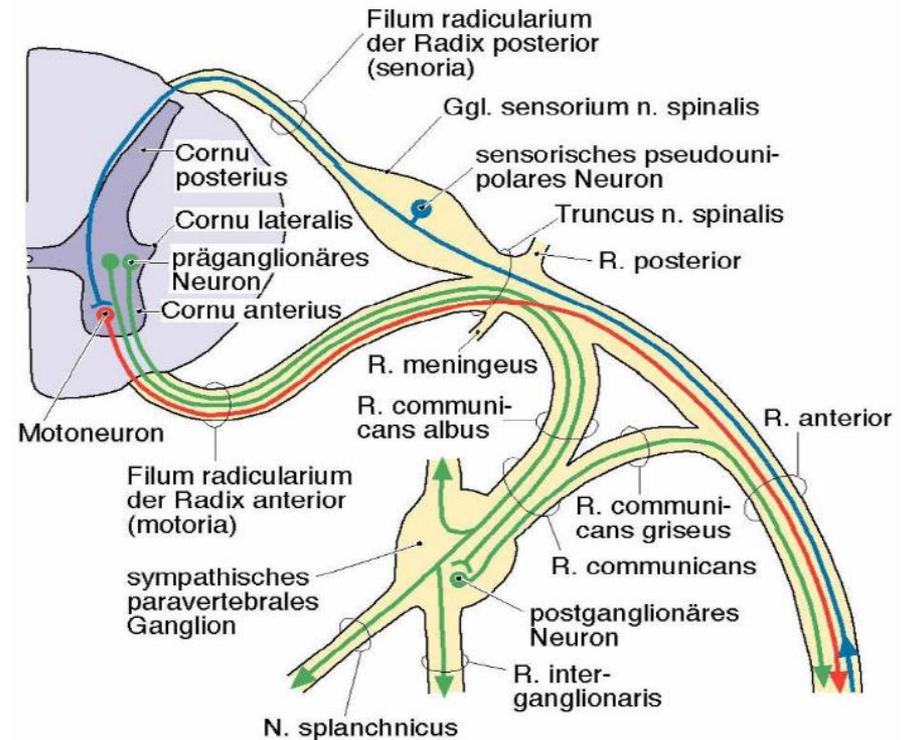
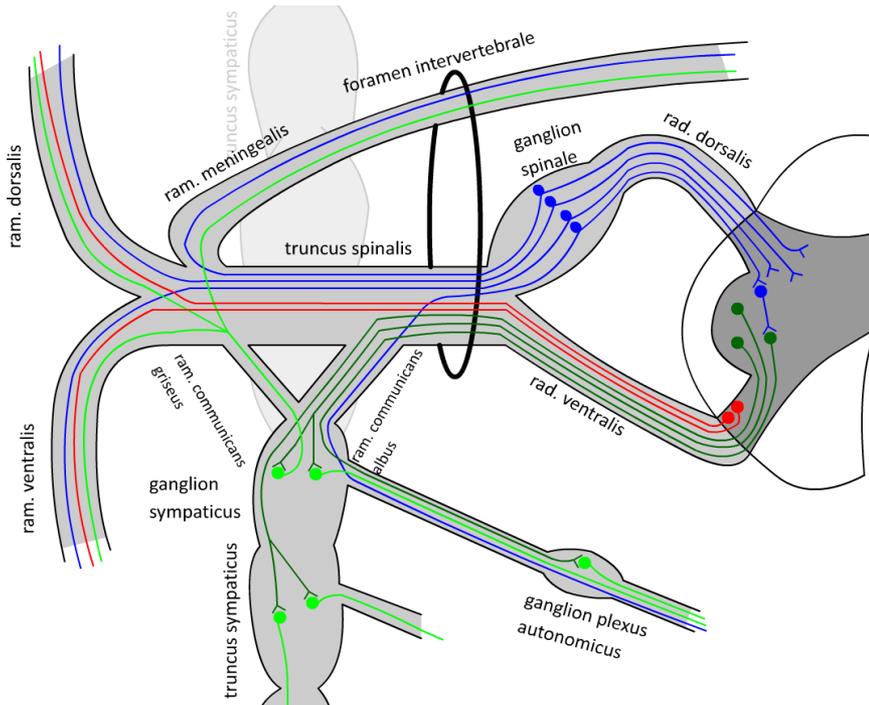
- für die Versorgung der wirbelsäulennahen Haut und Muskulatur



SPINALNERV (NERVUS SPINALIS) VERLAUF AUßERHALB DES WIRBELKANALS

2. Ramus anterior oder ventralis:

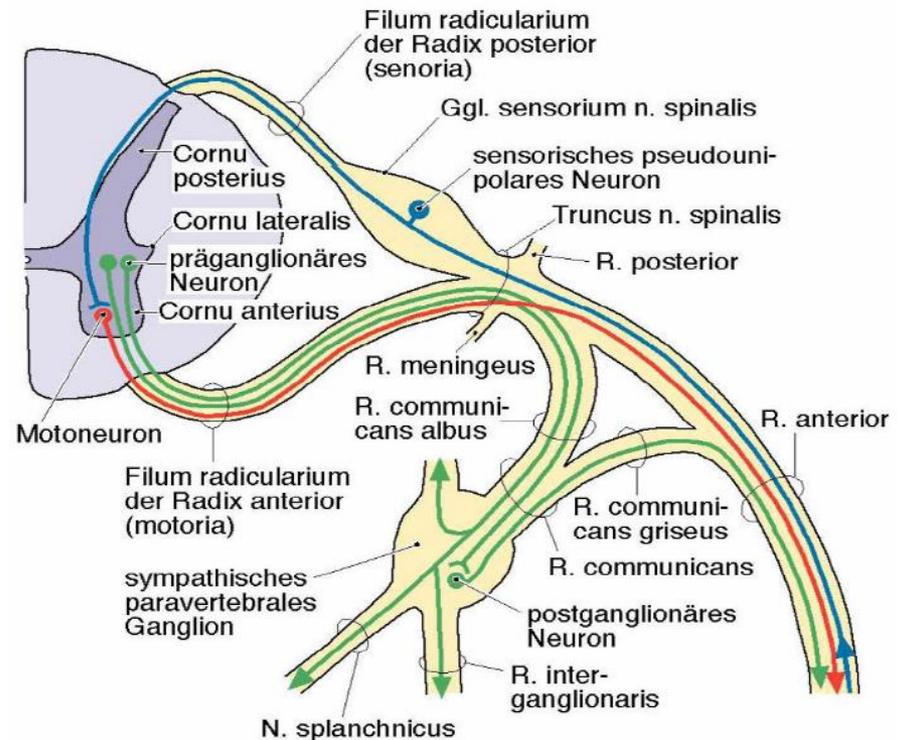
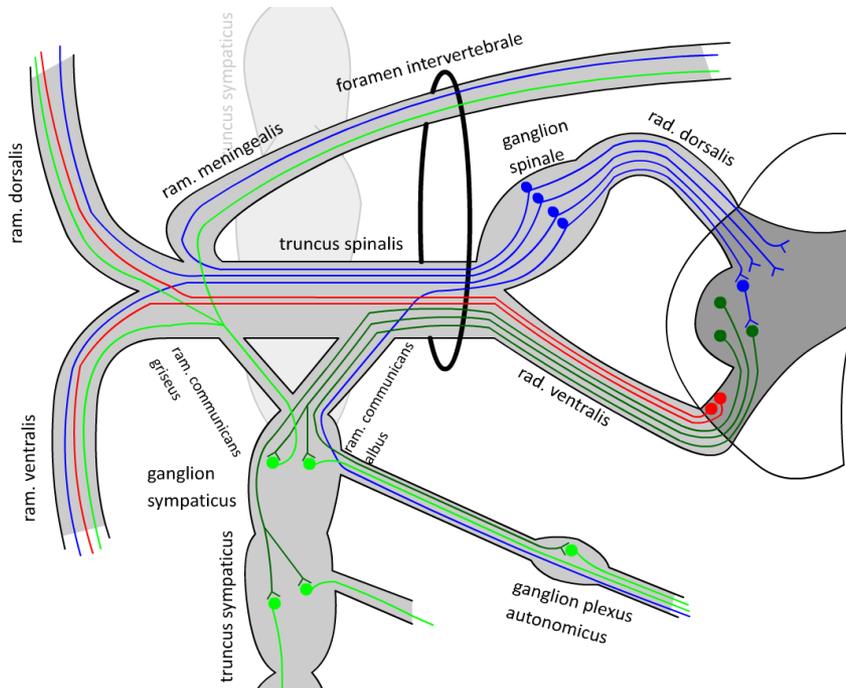
für die Versorgung der Haut und Muskulatur des wirbelsäulenfernen Rückens
der seitlichen und bauchseitigen Körperabschnitte



SPINALNERV (NERVUS SPINALIS) VERLAUF AUßERHALB DES WIRBELKANALS

3. Ramus communicans albus und Ramus communicans griseus:

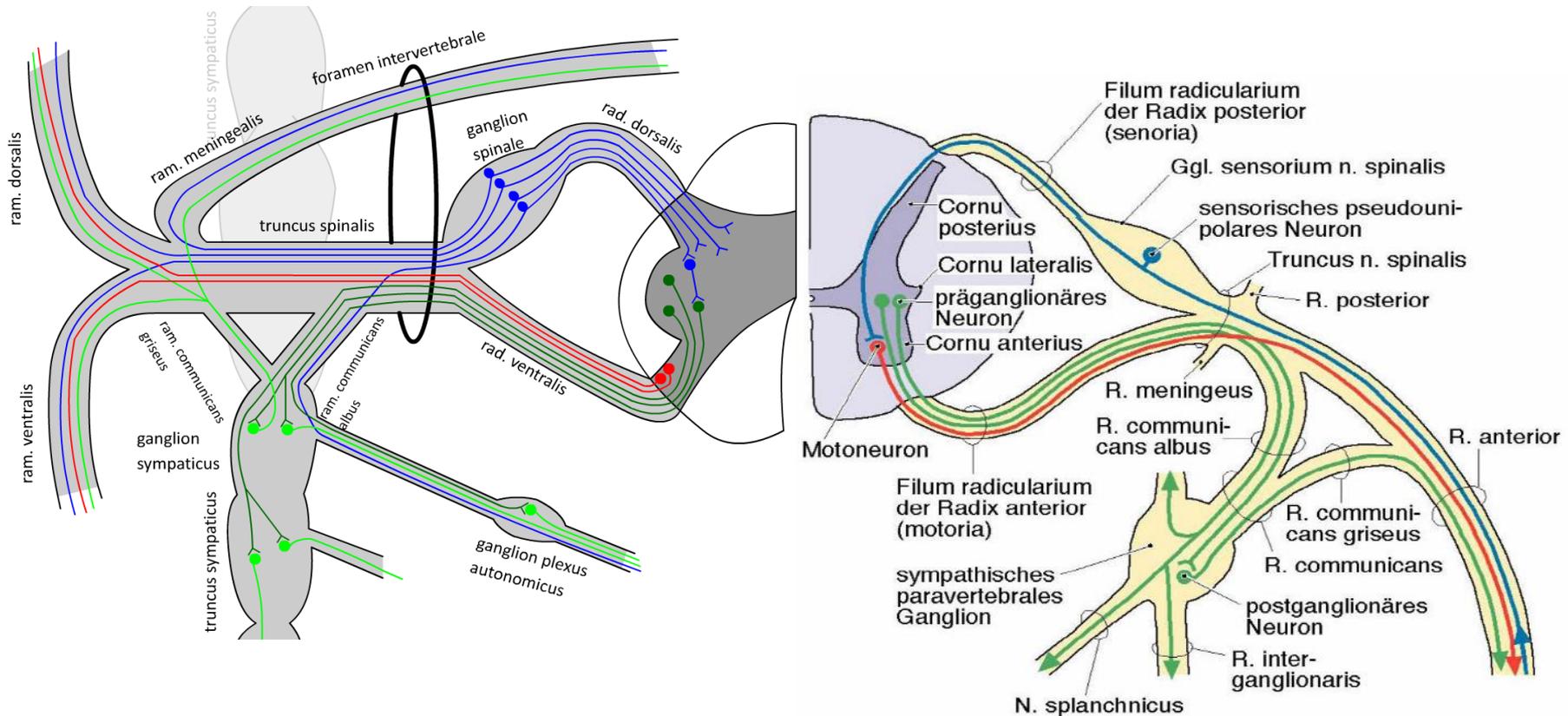
- zur Weiterleitung visceroafferenter Informationen



SPINALNERV (NERVUS SPINALIS) VERLAUF AUßERHALB DES WIRBELKANALS

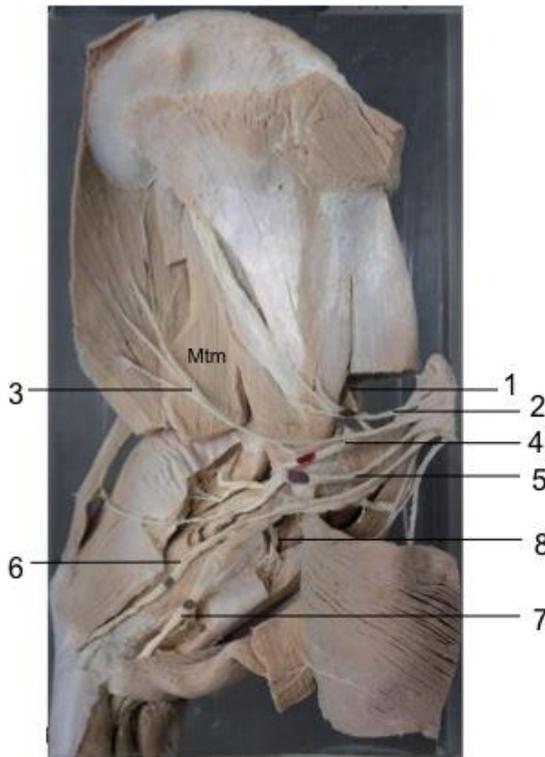
4. Ramus meningeus:

- für die Innervation der Rückenmarkshäute



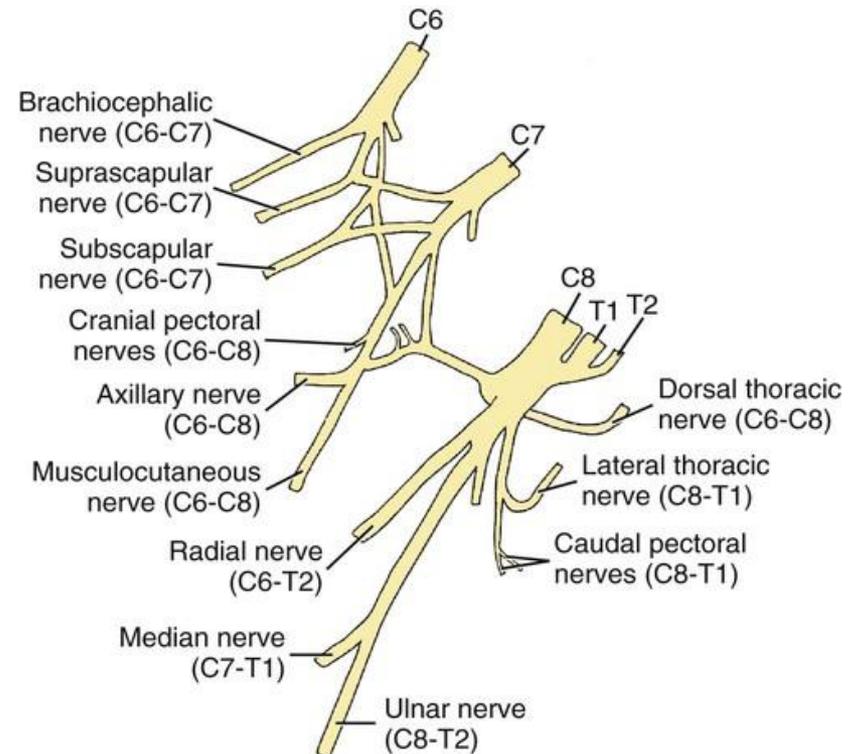
ARMGEFLECHT (PLEXUS BRACHIALIS)

- schiebt sich zwischen Hals – und Brustnerven ein
- bei Flfr, Wdk, Pfd gebildet **von Ventralästen des 6., 7. und 8. Halsnerven (C6-8) und Ventralast des 1 und 2 Brustnerven (Th1-2)**



M. teres major (Mtm) transected

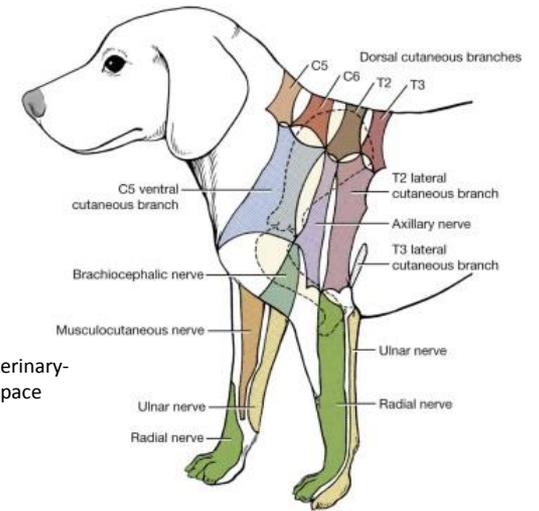
1. N. suprascapularis
2. Nn. subscapulares
3. N. thoracodorsalis
4. N. axillaris
5. N. radialis
6. N. ulnaris
7. N. medianus
8. N. musculocutaneus, R. proximalis



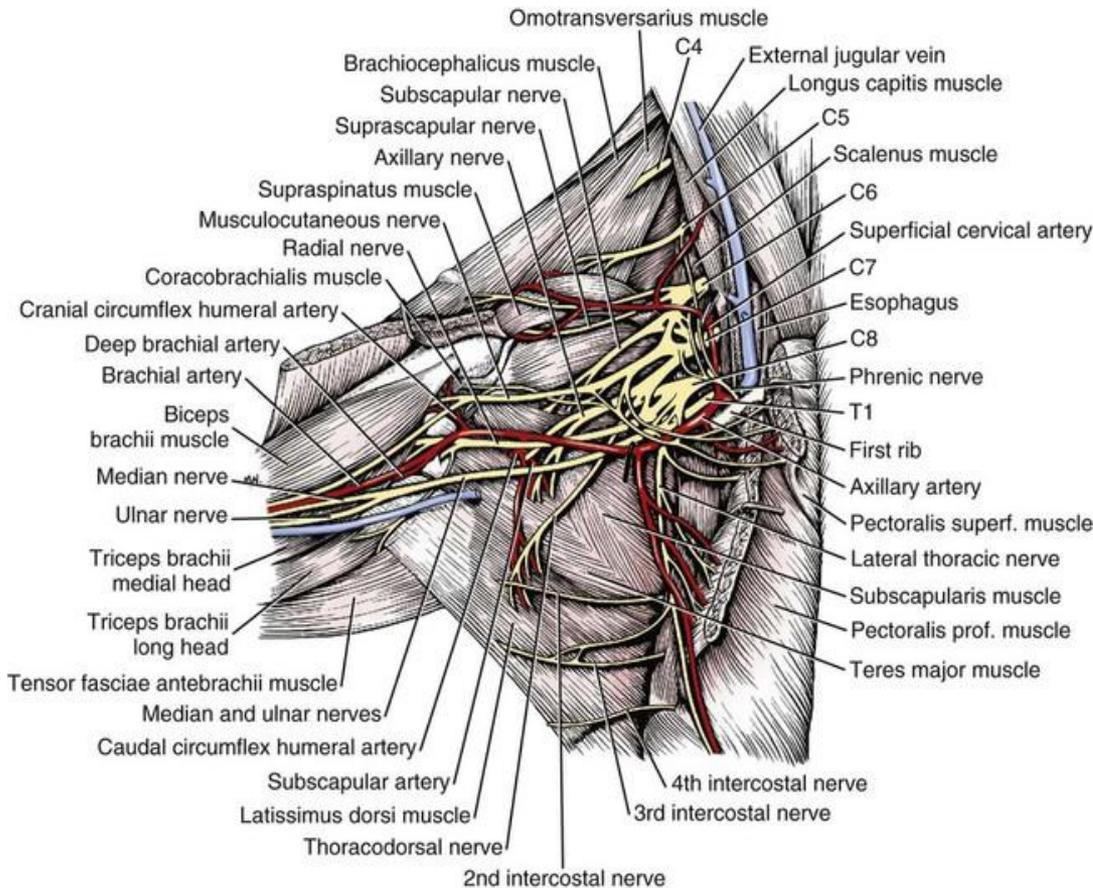
ARMGEFLECHT (PLEXUS BRACHIALIS)

versorgt:

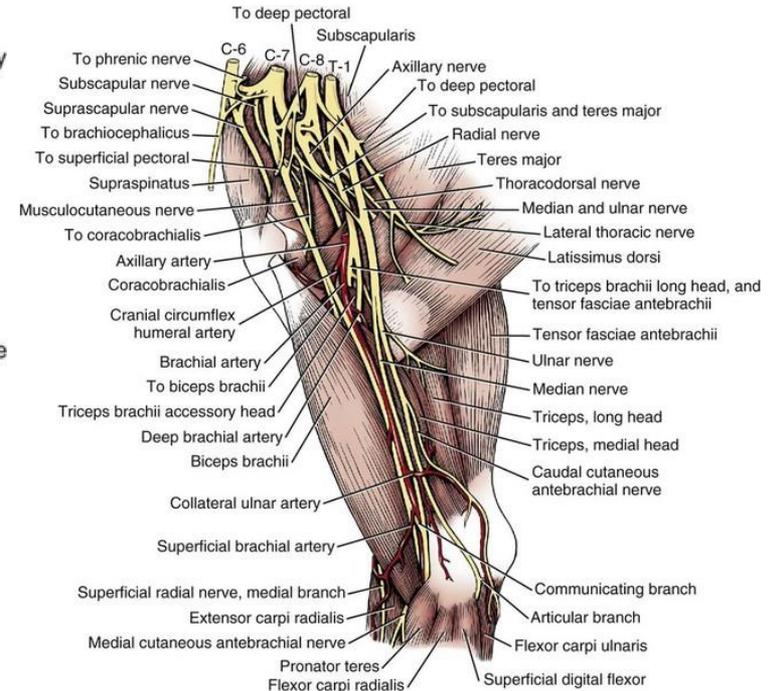
1. Schultergliedmaße
2. Teile der Schultergürtelmuskulatur
3. Rumpfwand



<https://www.sciencedirect.com/topics/veterinary-science-and-veterinary-medicine/axillary-space>



<https://veteriankey.com/spinal-nerves/>

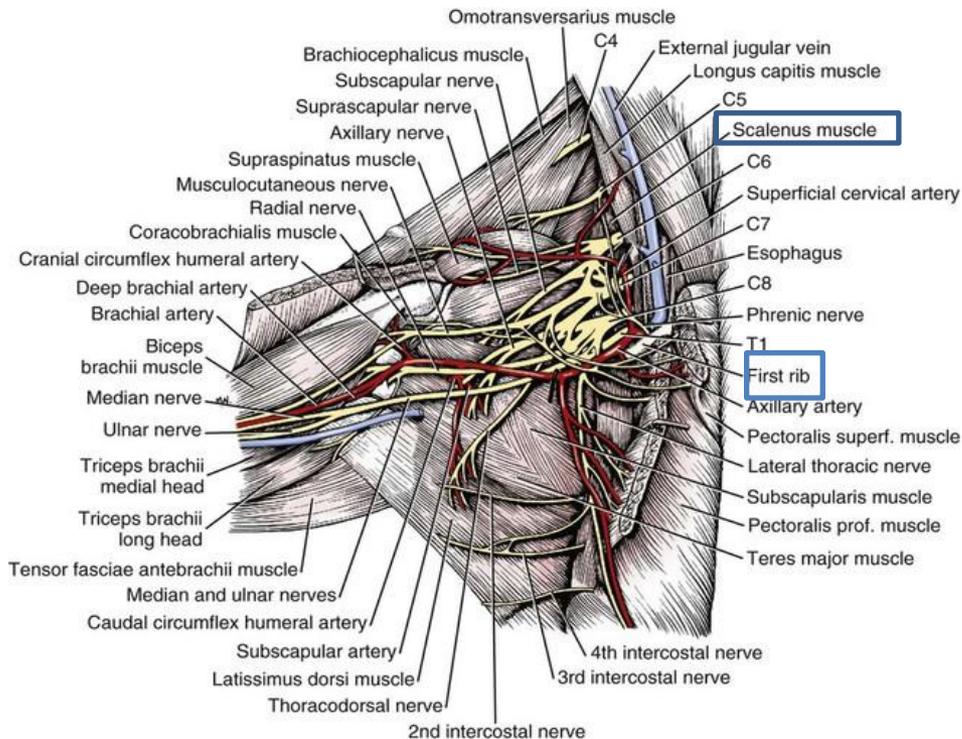


<https://veteriankey.com/spinal-nerves/>

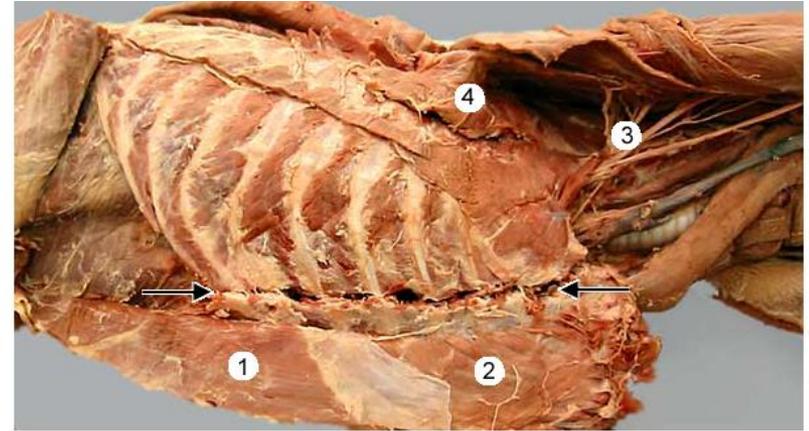
ARMGEFLECHT (PLEXUS BRACHIALIS)

Die Wurzeln des Armgeflecht (Radices plexus) liegen:

- vor der 1 Rippe
- zwischen M. longus colli und M. scalenus
- die Äste treten an die mediale Fläche der Schulter



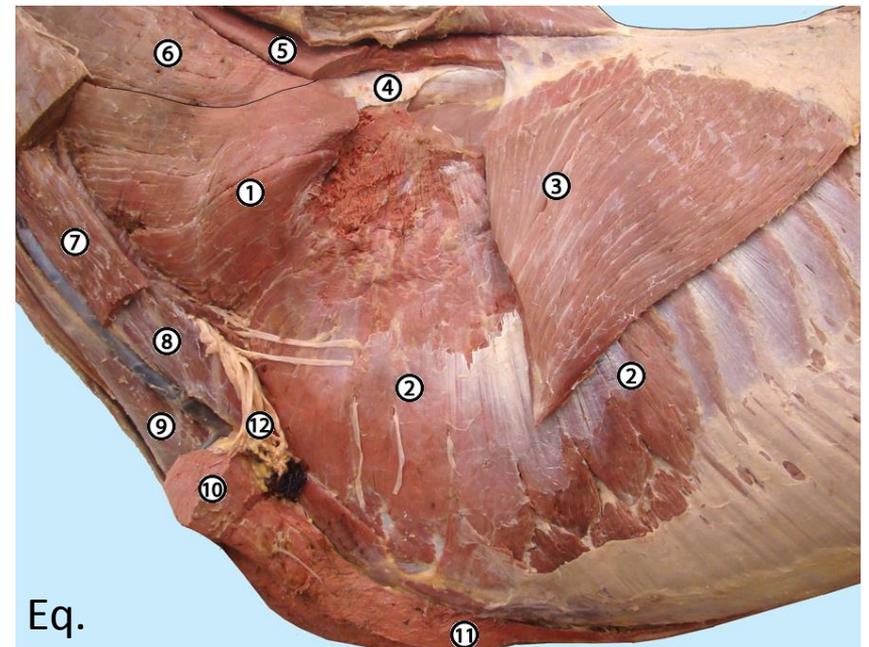
<https://veteriankey.com/spinal-nerves/>



Canine dissection. Begin opening the thoracic cavity by making bilateral incisions (arrows) at least one cm from the ventral midline. Then make a caudal incision detaching the sternum from the abdomen.

Notice the rectus abdominis m. (1), the deep pectoral m. (2), and brachial plexus nerves (3). The serratus ventralis muscle (4) has been detached from the thoracic wall.

<http://vanat.cvm.umn.edu/carnLabs/Lab10/lmg10-5.html>



Eq.

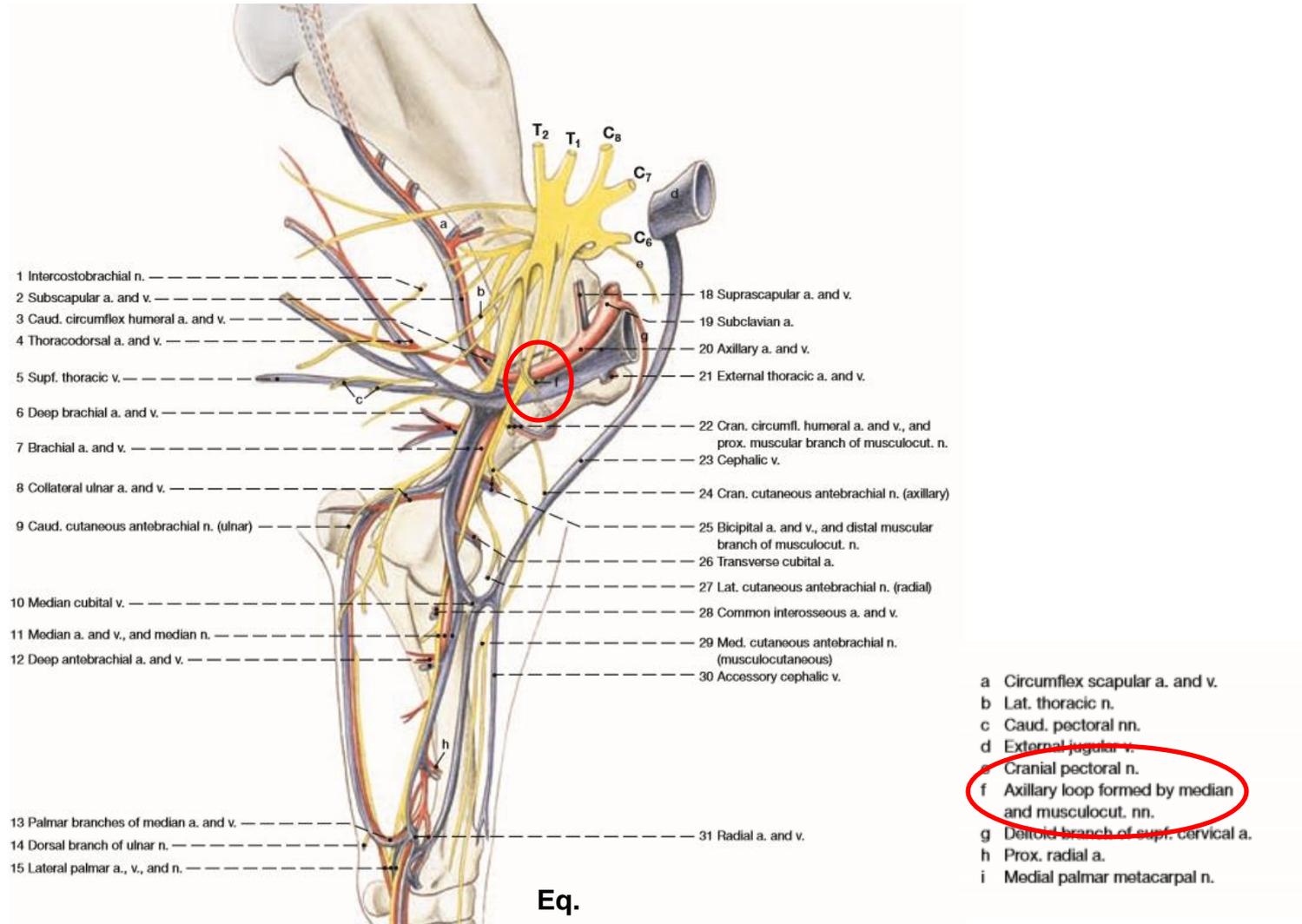
Exposure of the complete serratus ventralis m. after forelimb removal. 1, cervical serratus ventralis m.; 2, thoracic serratus ventralis m.; 3, latissimus dorsi m.; 4, dorsal scapular ligament; 5, rhomboideus m.; 6, splenius m.; 7, omohyoideus m.; 8, scalenus m.; 9, sternomandibularis m.; 10, subclavius (cranial deep pectoral) m.; 11, ascending (caudal deep) pectoral m.; 12, brachial plexus.

<http://vanat.cvm.umn.edu/ungDissect/Lab01/lmg1-18.html>

ARMGEFLECHT (PLEXUS BRACHIALIS)

Die Wurzeln des Armgeflecht (Radices plexus) liegen:

- um die A. axillaris (Ausnahme Flfr.) eine Schlinge (Ansa axillaris) bilden



Eq.

ARMGEFLECHT (PLEXUS BRACHIALIS)

aus dem Armgeflecht gehen folgende Nerven der Vordergliedmaße vor:

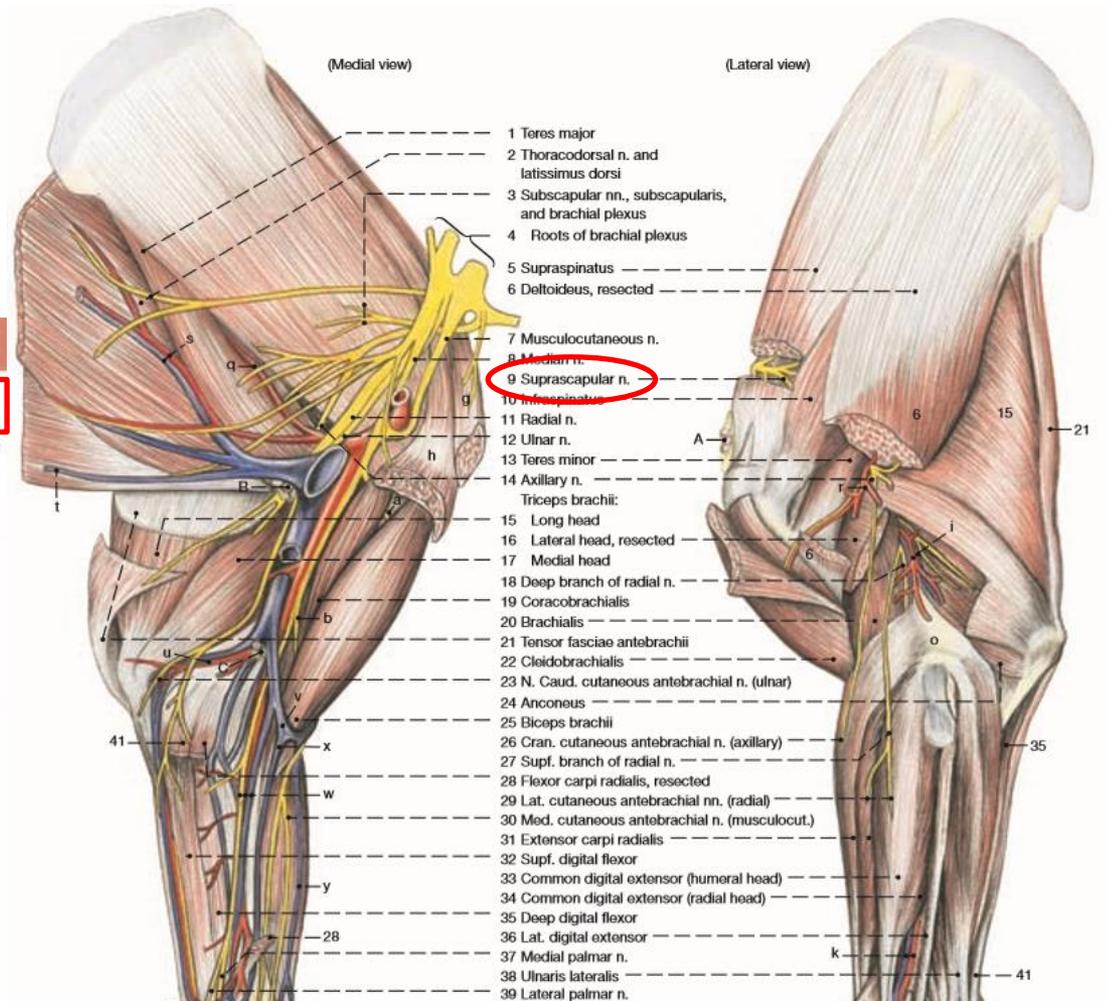
1. NERVUS (N.) SUPRASCAPULARIS:

bezieht Fasern aus:

a) beim Hd, Schw., Rd. : C6 - C7

b) beim Pferd: C6 - C8

Ventralast der Segmentalnerven	Nerv
C ₆	N. suprascapularis N. musculocutaneus
C ₇	
C ₈	N. axillaris
Th ₁	N. medianus N. ulnaris



Eq.

ARMGEFLECHT (PLEXUS BRACHIALIS)

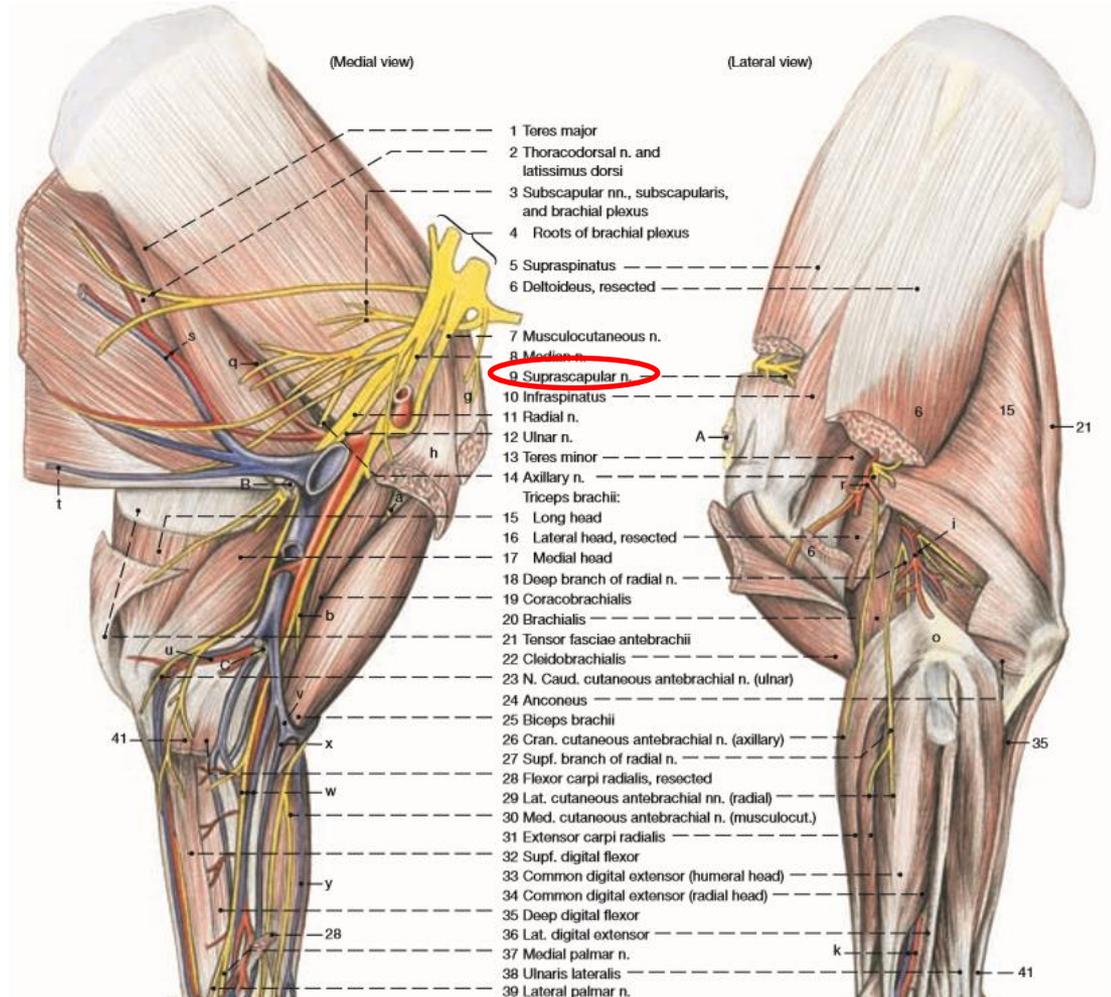
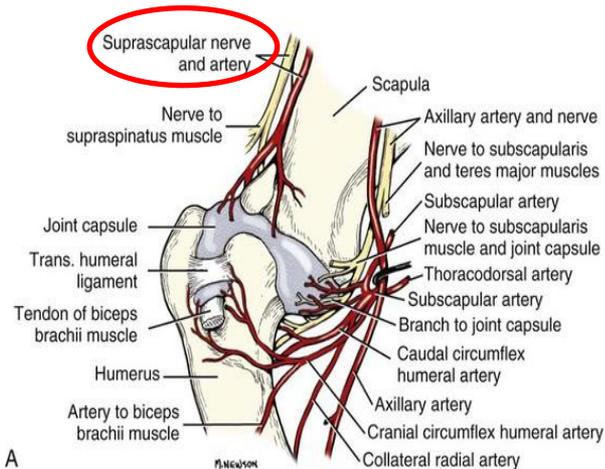
1. NERVUS (N.) SUPRASCAPULARIS:

verläuft zwischen:

- a) M. subscapularis
- b) M. supraspinatus

Innerviert:

- a. M. subscapularis
- b. M. supraspinatus



Ca.

A, Nerves and arteries of the right shoulder joint, medial aspect.

Eq.

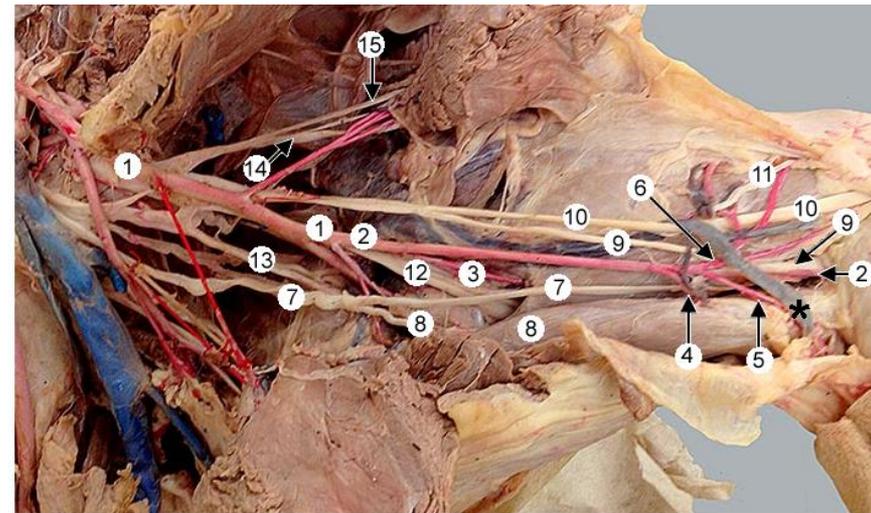
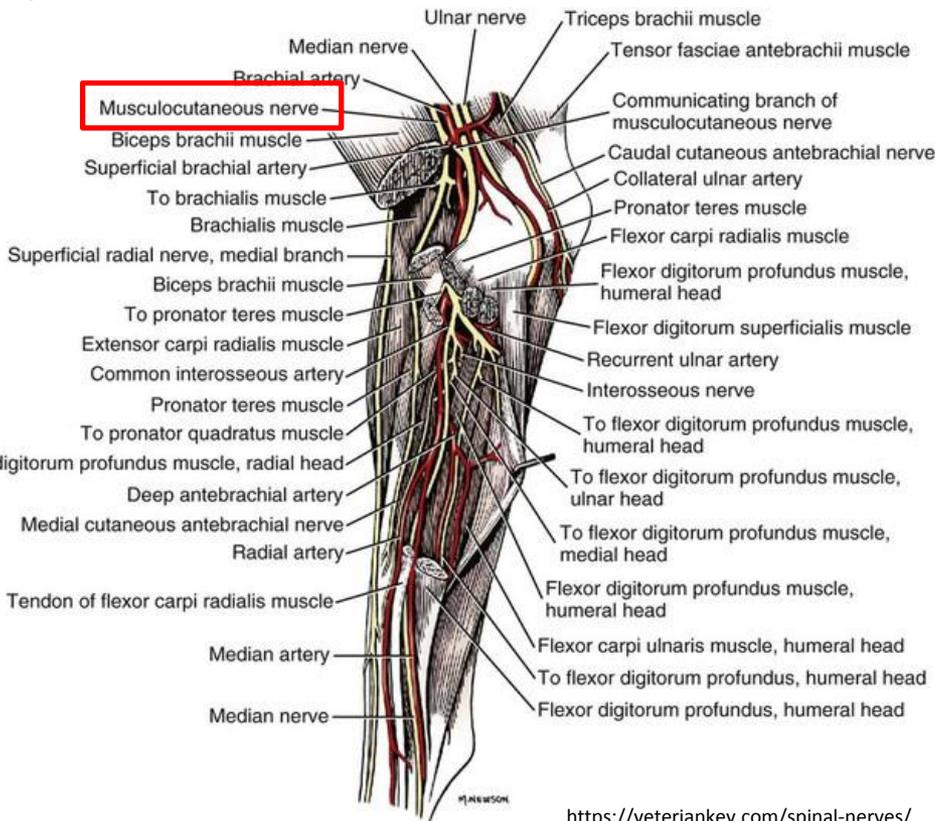
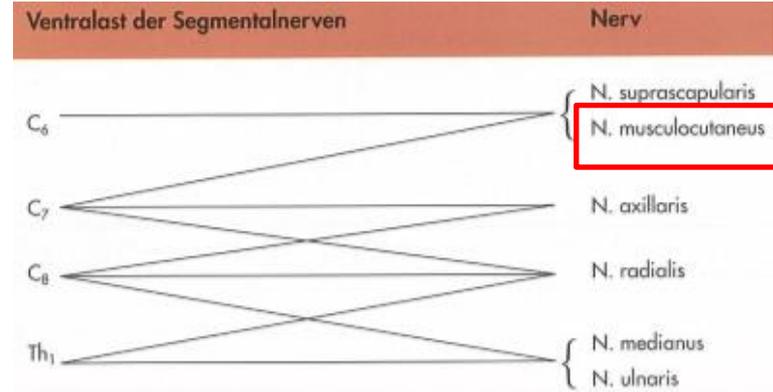
ARMGEFLECHT (PLEXUS BRACHIALIS)

2. NERVUS MUSCULOCUTANEUS:

- entspringt kaudal von N. suprascapularis

bezieht Fasern aus :

- a) beim Flfr. C7 – C8
- b) beim Wdk: C6 – C7
- c) beim Pfd.: C7



Canine brachial a.: The axillary a. (1) continues as the brachial a. (2). Visible branches of the brachial a. are: deep brachial a. (3), bicipital a. (4), superficial brachial (5), and collateral ulnar a. (6). Veins are poorly injected, but the median cubital v. (asterisk) is evident.

The musculocutaneous n. (7) innervates the biceps brachii m. (8). The median n. (9) runs with the brachial a. The ulnar n. (10) gives off a caudal cutaneous antebrachial n. (11). The large radial n. (12) courses laterally, as does the axillary n. (13). The thoracodorsal n. (14) and the lateral thoracic n. (14) are evident. The latter runs with the lateral thoracic a. and innervates the cutaneous trunci m. (panniculus reflex).

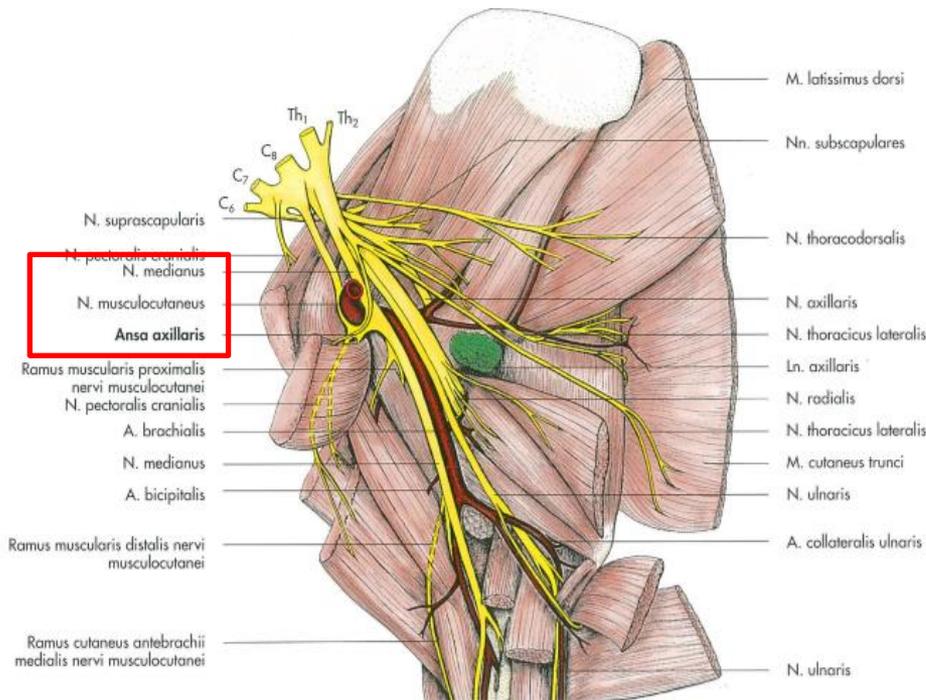
<http://vanat.cvm.umn.edu/earnLabs/Lab13/Img13-3.html>

ARMGEFLECHT (PLEXUS BRACHIALIS)

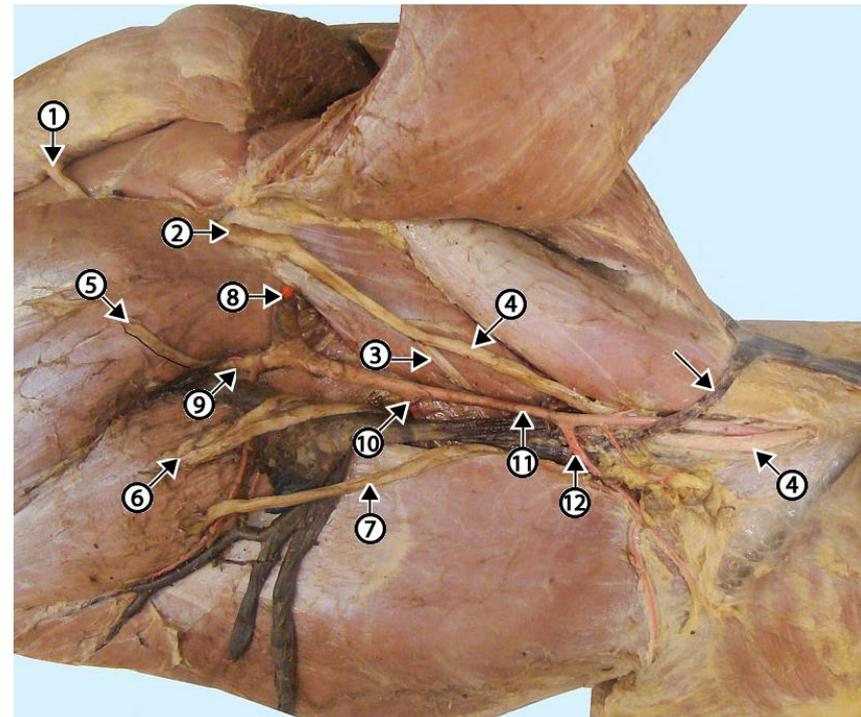
2. NERVUS MUSCULOCUTANEUS:

- bei den Wdk, beim Pfd. – Ansa cervicalis um die A. axillaris herum mit dem N. medianus

- bei den Flfr. von N. medianus getrennt weiterläuft



Eq.



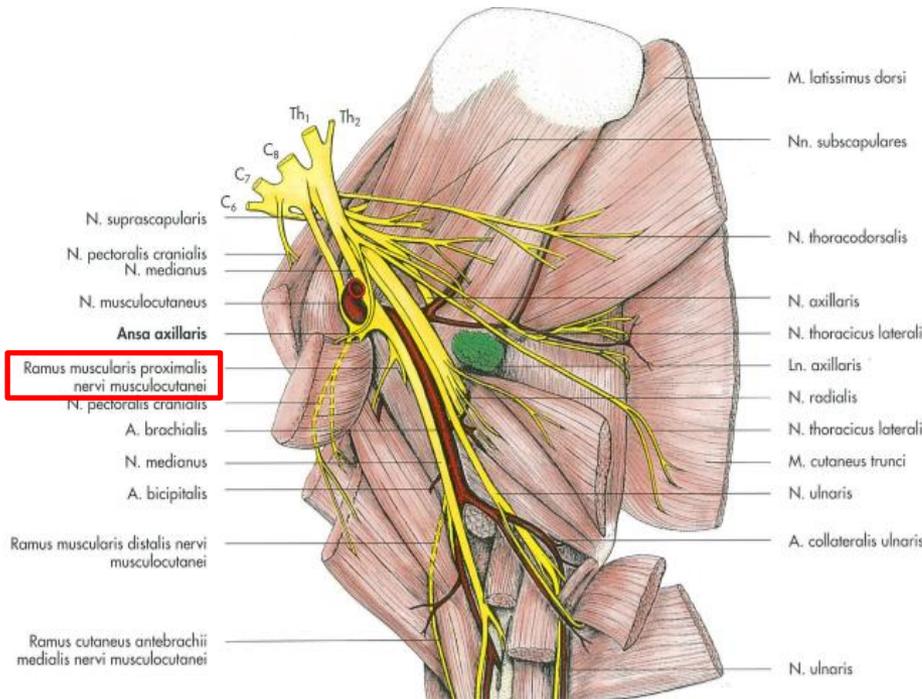
Neurovascular key for medial side of detached forelimb. Some nerves have been spread out to expose the brachial artery. 1, suprascapular n.; 2, combined median and musculocutaneous nn.; 3, distal branch of musculocutaneous n. to the brachialis m.; 4, median n.; 5, axillary n.; 6, radial n.; 7, ulnar n.; 8, axillary a.; 9, subscapular a.; 10, deep brachial a. coming off the brachial a.(11); 12, collateral ulnar a.; unlabeled arrow, median cubital vein.

ARMGEFLECHT (PLEXUS BRACHIALIS)

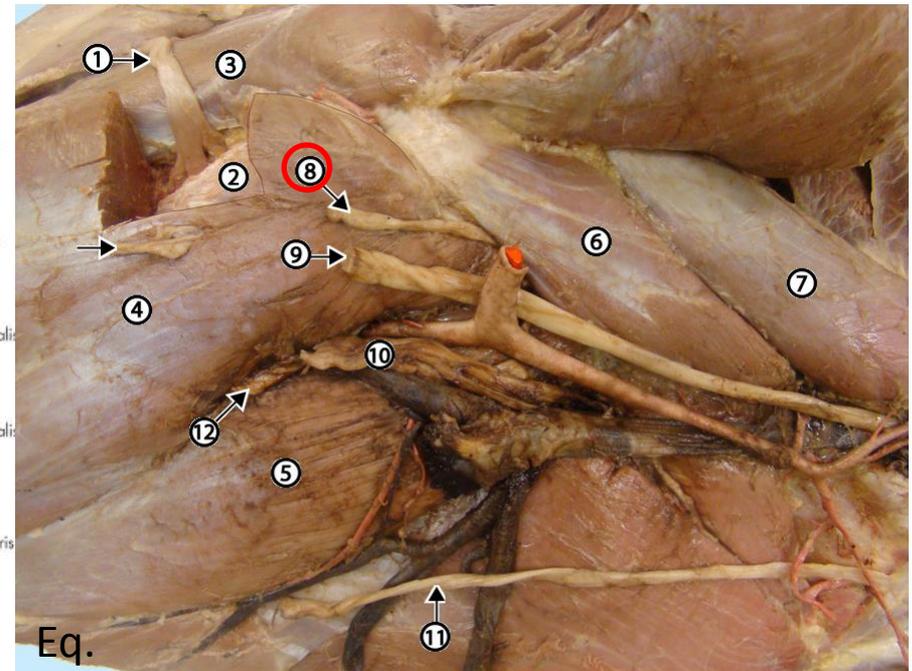
ÄSTE DES NERVUS MUSCULOCUTANEUS:

a. Ramus (R.) muscularis prox.:

- vor oder nach der Vereinigung des N. medianaus gibt den Ast ab
- zwischen den M. coracobrachialis und den M. biceps brachii



Eq.



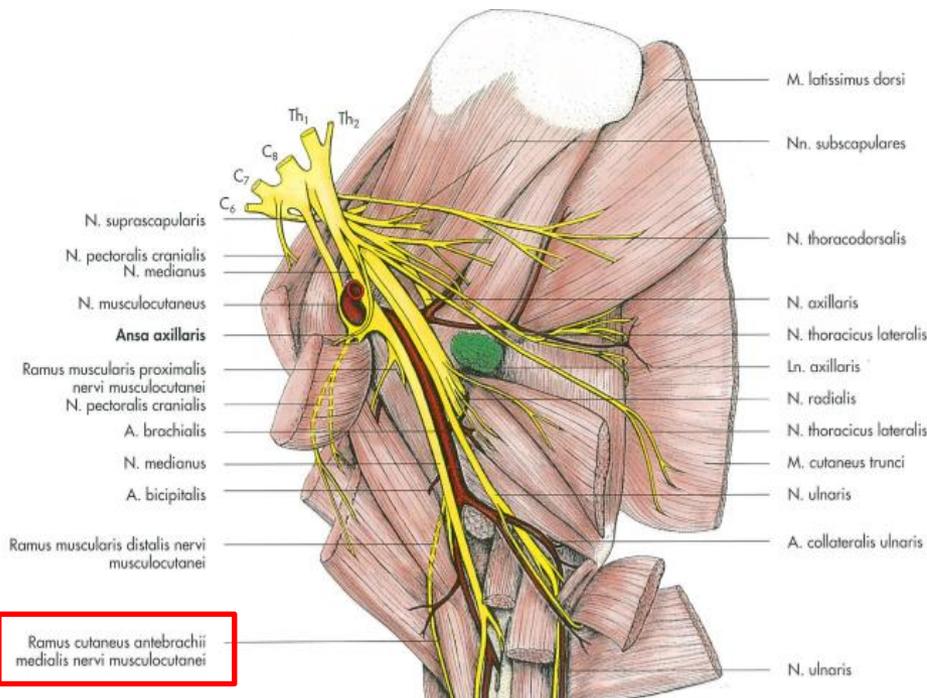
Exposure of the relationship of the suprascapular nerve (1) to the cranial edge of the scapula (2) and the supraspinatus m. (3); 4, subscapular m.; 5, teres major m.; 6, coracobrachialis m.; 7, biceps brachii m.; 8, proximal branch of the musculocutaneous n. (supplies muscles 6 & 7); 9, median n. combined with distal branch of musculocutaneous n.; 10, radial n.; 11, ulnar n.; 12, axillary n.; unlabeled arrow, subscapular nerve.

ARMGEFLECHT (PLEXUS BRACHIALIS)

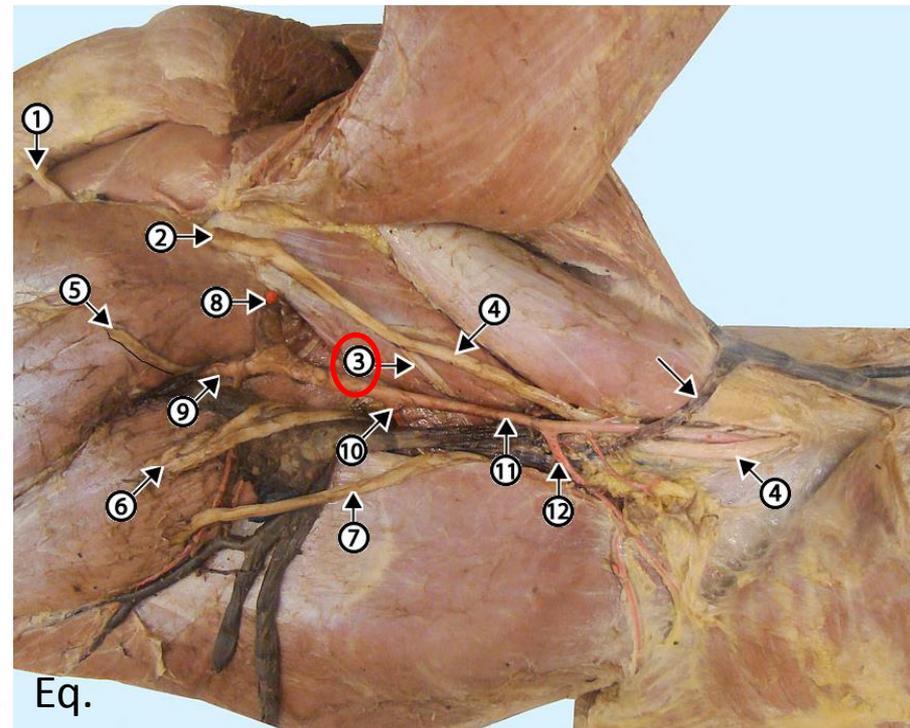
ÄSTE DES NERVUS MUSCULOCUTANEUS:

b. Ramus (R.) muscularis dist.

- versorgt den M. brahialis



Eq.



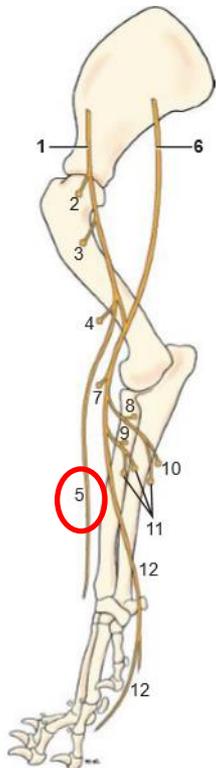
Neurovascular key for medial side of detached forelimb. Some nerves have been spread out to expose the brachial artery. 1, suprascapular n.; 2, combined median and musculocutaneous nn.; 3, distal branch of musculocutaneous n. to the brachialis m.; 4, median n.; 5, axillary n.; 6, radial n.; 7, ulnar n.; 8, axillary a.; 9, subscapular a.; 10, deep brachial a. coming off the brachial a. (11); 12, collateral ulnar a.; unlabeled arrow, median cubital vein.

ARMGEFLECHT (PLEXUS BRACHIALIS)

ÄSTE DES NERVUS MUSCULOCUTANEUS:

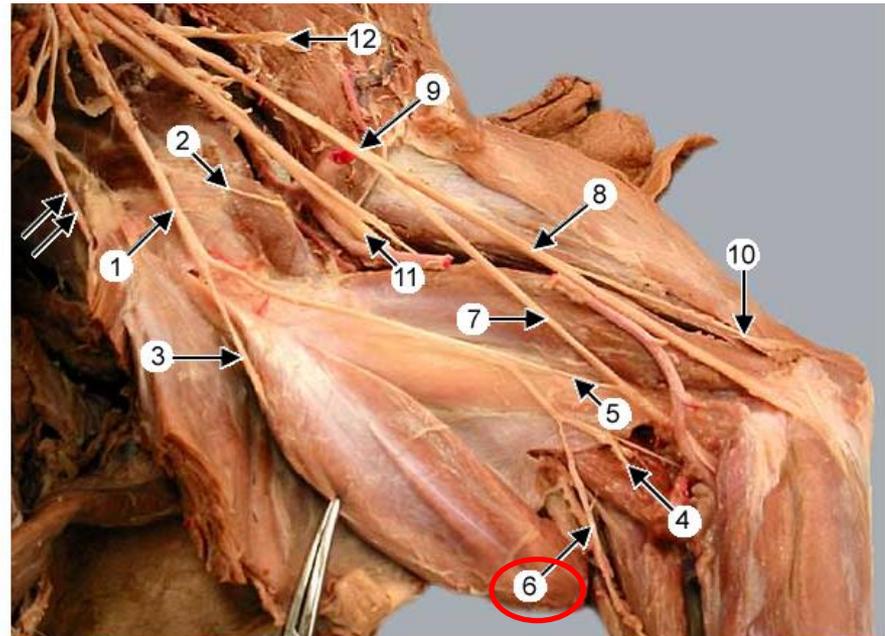
c. N. cutaneus antebrachii med.

- gelangt zwischen M. biceps brachii und M. brachialis an die Vorderseite des Unterarms
- tritt zwischen Mm. brachiocephalicus und M. biceps brachii an die Oberfläche
- seine Hautäste verzweigen sich unter der medialen Fläche der Unterarmfascie



Canine: Distribution of Musculocutaneous and Median Nerves, Right Forelimb (Medial View)

1. Musculocutaneous nerve
2. Coracobrachialis
3. Biceps brachii
4. Brachialis
5. Skin of the medial antebrachium
6. Median nerve
7. Pronator teres
8. Flexor carpi radialis
9. Pronator quadratus
10. Superficial digital flexor
11. Deep digital flexor, humeral, ulnar, and radial heads
12. Skin of the caudal antebrachium and palmar paw



Craniomedial view of the brachium. The musculocutaneous n. (1) innervates the coracobrachialis m. (2), the biceps brachii m. (3), and the brachialis m. (4). Also, the musculocutaneous n. sends a communicating branch (5) to the median nerve and ends as the medial cutaneous antebrachial n. (6). The median n. (7) and the ulnar n. (8) originate from a common trunk (9). The ulnar n. gives off the caudal cutaneous antebrachial n. (10). Identify the radial n. (11) passing laterally and the thoracodorsal n. (12). The nerve to the cleidobrachialis m. is evident (double arrows). <http://vanat.cvm.umn.edu/carnLabs/Lab13/Img13-12.html>

ARMGEFLECHT (PLEXUS BRACHIALIS)

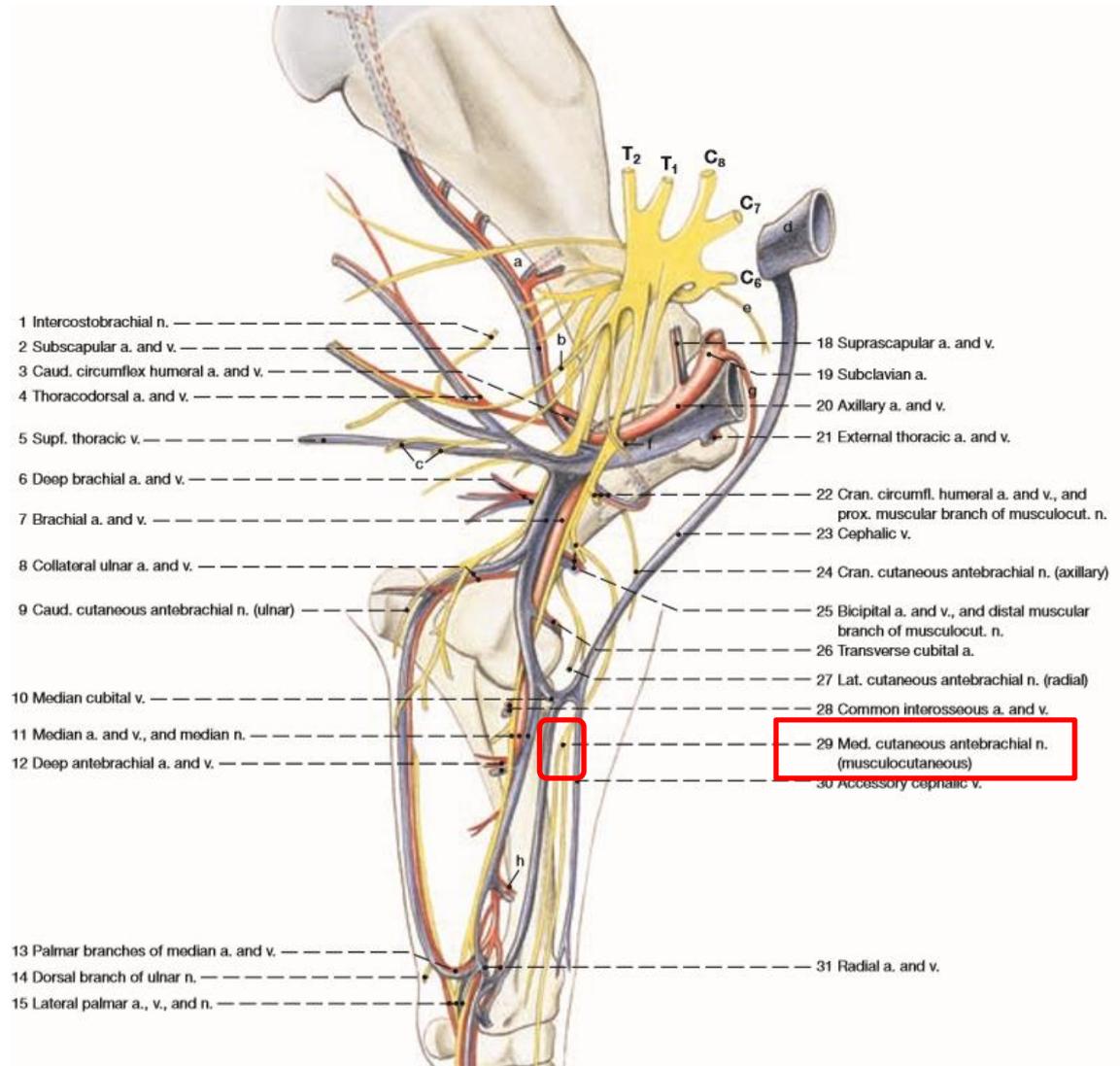
ÄSTE DES NERVUS MUSCULOCUTANEUS:

c. N. cutaneus antebrachii med.

beim Pfd. die Hautäste geben den

a. N. metacarpeus dors.

b. N. metacarpeus med. ab



ARMGEFLECHT (PLEXUS BRACHIALIS)

ÄSTE DES NERVUS MUSCULOCUTANEUS:

bei den Flfr.

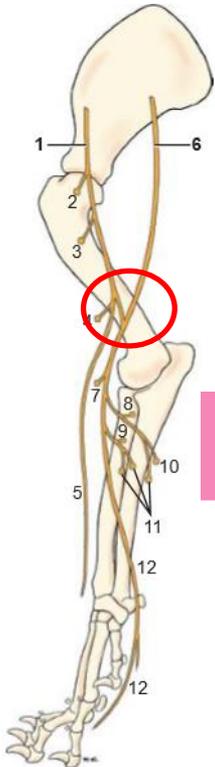
RAMUS COMMUNICANS CUM . N. MEDIANO:

- oberhalb des Ellenbogengelenkes durch ein Querast mit dem N. medianus verbindet

gabelt sich auf:

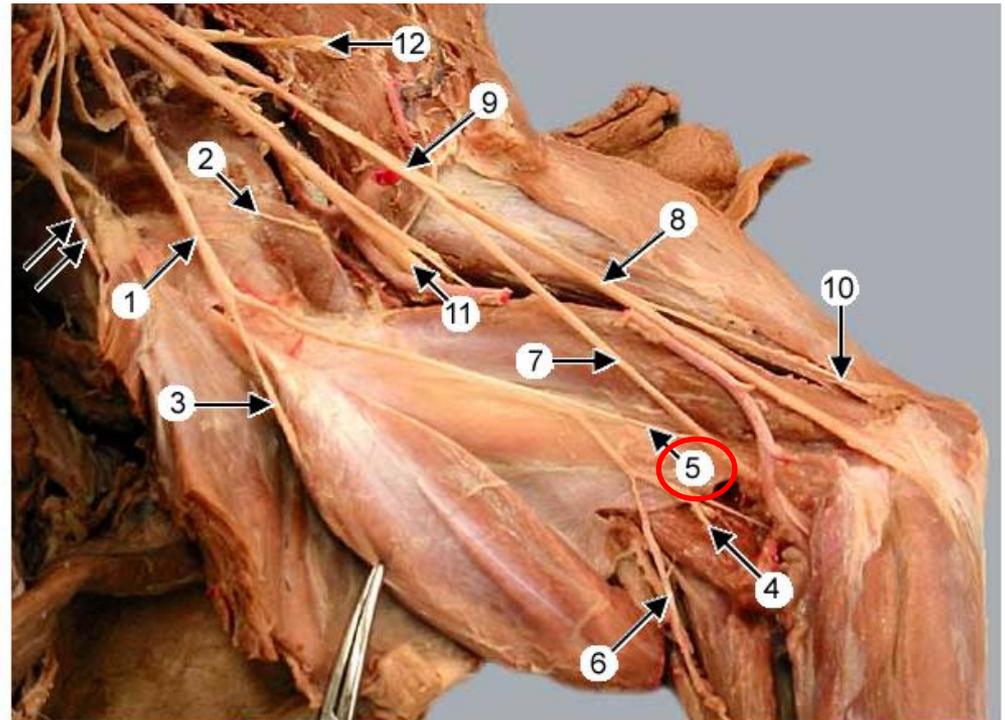
a. R. muscularis dist.

b. N. cutaneus antebrachii med.



Canine: Distribution of Musculocutaneous and Median Nerves, Right Forelimb (Medial View)

1. Musculocutaneous nerve
2. Coracobrachialis
3. Biceps brachii
4. Brachialis
5. Skin of the medial antebrachium
6. Median nerve
7. Pronator teres
8. Flexor carpi radialis
9. Pronator quadratus
10. Superficial digital flexor
11. Deep digital flexor, humeral, ulnar, and radial heads
12. Skin of the caudal antebrachium and palmar paw



Craniomedial view of the brachium. The **musculocutaneous n.** (1) innervates the coracobrachialis m. (2), the biceps brachii m. (3), and the brachialis m. (4). Also, the musculocutaneous n. sends a communicating branch (5) to the median nerve and ends as the medial cutaneous antebrachial n. (6). The **median n.** (7) and the **ulnar n.** (8) originate from a common trunk (9). The ulnar n. gives off the caudal cutaneous antebrachial n. (10). Identify the **radial n.** (11) passing laterally and the thoracodorsal n. (12). The nerve to the cleidobrachialis m. is evident (double arrows).

ARMGEFLECHT (PLEXUS BRACHIALIS)

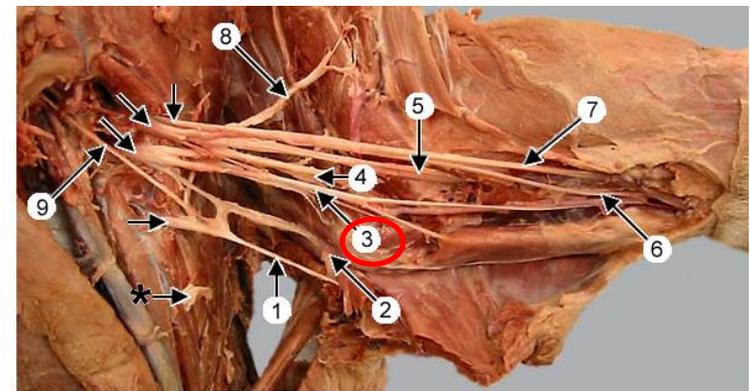
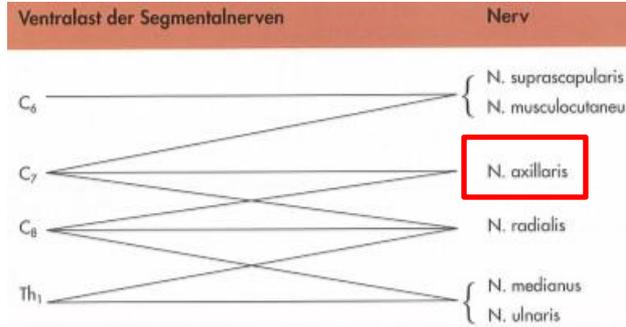
3. NERVUS AXILLARIS:

bezieht Fasern aus :

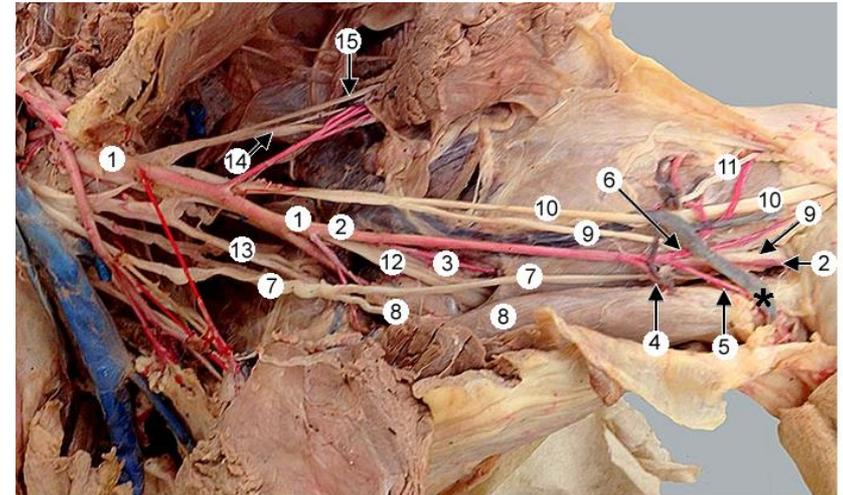
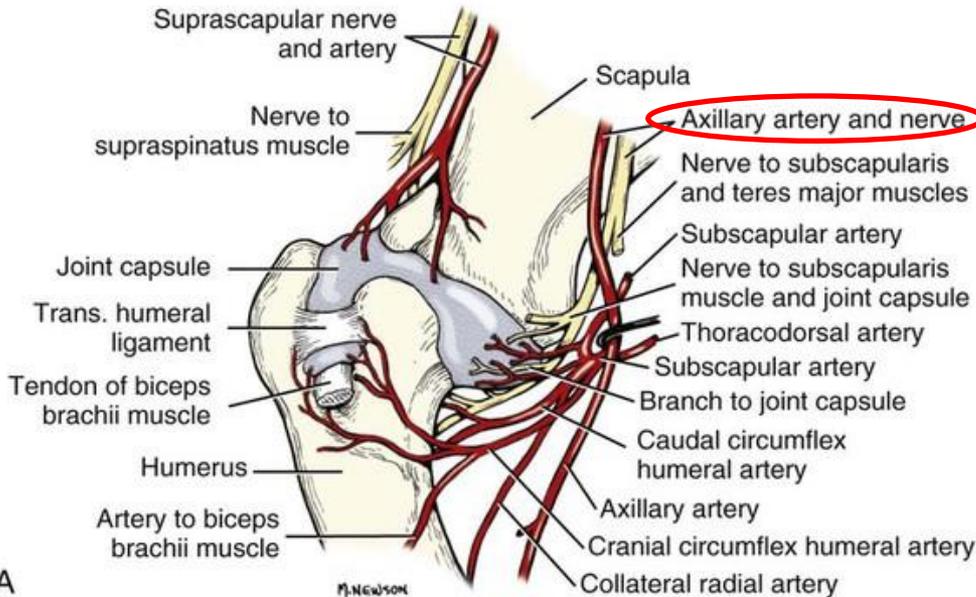
a. C7 – C8

zieht über:

- die Beugeseite des Schultergelenkes – gibt sensible Zweige ab
- zwischen des M. subscapularis und der A. subscapularis nach der lateralen Seite
- zwischen Caput long. et lat. des M. triceps brachii hinter dem M. teres major auftaucht



Brachial plexus nerves: Ventral branches of spinal nerves C-6 to T-1 (arrows) form the brachial plexus. The C-5 ventral branch is also evident (asterisk). Named, regional nerves include: n. to the cleidobrachialis (1), **suprascapular n.** (2), **musculocutaneus n.** (3), **axillary n.** (4), **radial n.** (5), **ulnar n.** (7), and **thoracodorsal n.** (8). The phrenic n. (9) can be seen entering the thoracic cavity. <http://vanat.cvm.umn.edu/carnLabs/Lab13/lmg13-8.html>



Canine brachial a.: The **axillary a.** (1) continues as the **brachial a.** (2). Visible branches of the brachial a. are: deep brachial a. (3), bicipital a. (4), superficial brachial (5), and **collateral ulnar a.** (6). Veins are poorly injected, but the median cubital v. (asterisk) is evident.

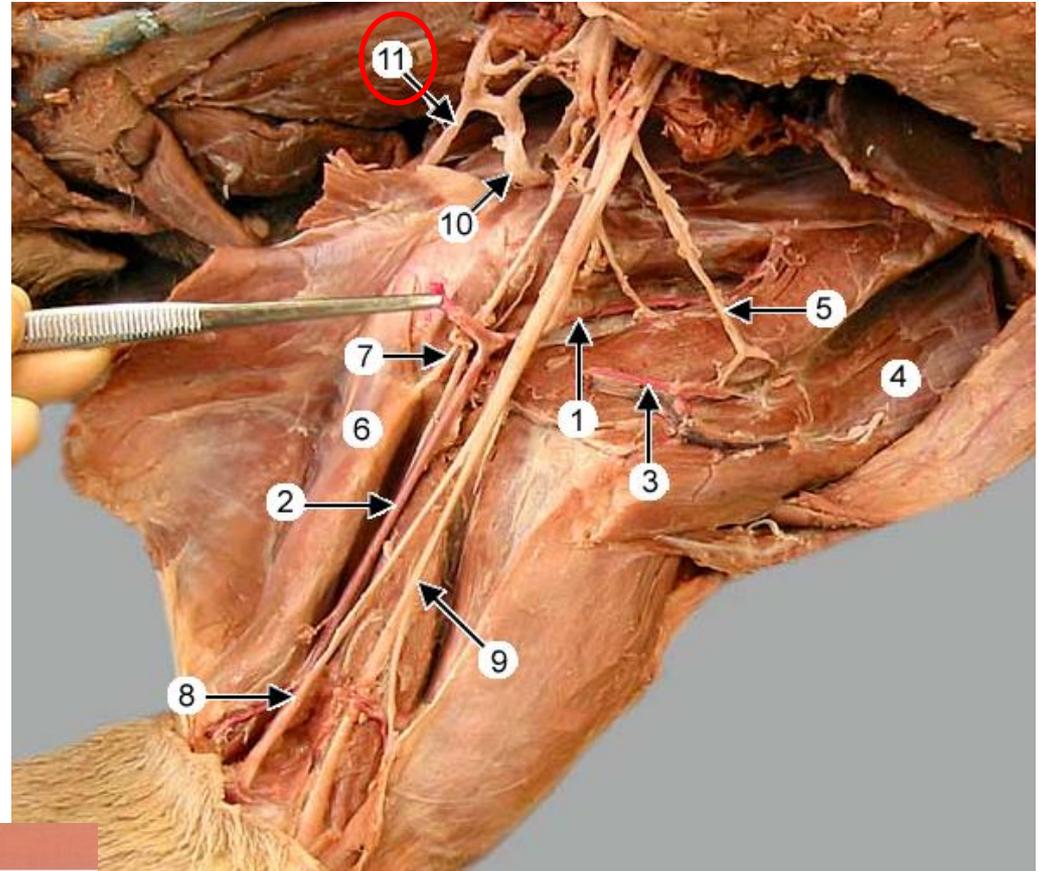
The **musculocutaneus n.** (7) innervates the biceps brachii m. (8). The **median n.** (9) runs with the brachial a. The **ulnar n.** (10) gives off a caudal cutaneous antebrachial n. (11). The large **radial n.** (12) courses laterally, as does the **axillary n.** (13). The **thoracodorsal n.** (14) and the **lateral thoracic n.** (14) are evident. The latter runs with the lateral thoracic a. and innervates the cutaneous trunci m. (panniculus reflex).

ARMGEFLECHT (PLEXUS BRACHIALIS)

3. NERVUS AXILLARIS:

entsendet Muskelzweige (Rr. musculares):

- a) an den M. deltoideus
- b) an den die Mm. teres major et minor
- c) an die kaudale Partie des M. subscapularis
- d) an den M. articularis seu capsularis
- e) zum M. cleidobrachialis



Medial view of the scapular region and brachium. The **axillary a.** (held in forceps) gives off a large **subscapular a.** (1) and then becomes the **brachial a.** (2), after sending a cranial circumflex humeral a. (not visible) to the biceps brachii m. The subscapular a. gives rise to the **thoracodorsal a.** (3) which supplies the latissimus dorsi m. (4), as does the **thoracodorsal n.** (5) from the brachial plexus.

Also, find: biceps brachii m. (6) innervated by the musculocutaneous n. (7), median n. (8), ulnar n. (9), suprascapular n. (10), and nerve to the cleidobrachialis m. (11).

<http://vanat.cvm.umn.edu/carnLabs/Lab13/lmg13-4.html>

Nerv	motorisch	sensibel
N. suprascapularis	M. supraspinatus, M. infraspinatus	
N. axillaris	Beuger des Schultergelenks: M. deltoideus, M. teres major, M. teres minor, M. cleidobrachialis	Haut an der Vorderfläche des Unterarms
Nn. subscapulares	M. subscapularis	
N. musculocutaneus	M. coracobrachialis, M. biceps brachii, M. brachialis, zum Teil	Haut medial am Unterarm

ARMGEFLECHT (PLEXUS BRACHIALIS)

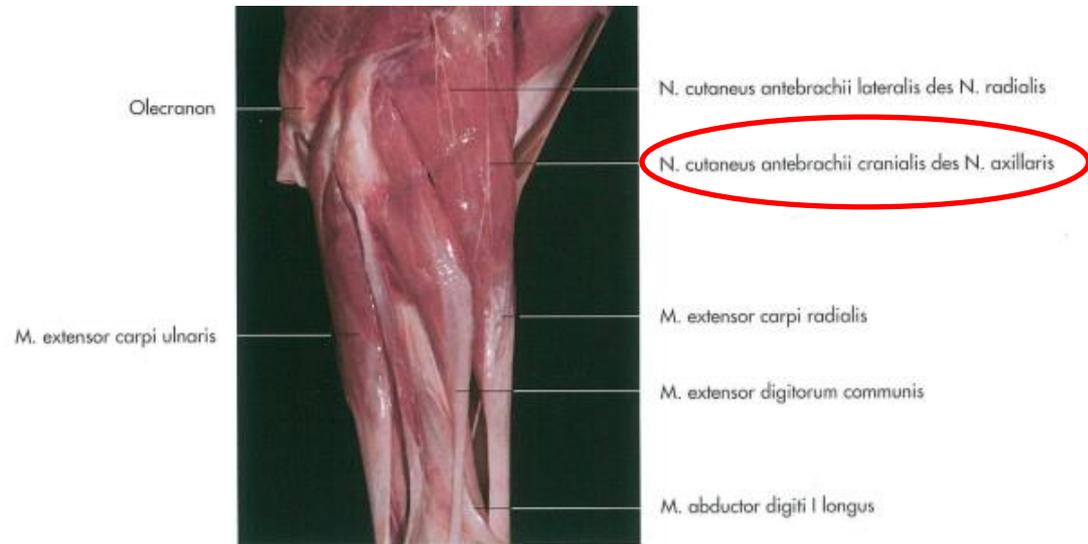
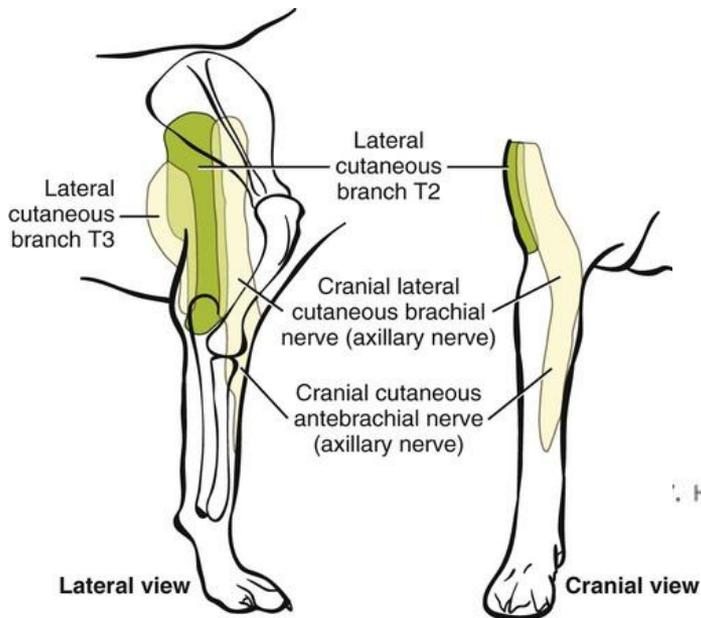
HAUTAST des NERVUS AXILLARIS:

a. N. cutaneus antebrachii cran.

- tritt zwischen Hinterrand des M. deltoideus und Caput lat. des M. triceps brachii

in zwei Äste gabelt:

- über den M. extensor carpi radialis zur Haut der Vordergliedmaße des Unterarms, bis zum Carpus mit sensible Fasern versorgt



! Hautnerven am Unterarm der rechten Vordergliedmaße eines Pferdes (Lateralansicht), Präparat Dr. R. Macher, Wien.

ARMGEFLECHT (PLEXUS BRACHIALIS)

4. NERVI (Nn) SUBSCAPULARES:

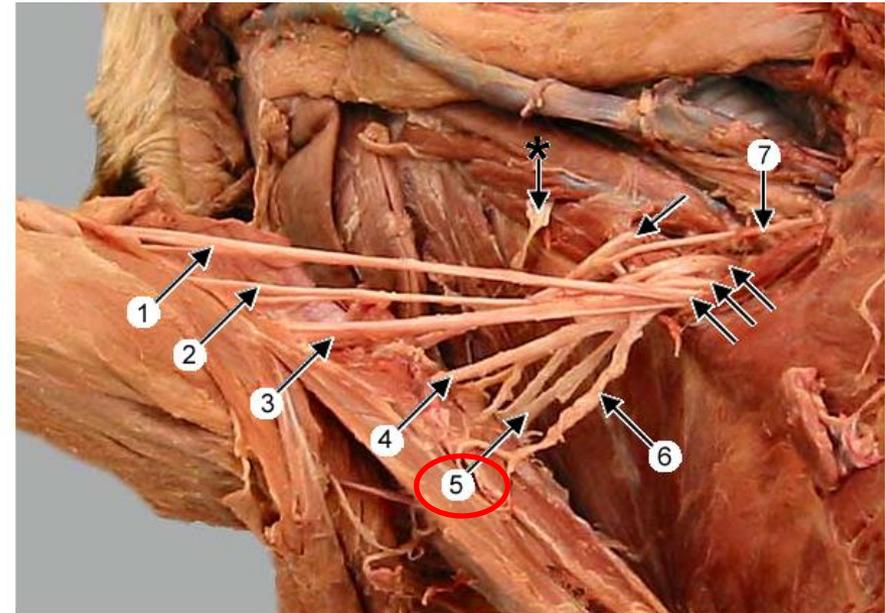
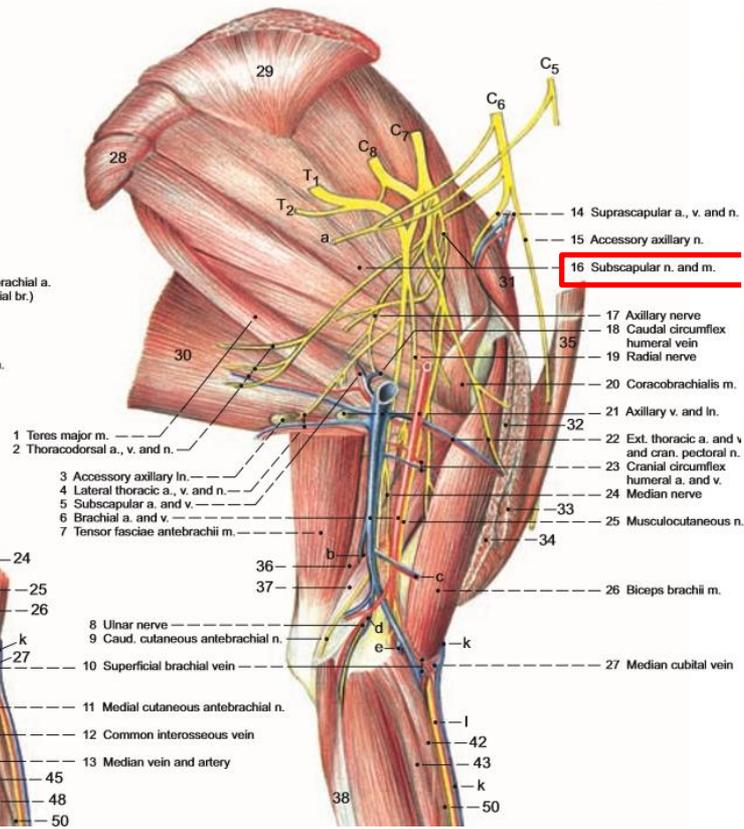
innervieren:

a. den M. subscapularis

Thoracic limb

Legend :

- a Phrenic n.
- b Deep brachial a. and v.
- c Bicipital a. and v.
- d Collateral ulnar a. and v.
- e Transverse cubital a. and v.
- f Recurrent ulnar a. and v.
- g Ulnar a. and v.
- h Dors. br. of ulnar a. v. and n.
- i Caud. interosseous a. and v.
- j Deep brachial a. and v.
- k Cephalic v.
- l Medial br. of supf. cran. antebrachial a. and supf. br. of radial n. (medial br.)
- m Acc. cephalic v.
- n Radial a. and v.
- o Dors. carpal br.
- p Abaxial palmar digital n. I
- q Palm. com. digital aa. and nn.
- r Supf. palmar arch
- s Palm. com. digital vv.



Another view of brachial plexus nerves: Ventral branches of spinal nerves C-6 to T-1 (arrows) feed into the brachial plexus The C-5 ventral branch is also evident (asterisk). Named, regional nerves include: ulnar n. together with the median n. (1), **musculocutaneous n. (2)**, **radial n. (3)**, **axillary n. (4)**, **subscapular n. (5)**, and **thoracodorsal n. (6)**. The phrenic n. (7) can be seen entering the thoracic cavity (the C-5 contribution to the phrenic n. is broken).

<http://vanat.cvm.umn.edu/carnLabs/Lab13/Img13-9.html>

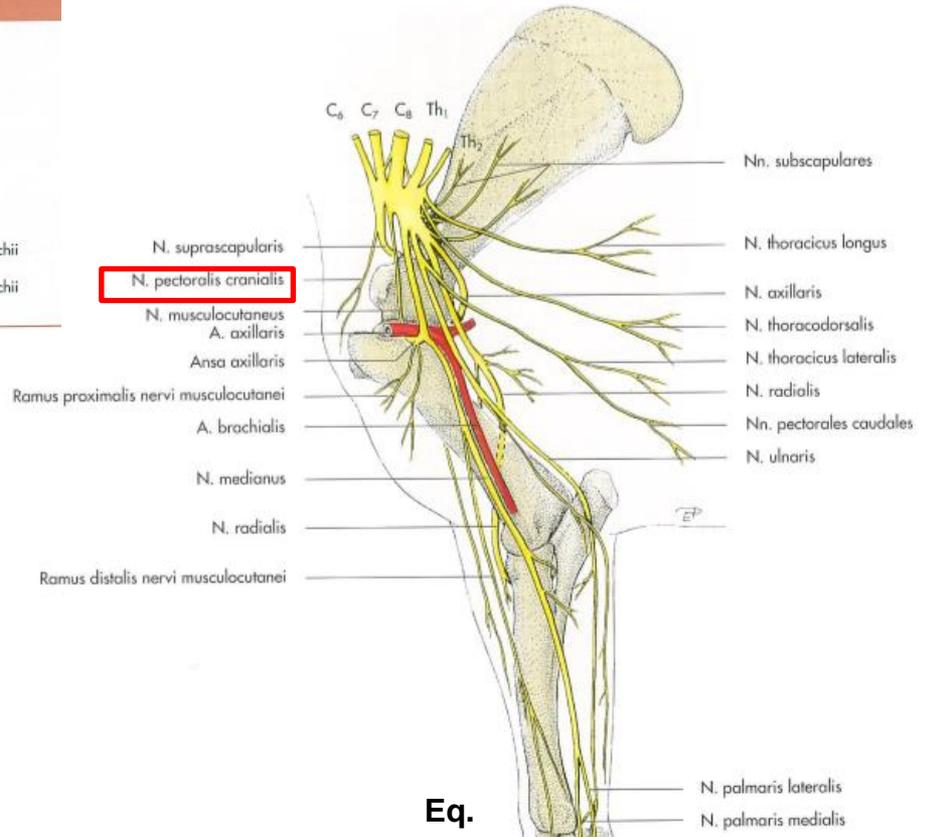
ARMGEFLECHT (PLEXUS BRACHIALIS)

5. NERVI (Nn) PECTORALES (THORACICI) CRANIALES:

ziehen ventralwärts zu den:

- a. Mm. pectorales superficiales
- b. M. pectoralis cleidoscapularis (Pars praescapularis des M. pectorali prof.) von Pfd.

Nerv	motorisch	sensibel
Nn. pectorales craniales	M. pectoralis superficialis, M. subclavius	
Nn. pectorales caudales	M. pectoralis profundus	
N. thoracicus longus	M. serratus ventralis thoracis	
N. thoracodorsalis	M. latissimus dorsi	
N. thoracicus lateralis	M. cutaneus trunci	Haut seitlich am Thorax und über dem M. triceps brachii
N. intercostobrachialis	M. cutaneus trunci	Haut seitlich am Thorax und über dem M. triceps brachii

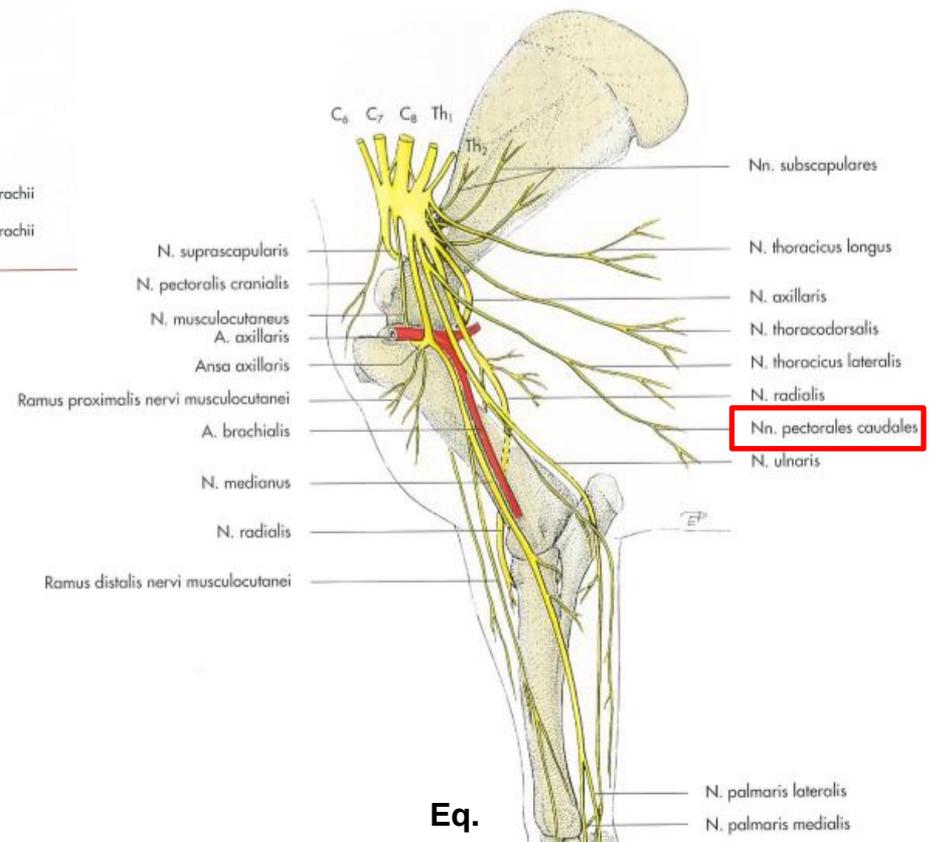


ARMGEFLECHT (PLEXUS BRACHIALIS)

6. NERVI (Nn) PECTORALES (THORACICI) CAUDALES:

- verlaufen kaudoventral zum M. pectoralis ascendens

Nerv	motorisch	sensibel
Nn. pectorales craniales	M. pectoralis superficialis, M. subclavius	
Nn. pectorales caudales	M. pectoralis profundus	
N. thoracicus longus	M. serratus ventralis thoracis	
N. thoracodorsalis	M. latissimus dorsi	
N. thoracicus lateralis	M. cutaneus trunci	Haut seitlich am Thorax und über dem M. triceps brachii
N. intercostobrachialis	M. cutaneus trunci	Haut seitlich am Thorax und über dem M. triceps brachii

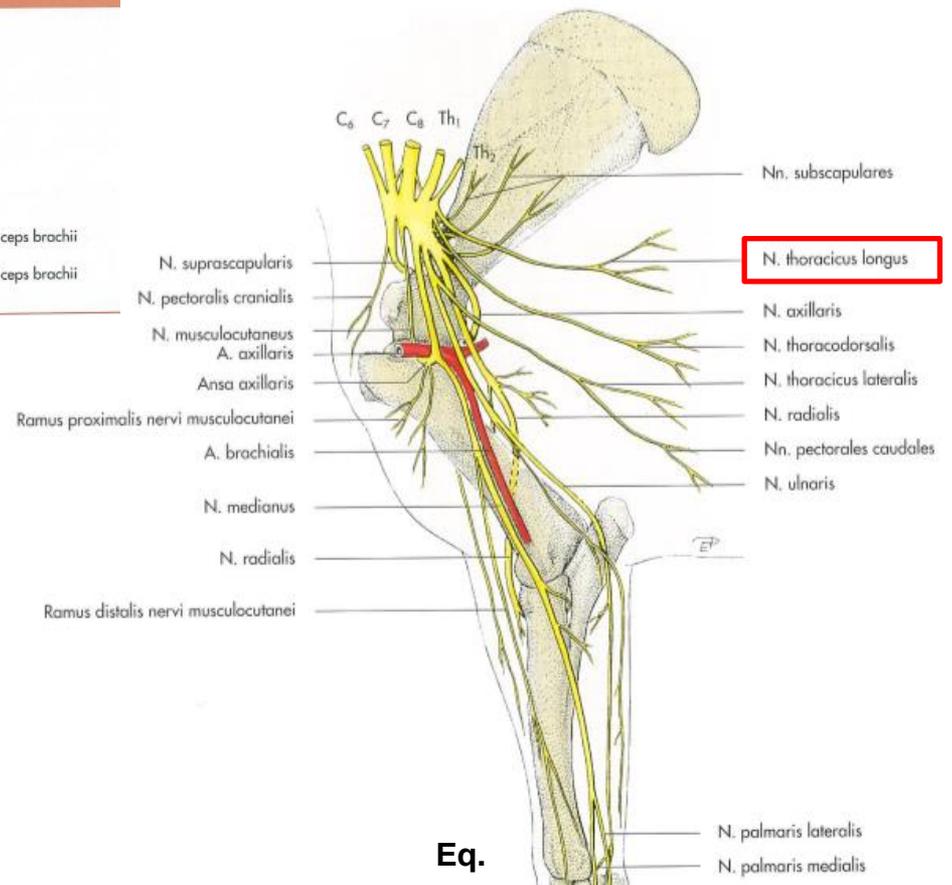


ARMGEFELCHT (PLEXUS BRACHIALIS)

7. NERVUS THORACICUS LONGUS:

- aus Radix von C7 oder C8
- zieht in horizontalem Verlauf zur Brustportion des M. serratus ventralis

Nerv	motorisch	sensibel
Nn. pectorales craniales	M. pectoralis superficialis, M. subclavius	
Nn. pectorales caudales	M. pectoralis profundus	
N. thoracicus longus	M. serratus ventralis thoracis	
N. thoracodorsalis	M. latissimus dorsi	
N. thoracicus lateralis	M. cutaneus trunci	Haut seitlich am Thorax und über dem M. triceps brachii
N. intercostobrachialis	M. cutaneus trunci	Haut seitlich am Thorax und über dem M. triceps brachii



Eq.

ARMGEFLECHT (PLEXUS BRACHIALIS)

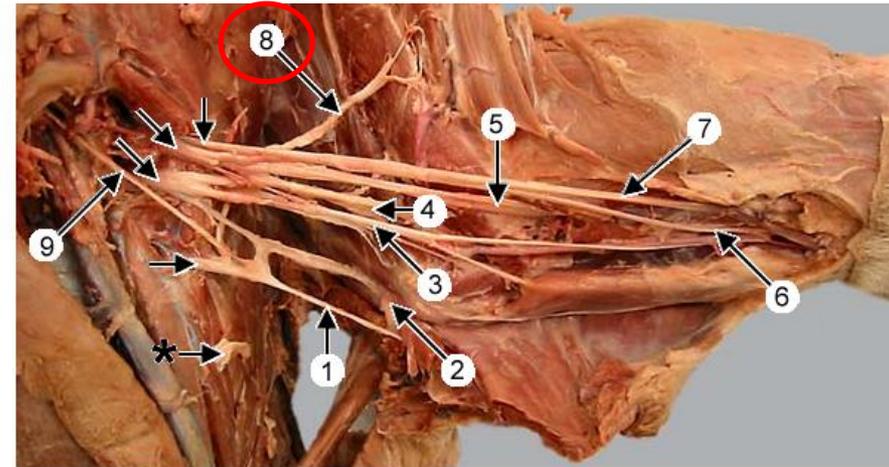
8. NERVUS THORACODORSALIS:

- geht aus den hinteren Plexuswurzeln vorab C8 hervor

verläuft kaudalwärts:

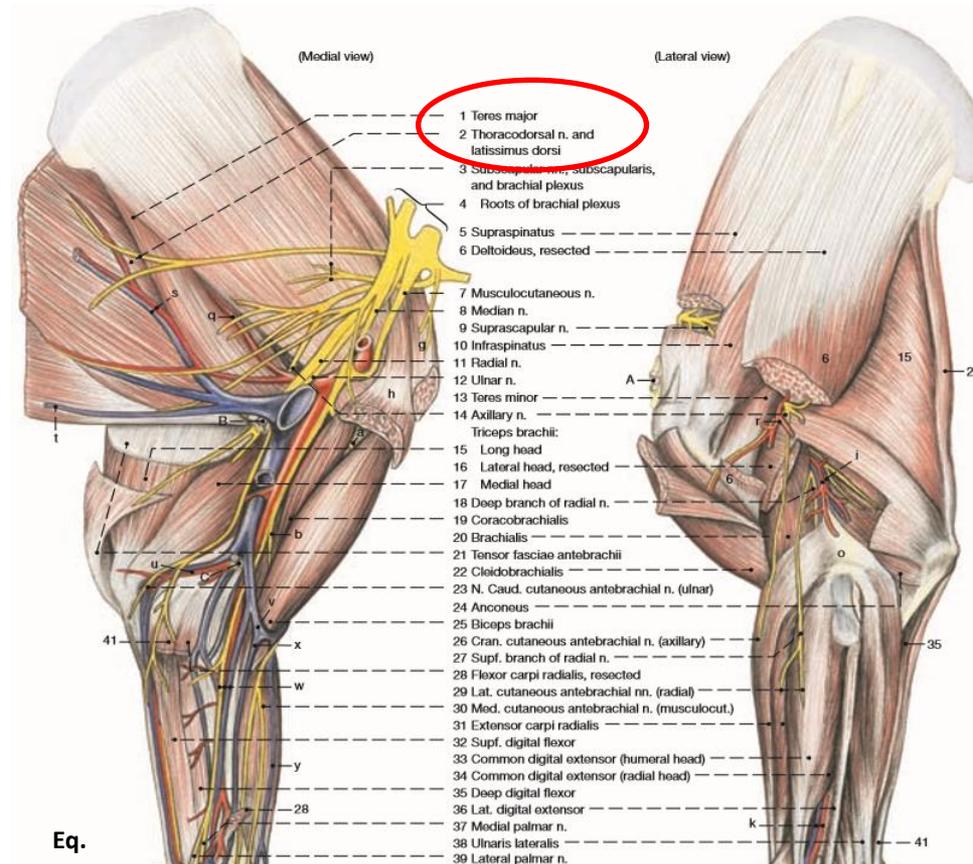
a. über den M. teres major

b. hinweg zum M. latissimus dorsi



Brachial plexus nerves: Ventral branches of spinal nerves C-6 to T-1 (arrows) form the brachial plexus. The C-5 ventral branch is also evident (asterisk). Named, regional nerves include: n. to the cleidobrachialis (1), suprascapular n. (2), musculocutaneous n. (3), axillary n. (4), radial n. (5), median n. (6), ulnar n. (7), and thoracodorsal n. (8). The phrenic n. (9) can be seen entering the thoracic cavity.

<http://vanat.cvm.umn.edu/carnLabs/Lab13/Img13-8.html>



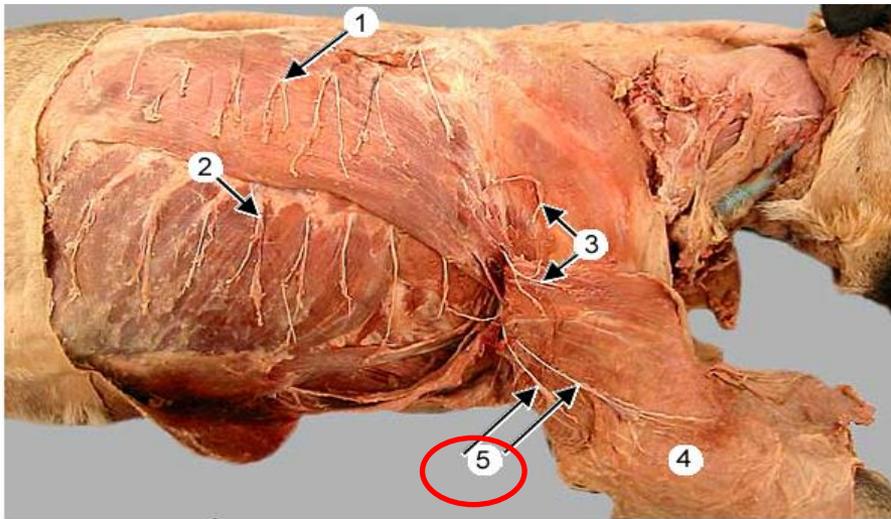
ARMGEFLECHT (PLEXUS BRACHIALIS)

9. NERVUS THORACICUS LATERALIS:

- aus den C8 und Th1
- **sensorisch**
- überquert den M. teres major
- zieht dem unteren Rand des M. latissimus dorsi

innerviert:

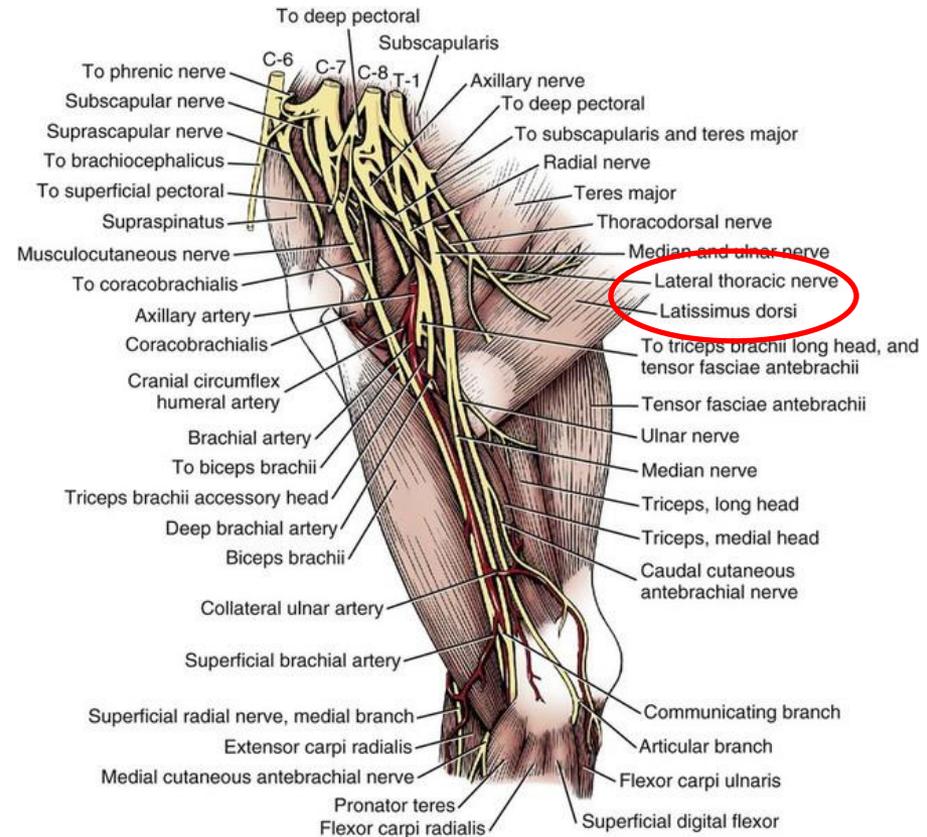
a. die ventralen Teile der Brust – Bauchhaut



Examine cutaneous nerves in the thorax. A row of **dorsal cutaneous nerves** (1) emerges laterally on the thorax (and abdomen), in contrast to the neck where dorsal cutaneous nerves emerged from the dorsal midline. A row of **lateral cutaneous nerves** (2) emerges mid-laterally on the thorax (and abdomen). The initial lateral cutaneous nerve (from T-2) spreads over the brachium and is named intercostobrachial n. (3). The thorax also features small ventral cutaneous nerves (not shown) that emerge near the ventral midline.

The reflected cutaneous trunci m. (4) is innervated by the **lateral thoracic n.** (5) a muscle (motor) nerve that originates from the brachial plexus.

<http://vanat.cvm.umn.edu/carnLabs/Lab10/img10-1.html>



<https://veteriankey.com/spinal-nerves/>

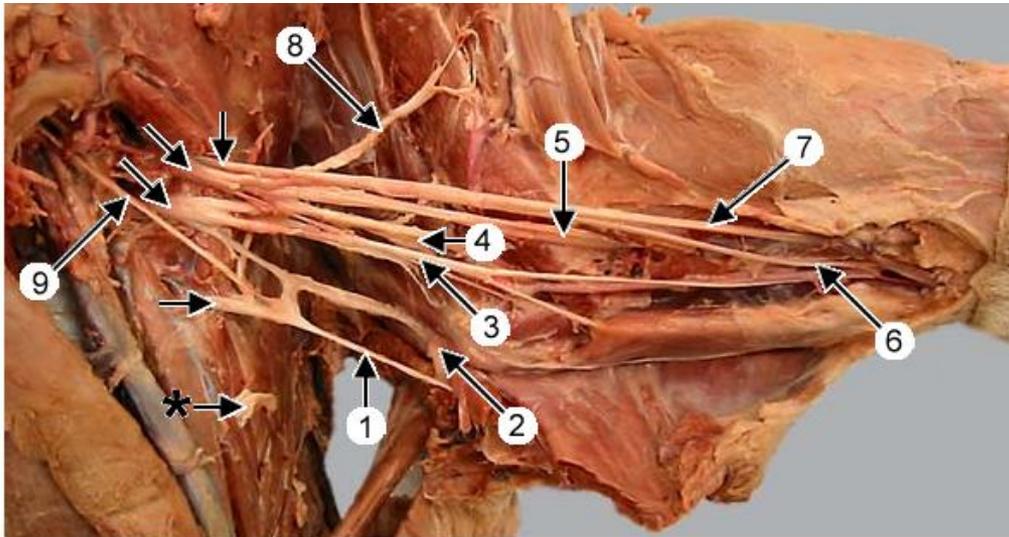
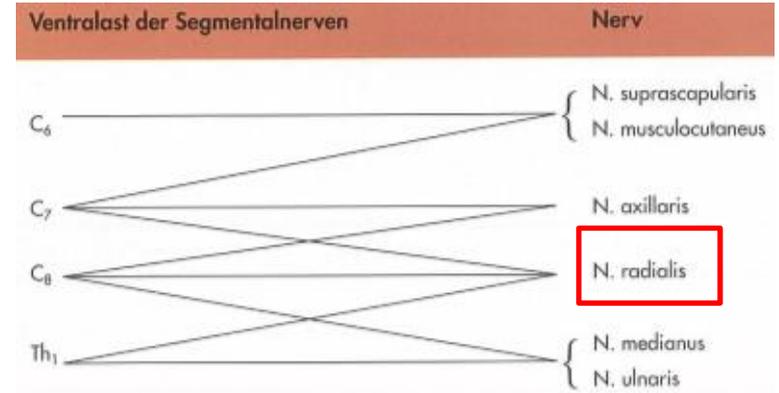
ARMGEFLECHT (PLEXUS BRACHIALIS)

10. NERVUS RADIALIS:

- entsteht aus C7, C8, Th1

versorgt motorisch:

- die Strecker des Ellenbogen – und Karpalgelenks
- die Strecker der Zehengelenke



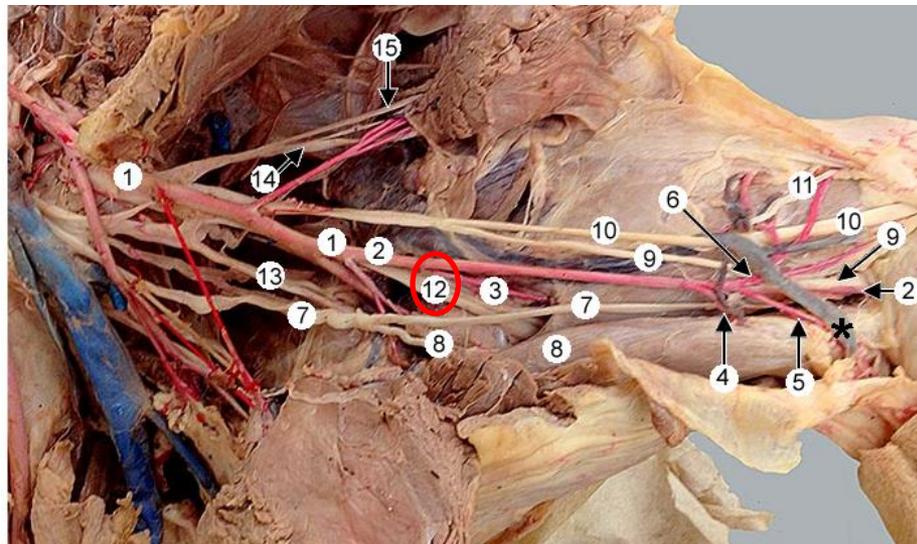
Brachial plexus nerves: Ventral branches of spinal nerves C-6 to T-1 (arrows) form the brachial plexus. The C-5 ventral branch is also evident (asterisk). Named, regional nerves include: n. to the cleidobrachialis (1), **suprascapular n.** (2), **musculocutaneous n.** (3), **axillary n.** (4), **radial n.** (5), **median n.** (6), **ulnar n.** (7), and **thoracodorsal n.** (8). The phrenic n. (9) can be seen entering the thoracic cavity.

Nerv	motorisch	sensibel
N. radialis	alle Strecker der Vordergliedmaße, mit Ausnahme derer des Schultergelenks: M. triceps brachii, M. anconaeus, M. tensor fasciae antebrachii, M. brachialis (zum Teil), M. extensor carpi radialis, M. extensor digitorum communis, M. extensor digitorum lateralis, M. extensor carpi ulnaris (Beuger), M. abductor digiti I longus, M. brachioradialis, M. supinator	Haut lateral am Ober- und Unterarm

ARMGEFLECHT (PLEXUS BRACHIALIS)

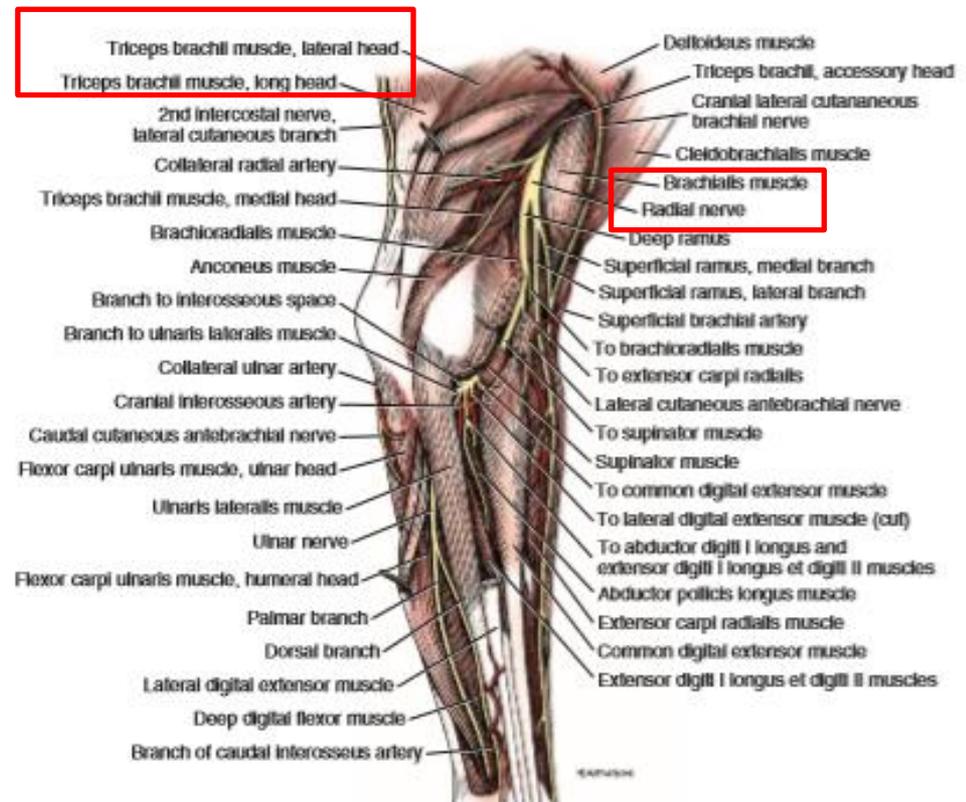
10. NERVUS RADIALIS tritt:

- in der Mitte des Oberarms am hinteren Rand des M. triceps brachii kaudal von der A. brachialis zwischen Caput long. et Caput med. des M. triceps brachii in die Tiefe
- bedeckt von Caput lat. des M. triceps brachii
- distalwärts über Humerus hinweg zur Beugeseite des Ellenbogengelenks
- liegt am hinteren Rand des M. brachialis auf – kann hier gequetscht werden – **Radialislähmung**



Canine brachial a.: The axillary a. (1) continues as the brachial a. (2). Visible branches of the brachial a. are: deep brachial a. (3), bicipital a. (4), superficial brachial (5), and collateral ulnar a. (6). Veins are poorly injected, but the median cubital v. (asterisk) is evident.

The musculocutaneous n. (7) innervates the biceps brachii m. (8). The median n. (9) runs with the brachial a. The ulnar n. (10) gives off a caudal cutaneous antebrachial n. (11). The large radial n. (12) courses laterally, as does the axillary n. (13). The thoracodorsal n. (14) and the lateral thoracic n. (14) are evident. The latter runs with the lateral thoracic a. and innervates the cutaneous trunci m. (panniculus reflex). <http://vanat.cvm.umn.edu/carnLabs/Lab13/lmg13-3.html>

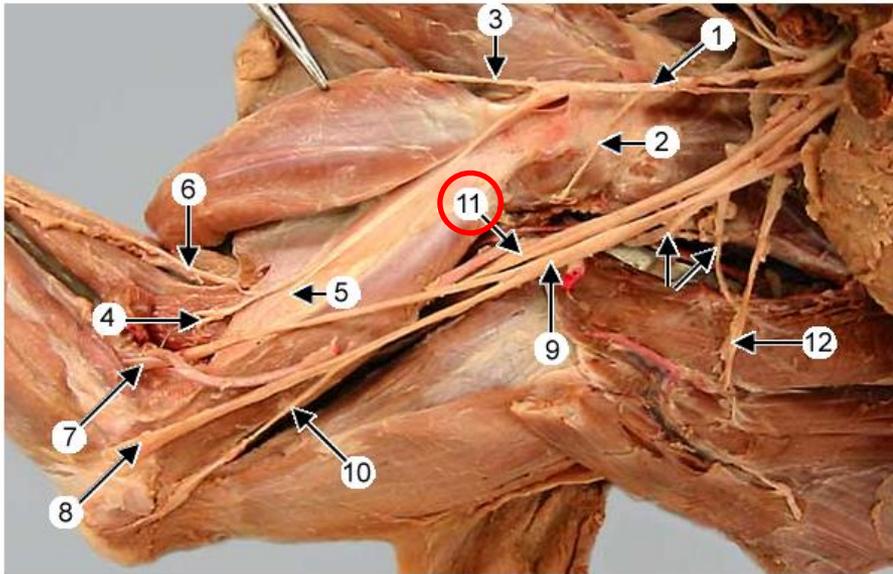


ARMGEFLECHT (PLEXUS BRACHIALIS)

MUSKELÄBTE DES NERVUS RADIALIS:

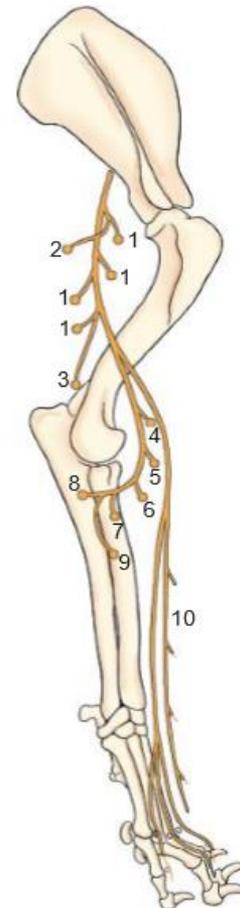
a. proximale Muskeläbte versorgen:

- die Trizepsgruppe
- den M. anconeus
- den M. tensor fasciae antebrachii
- bei den Hft. das distale Ende des M. brachialis



The **musculocutaneous n.** (1) innervates the coracobrachialis m. (2), the biceps brachii m. (3), and the brachialis m. (4). Also, the musculocutaneous n. sends a communicating branch (5) to the median nerve and ends as the medial cutaneous antebrachial n. (6). The **median n.** (7) and the **ulnar n.** (8) originate from a common trunk (9). The ulnar n. gives off the caudal cutaneous antebrachial n. (10). Identify the **radial n.** (11) passing laterally and the thoracodorsal n. (12). Branches of the axillary n. are evident (arrows).

<http://vanat.cvm.umn.edu/carnLabs/Lab13/lmg13-11.html>



Canine: Distribution of the Radial Nerve, Right Forelimb (Lateral View)

1. Triceps brachii
2. Tensor fasciae antebrachii
3. Anconeus
4. Extensor carpi radialis
5. Supinator
6. Common digital extensor
7. Lateral digital extensor
8. Ulnaris lateralis
9. Abductor digiti I longus
10. Skin of the cranial and lateral antebrachium and dorsal paw

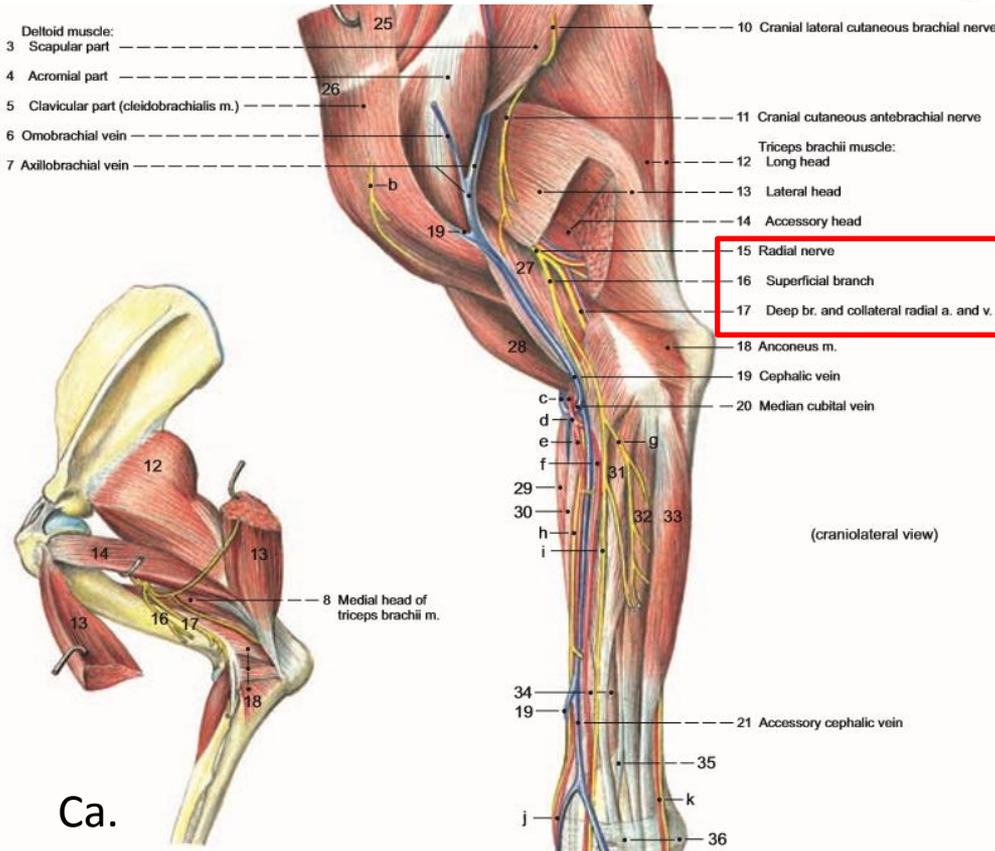
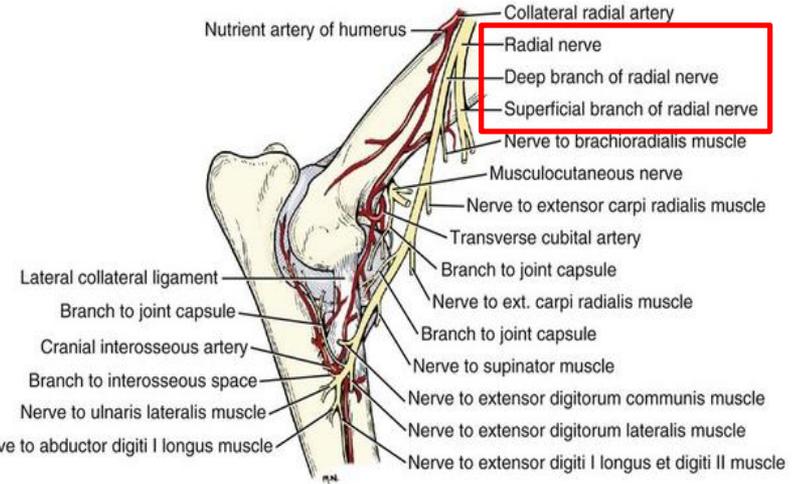
ARMGEFLECHT (PLEXUS BRACHIALIS)

10. NERVUS RADIALIS:

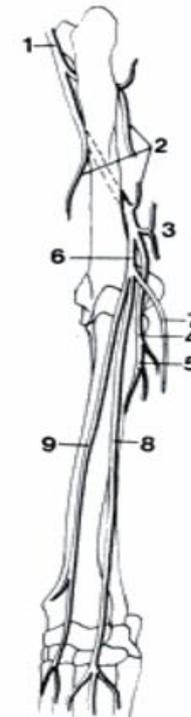
dann teilt sich unter dem Caput lat. des Trizeps in einen:

A. RAMUS PROFUNDUS – Muskelast, motorisch

B. RAMUS SUPERFICIALIS – Hautast, sensorisch



A N. radialis – left brachium and antebrachium, cranial aspect (ca)

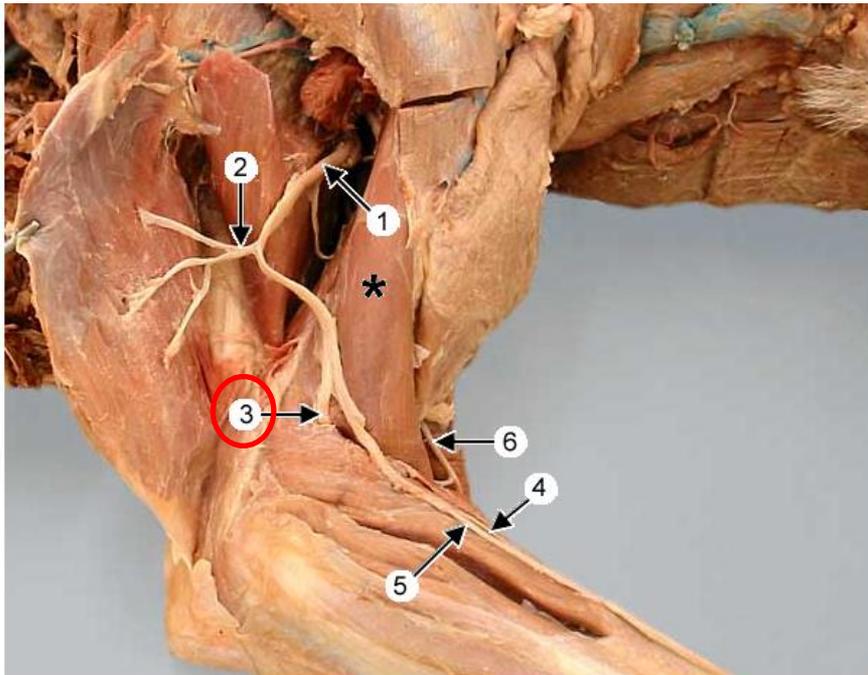


1. N. radialis
2. Rami musculares
3. N. cutaneus lateralis caud.
4. Ramus profundus
5. Rami musculares
6. Ramus superficialis
7. N. cutaneus antebrachii lat.

ARMGEFLECHT (PLEXUS BRACHIALIS)

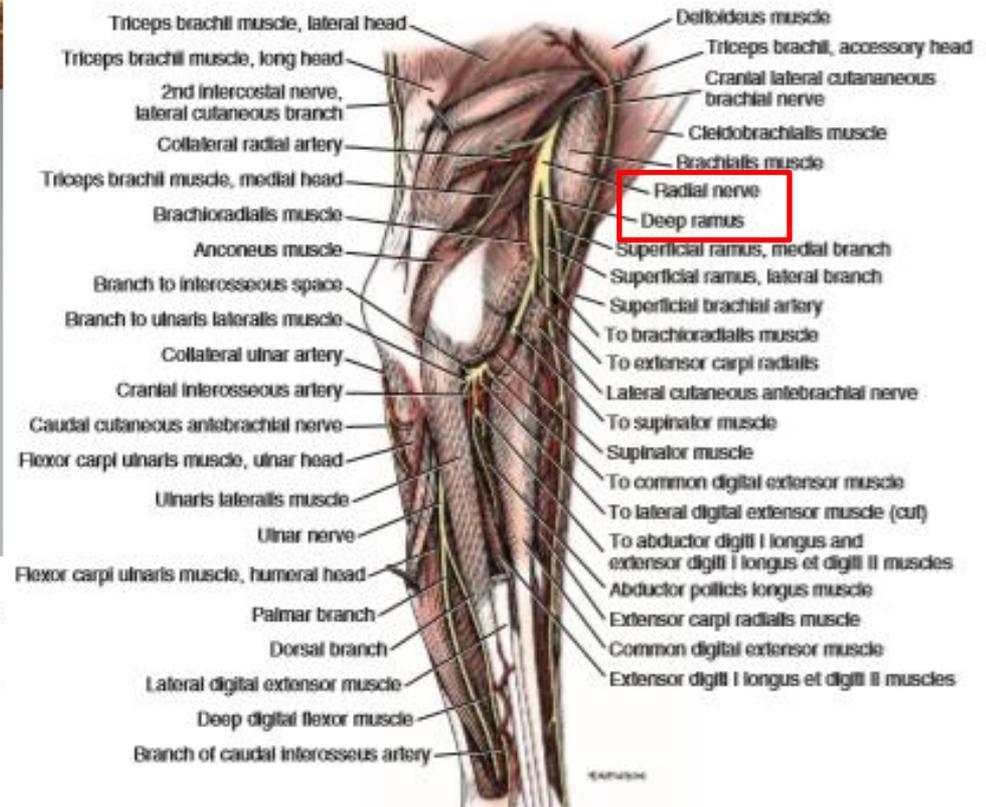
A. NERVUS RADIALIS RAMUS PROFUNDUS:

- zieht unter dem M. supinator - unter den Köpfen der Mm. extensor carpi radialis und extensor digitorum comm. - über die Beugeseite des Ellenbogengelenks hinweg



Lateral view of the brachium and antebrachium, the lateral head of the triceps brachii m. is reflected caudally. The **radial n.** (1) passes from medial to lateral along the caudal surface of the brachialis m. (asterisk). After the radial n. innervates the triceps brachii m. (2), it divides into **deep** and **superficial** branches. The deep branch innervates craniolateral antebrachial muscles (3). The radial nerve continues as medial (4) and lateral (5) **superficial branches** of the **radial n.** These supply skin of the cranial antebrachium and dorsal manus. The superficial brachial a. (6) is visible cranial to the brachialis m.

<http://vanat.cvm.umn.edu/carnLabs/Lab14/lmg14-2.html>

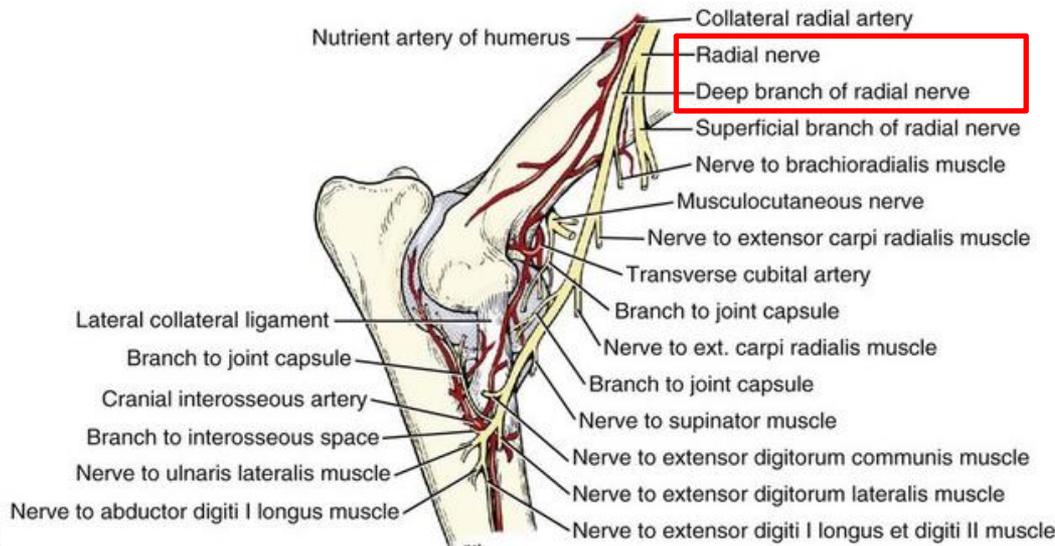
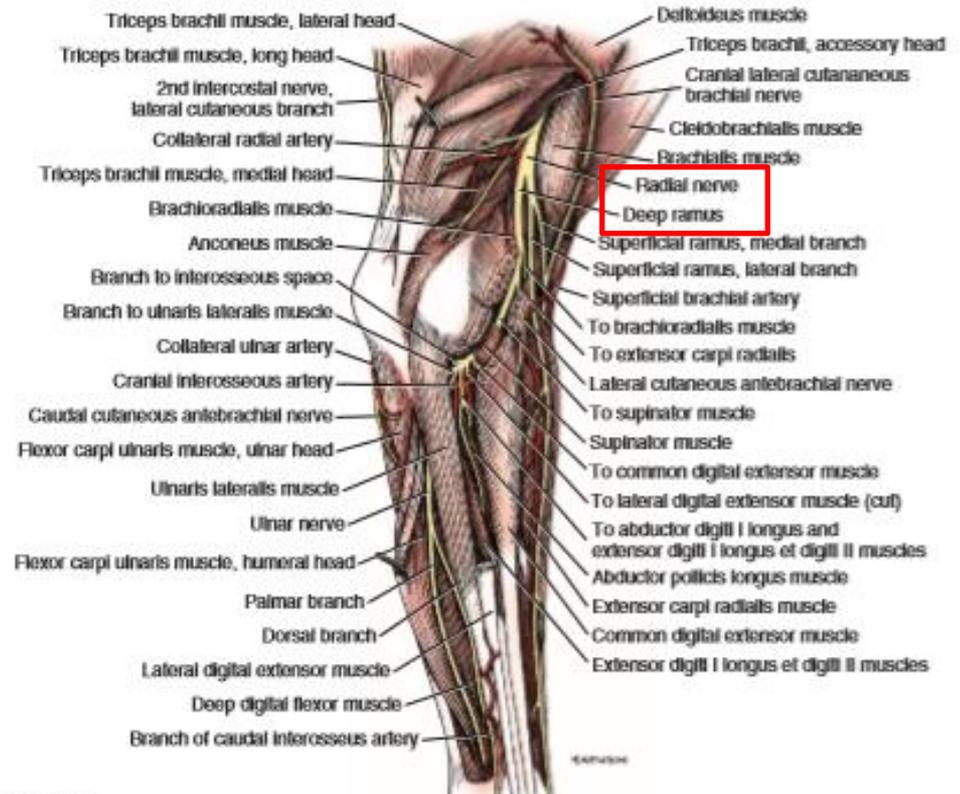


ARMGEFLECHT (PLEXUS BRACHIALIS)

A. NERVUS RADIALIS RAMUS PROFUNDUS:

innerviert:

- a. **M. extensor carpi rad.**
- b. **M. extensor digitorum comm.**
- c. **M. extensor dig. lat.**
- d. **M. extensor carpi ulnaris radiale Seite**
- e. **M. abductor pollicis long.**



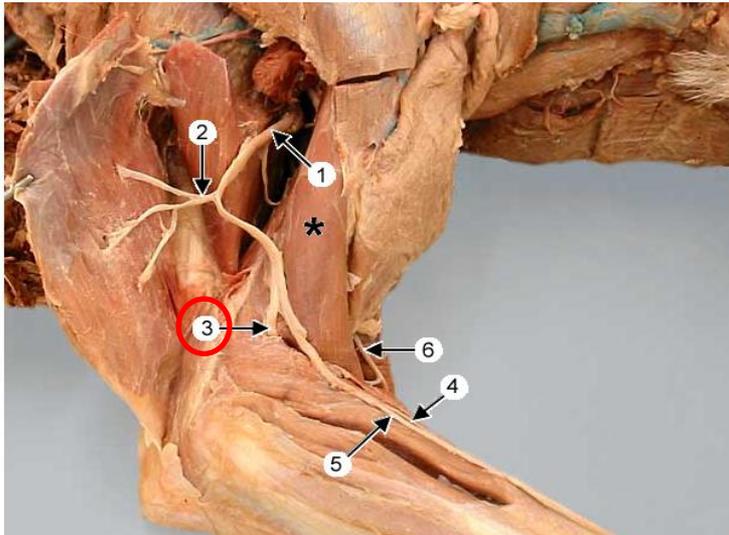
ARMGEFLECHT (PLEXUS BRACHIALIS)

A. NERVUS RADIALIS RAMUS PROFUNDUS:

innerviert:

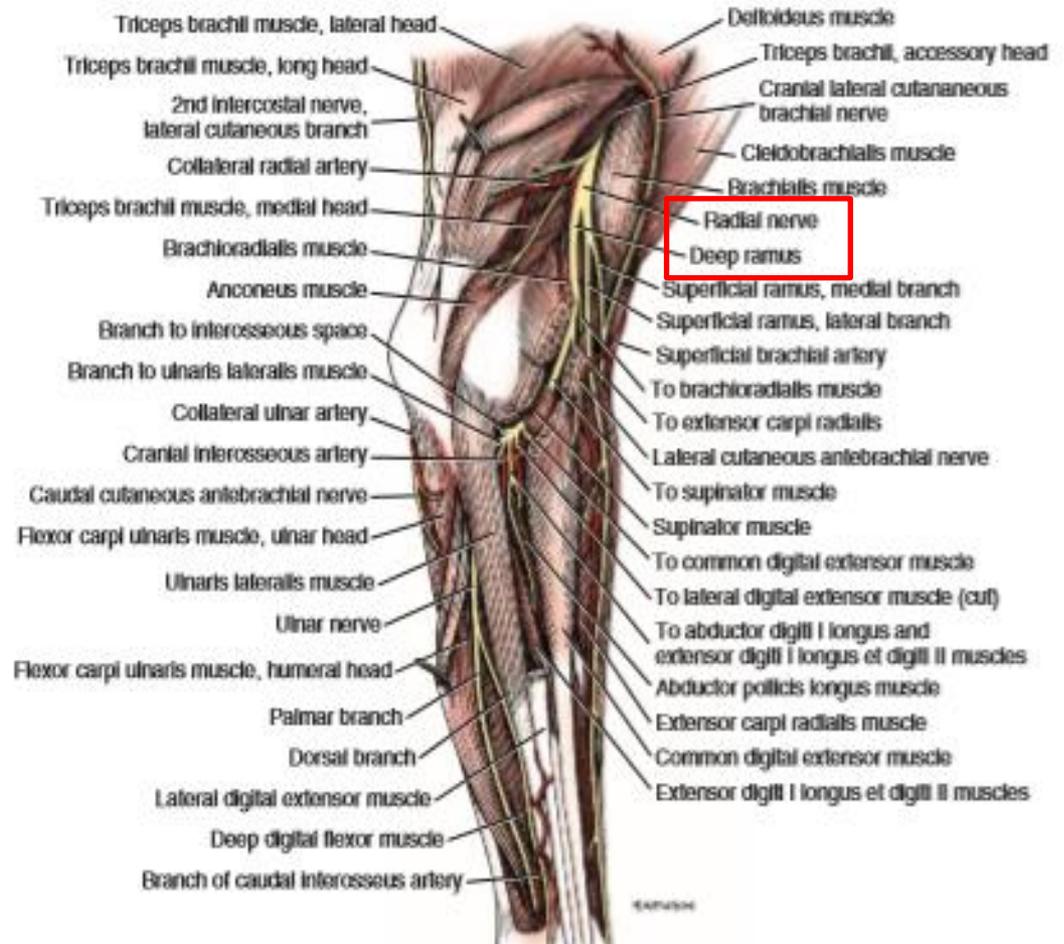
beim Flfr. auch:

- den M. brachioradialis
- M. supinator



Lateral view of the brachium and antebrachium, the lateral head of the triceps brachii m. is reflected caudally. The **radial n.** (1) passes from medial to lateral along the caudal surface of the brachialis m. (asterisk). After the radial n. innervates the triceps brachii m. (2), it divides into **deep** and **superficial** branches. The deep branch innervates craniolateral antebrachial muscles (3). The radial nerve continues as medial (4) and lateral (5) **superficial branches** of the **radial n.** These supply skin of the cranial antebrachium and dorsal manus. The superficial brachial a. (6) is visible cranial to the brachialis m.

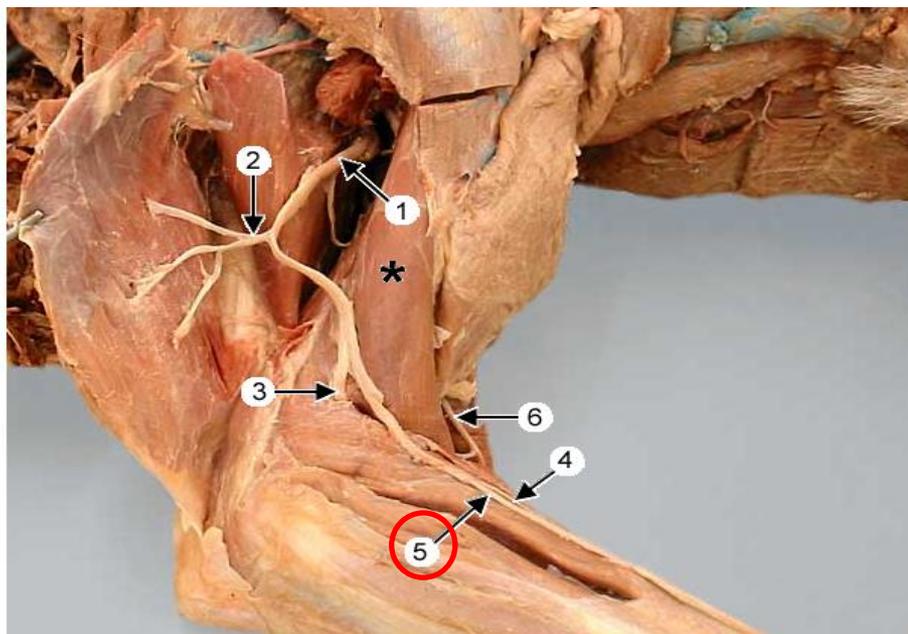
<http://vanat.cvm.umn.edu/carnLabs/Lab14/img14-2.html>



ARMGEFLECHT (PLEXUS BRACHIALIS)

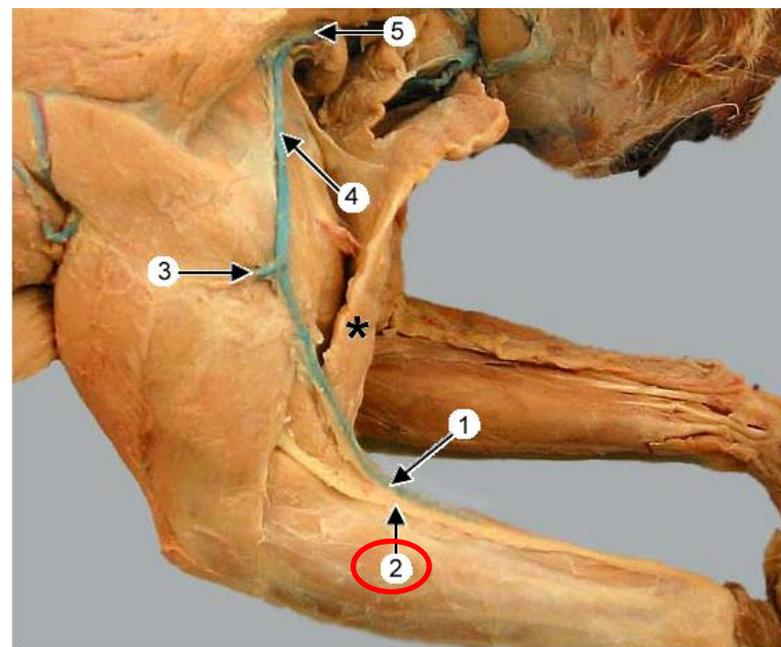
B. NERVUS RADIALIS RAMUS SUPERFICIALIS:

- tritt unter dem Caput lat. des Trizeps hervor
- läuft entlang des V. cephalica



Lateral view of the brachium and antebrachium, the lateral head of the triceps brachii m. is reflected caudally. The **radial n.** (1) passes from medial to lateral along the caudal surface of the brachialis m. (asterisk). After the radial n. innervates the triceps brachii m. (2), it divides into **deep** and **superficial** branches. The deep branch innervates craniolateral antebrachial muscles (3). The radial nerve continues as medial (4) and lateral (5) **superficial branches** of the **radial n.** These supply skin of the cranial antebrachium and dorsal manus. The superficial brachial a. (6) is visible cranial to the brachialis m.

<http://vanat.cvm.umn.edu/carnLabs/Lab14/lmg14-2.html>



Cat dissection. The **cephalic vein** (1) runs along the cranial surface of the antebrachium, flanked by lateral and medial branches of the **superficial radial n.** (2). After giving off an axillobrachial v. (3) that penetrates medially ventral to the deltoideus m., the cephalic v. (4) runs deep to the transected cleidobrachialis m. (asterisk) to join the external jugular v. (5). (The cat lacks an omobrachial v. that, in the dog, runs on the surface of the brachiocephalicus m. to join the external jugular v.).

<http://vanat.cvm.umn.edu/carnLabs/Lab14/lmg14-12.html>

ARMGEFLECHT (PLEXUS BRACHIALIS)

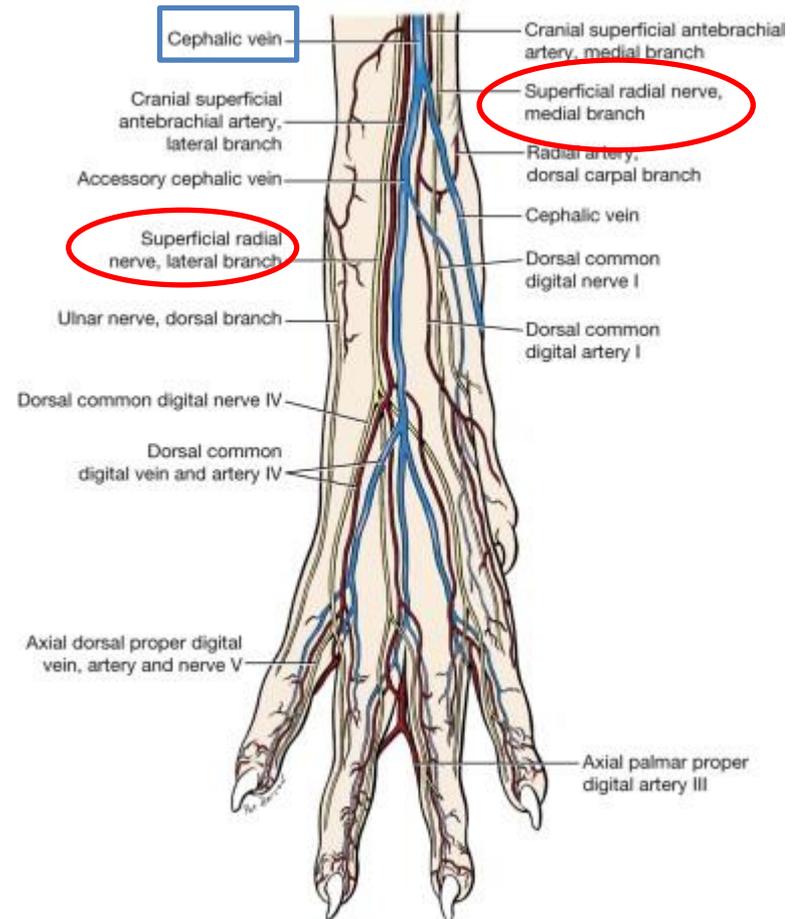
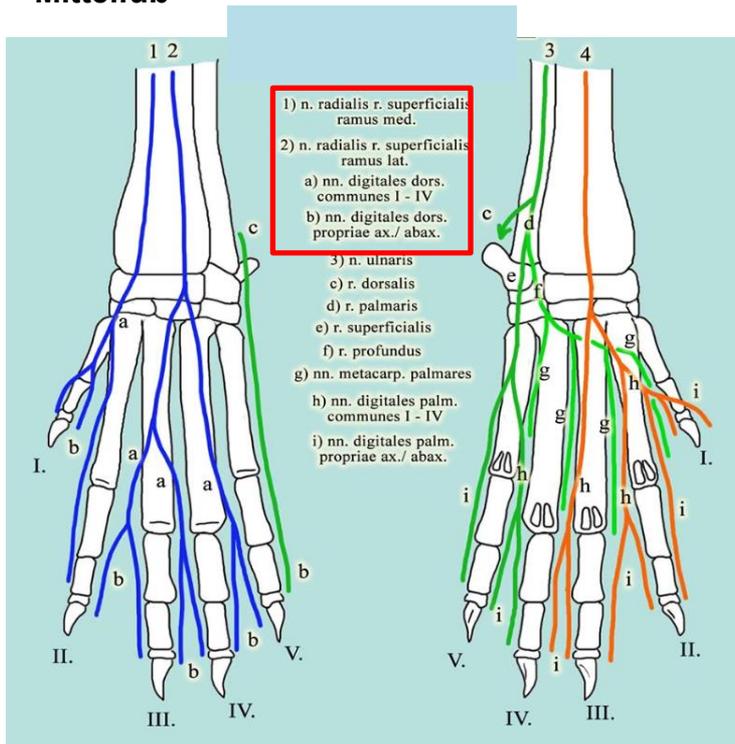
B. NERVUS RADIALIS RAMUS SUPERFICIALIS:

beim Flfr. teilt er in einen:

- a) Ramus medialis
- b) Ramus lateralis

innervieren die Haut der Vorderfläche von:

1. Unterarm
2. Carpus
3. Mittelfuß



ARMGEFLECHT (PLEXUS BRACHIALIS)

B. NERVUS RADIALIS RAMUS SUPERFICIALIS:

beim Flfr.

a) Ramus medialis:

teilt sich am Metacarpus in den:

1. N. digitalis dorsalis comm.I.
2. N. digitalis dors. II. abaxialis

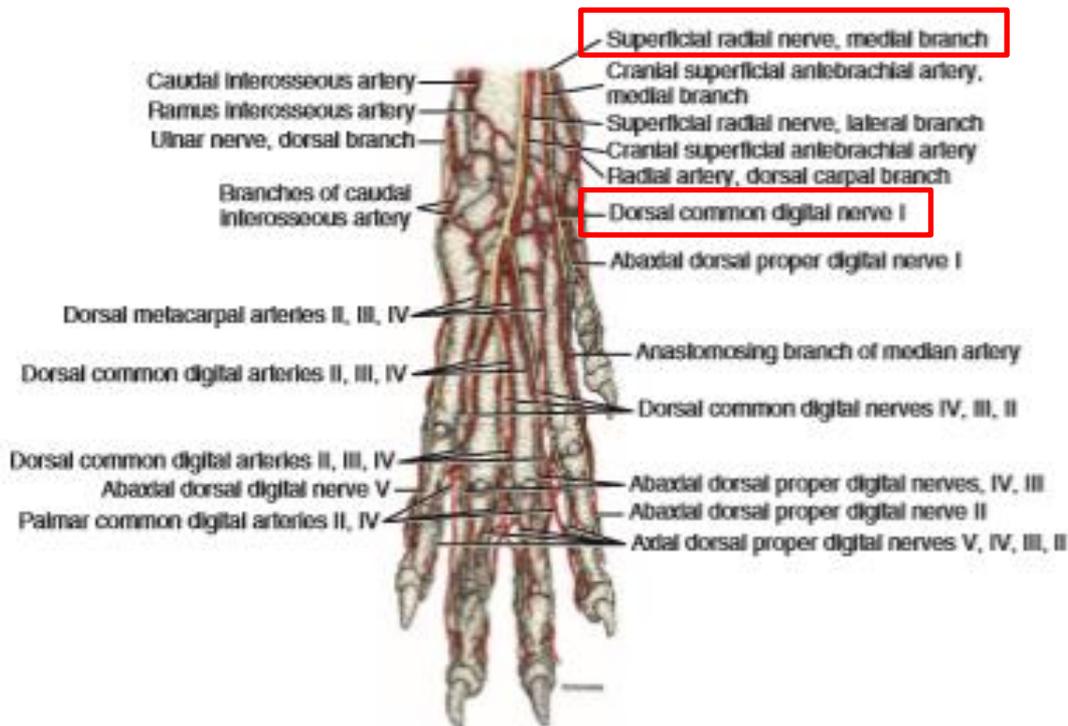
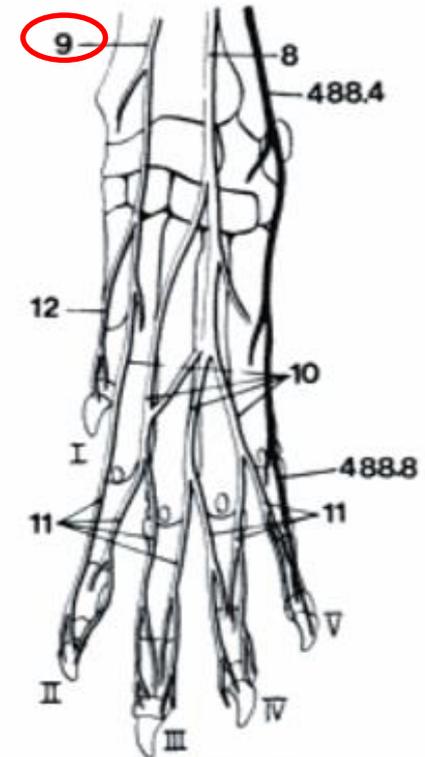


FIGURE 17-24 Nerves and arteries of the right forepaw, dorsal aspect.



B Nn. radialis and ulnaris – left manus, dorsal aspect (ca)

8. Ramus lateralis

9. Ramus medialis

10. N. digitales dorsales comm. I-IV.

11. Nn. digitales dorsales proprii

12. N. digitalis dorsalis I. abaxialis

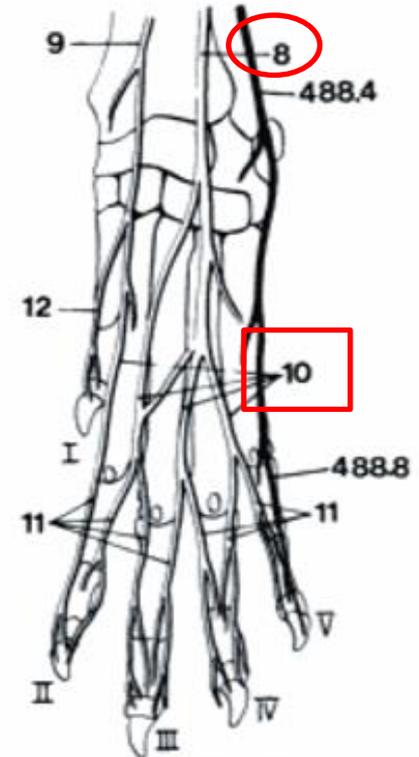
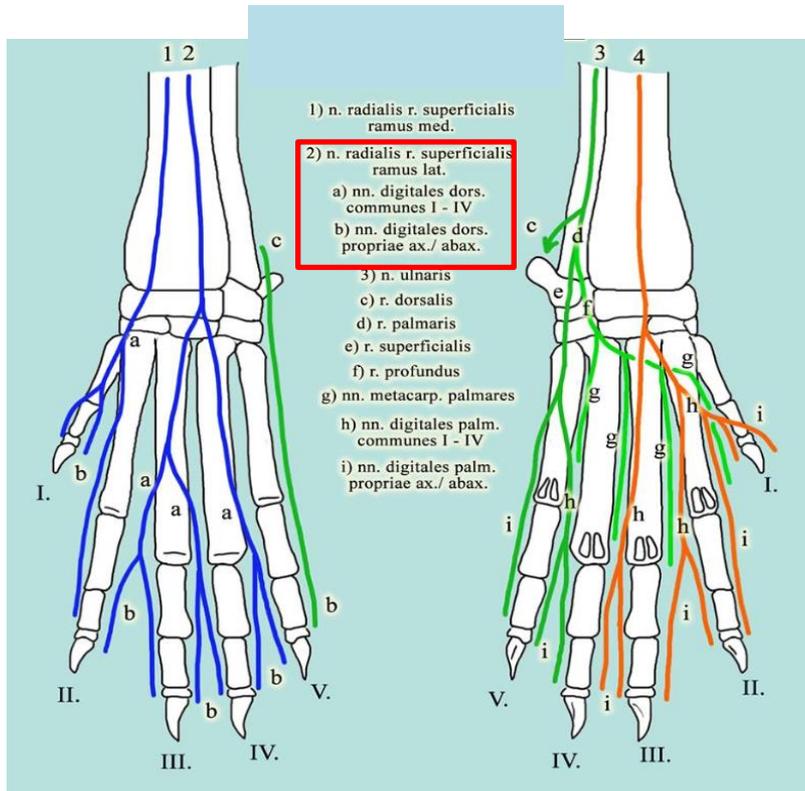
ARMGEFLECHT (PLEXUS BRACHIALIS)

B. NERVUS RADIALIS RAMUS SUPERFICIALIS:

beim Flfr.

b. Ramus lateralis teilt sich in die:

1. Nn. digitales dorsales communes II., III., IV.



B Nn. radialis and ulnaris – left manus, dorsal aspect (ca)

8. Ramus lateralis

9. Ramus medialis

10. N. digitales dorsales comm. I-IV.

11. Nn. digitales dorsales proprii

12. N. digitalis dorsalis I. abaxialis

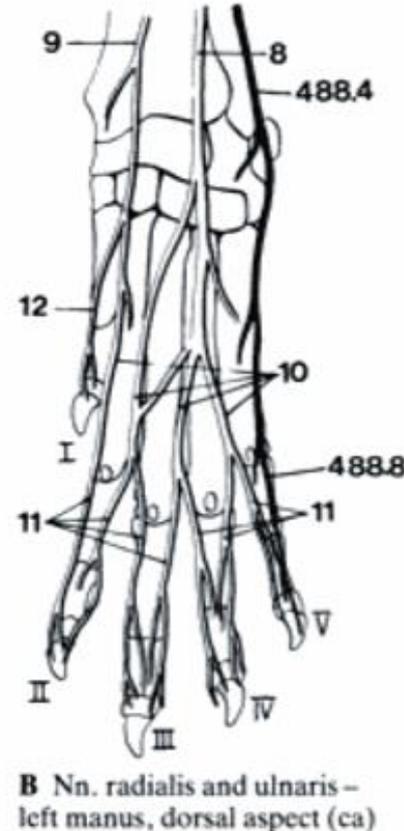
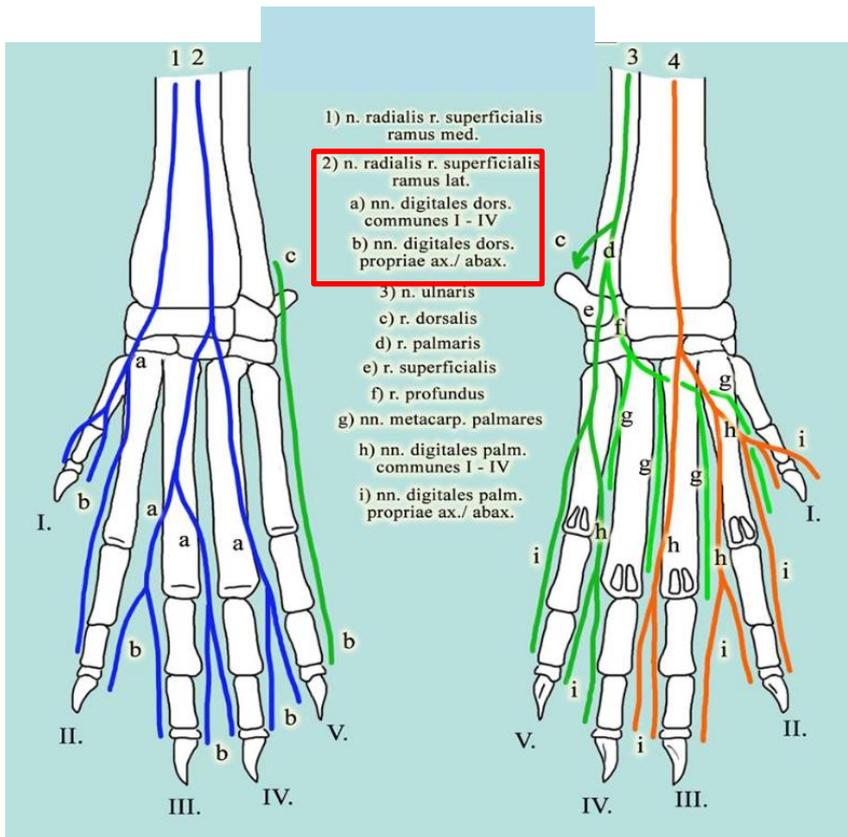
ARMGEFLECHT (PLEXUS BRACHIALIS)

B. NERVUS RADIALIS RAMUS SUPERFICIALIS:

beim Fflr.

Nn. digitales dorsales comm. I., II., III., IV. auf der Höhe des 1. Zehengelenks geben die:

- Nn. digitales dorsales proprii axiales et abaxiales für die I – V Zehe ab



ARMGEFLECHT (PLEXUS BRACHIALIS)

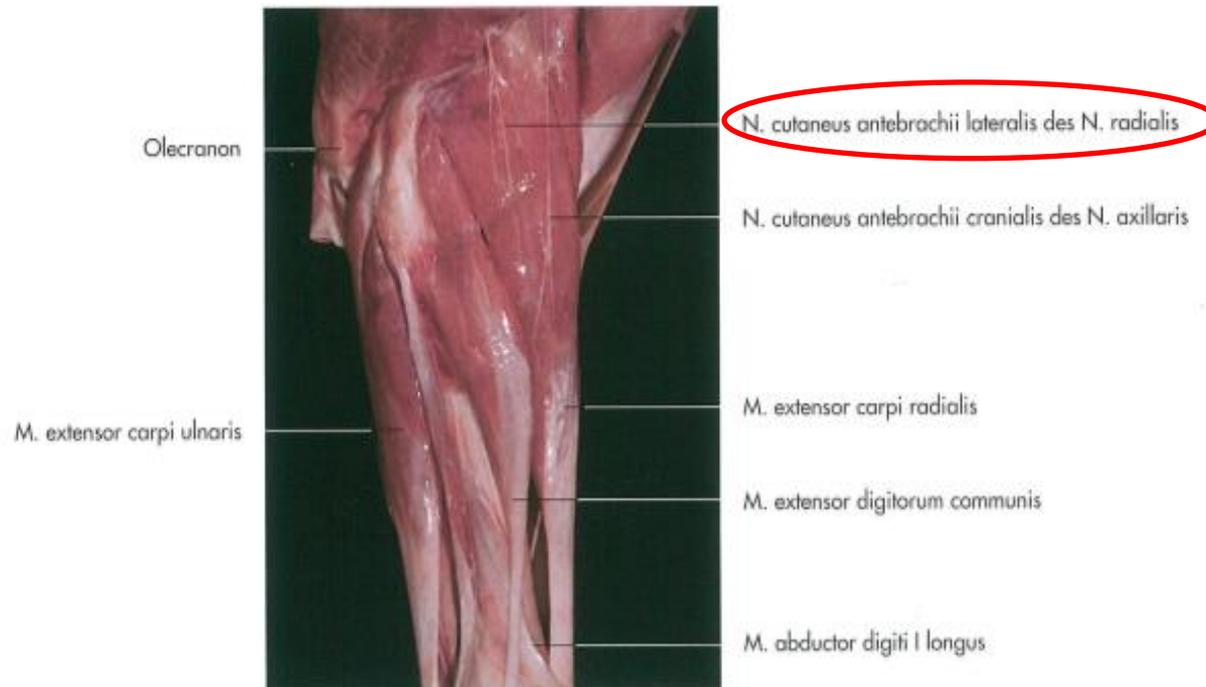
B. NERVUS RADIALIS RAMUS SUPERFICIALIS:

beim Pfd.

verbreitet sich den.

1. N. cutaneus antebrachii lat.

- in der Haut der außenfläche des Unterarms bis zum Karpus



1. Hautnerven am Unterarm der rechten Vordergliedmaße eines Pferdes (Lateralansicht), Präparat Dr. R. Macher, Wien.

ARMGEFLECHT (PLEXUS BRACHIALIS)

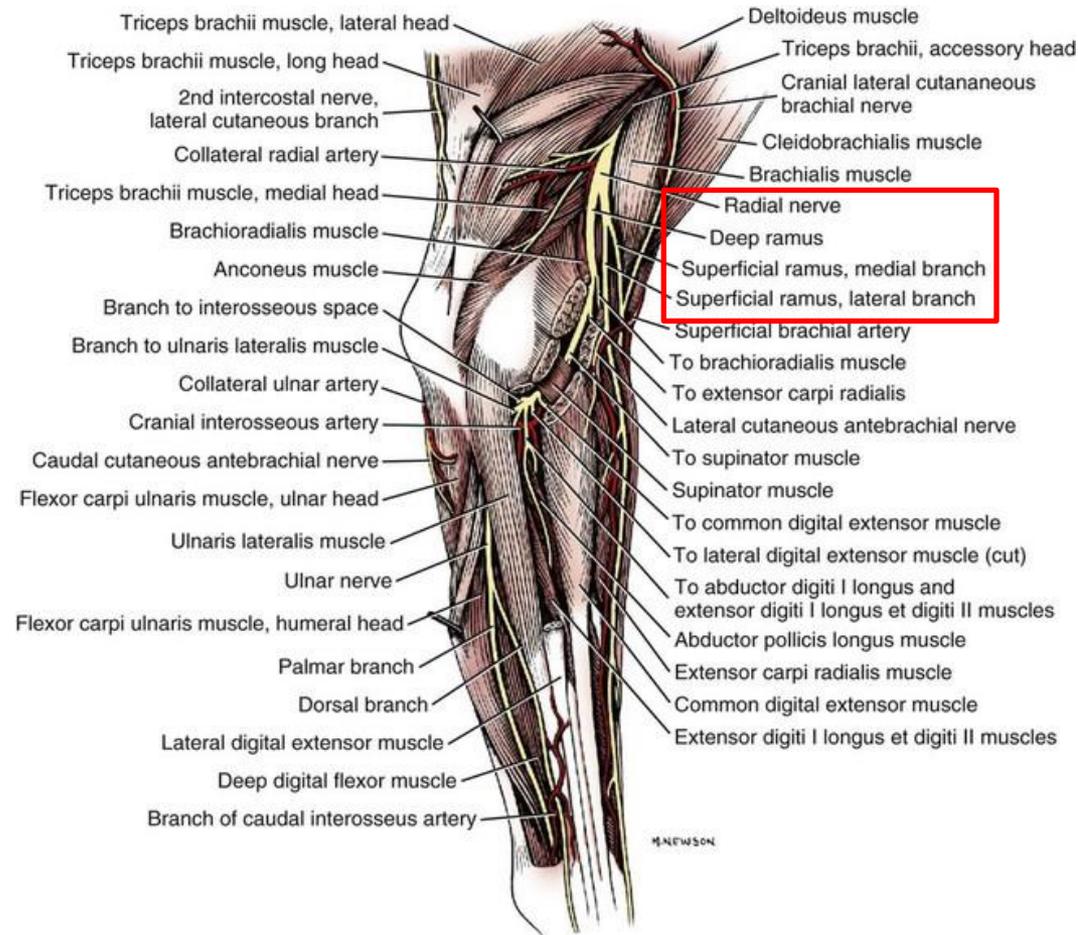
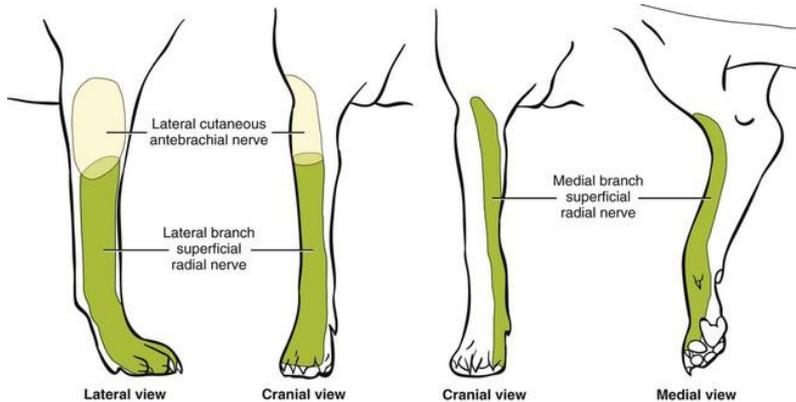
HAUTÄÄSTE des NERVUS RADIALIS:

a. N. cutaneus brachii lat.:

- die Haut im Gebiet des Caput lat. Des M. triceps brachii

b. N. cutaneus antebrachii lat.:

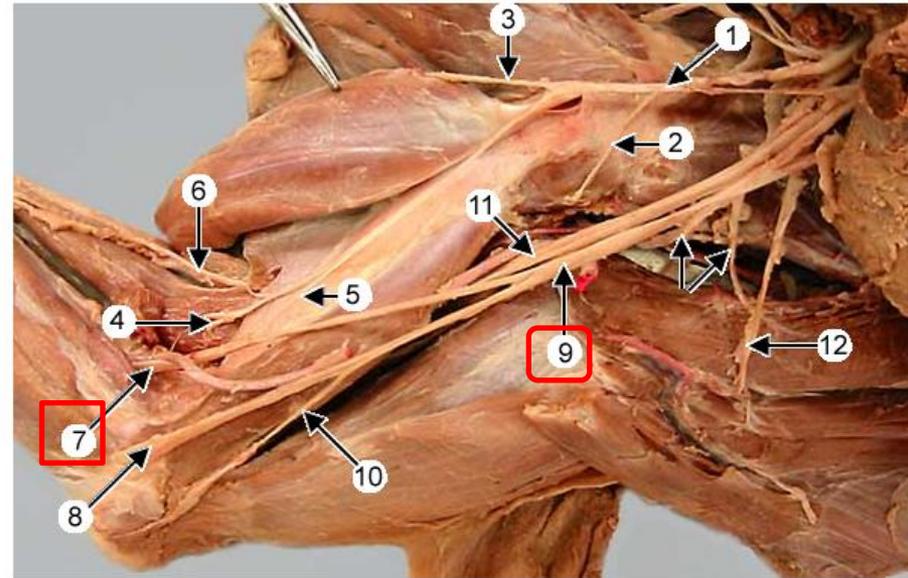
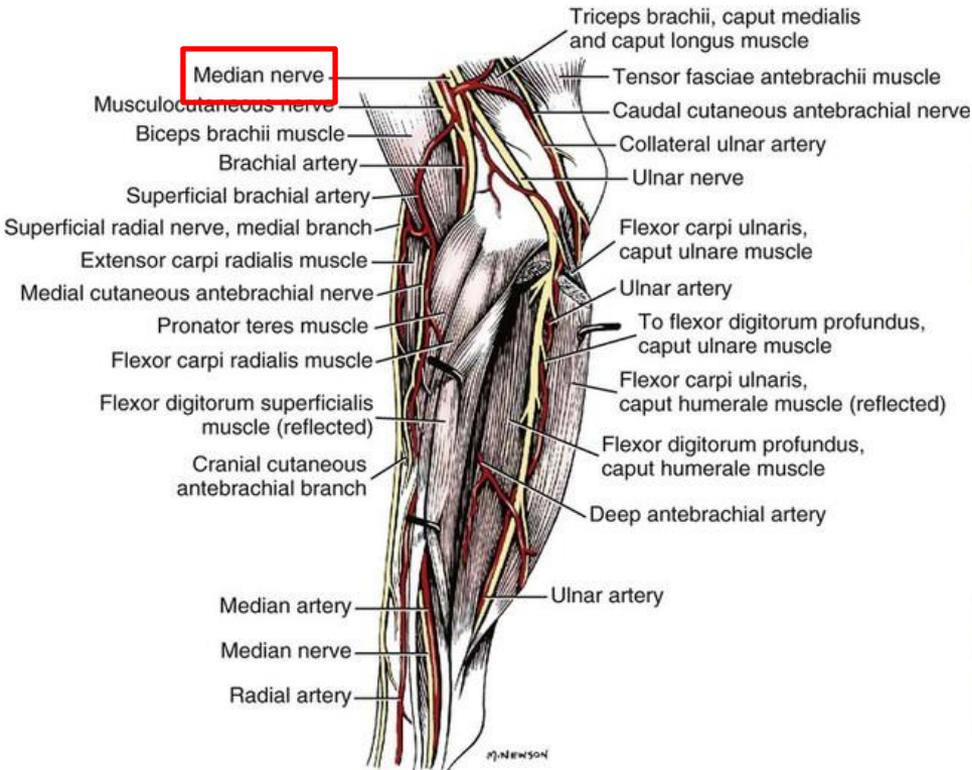
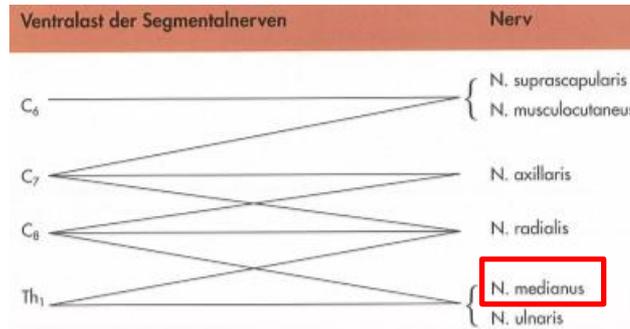
- innerviert den Hautbezirk lateral am Unterarm



ARMGEFLECHT (PLEXUS BRACHIALIS)

11. NERVUS MEDIANUS:

- aus C8, Th1
- beim Pfd. aus C8, Th1-2
- mit dem N. ulnaris verbunden

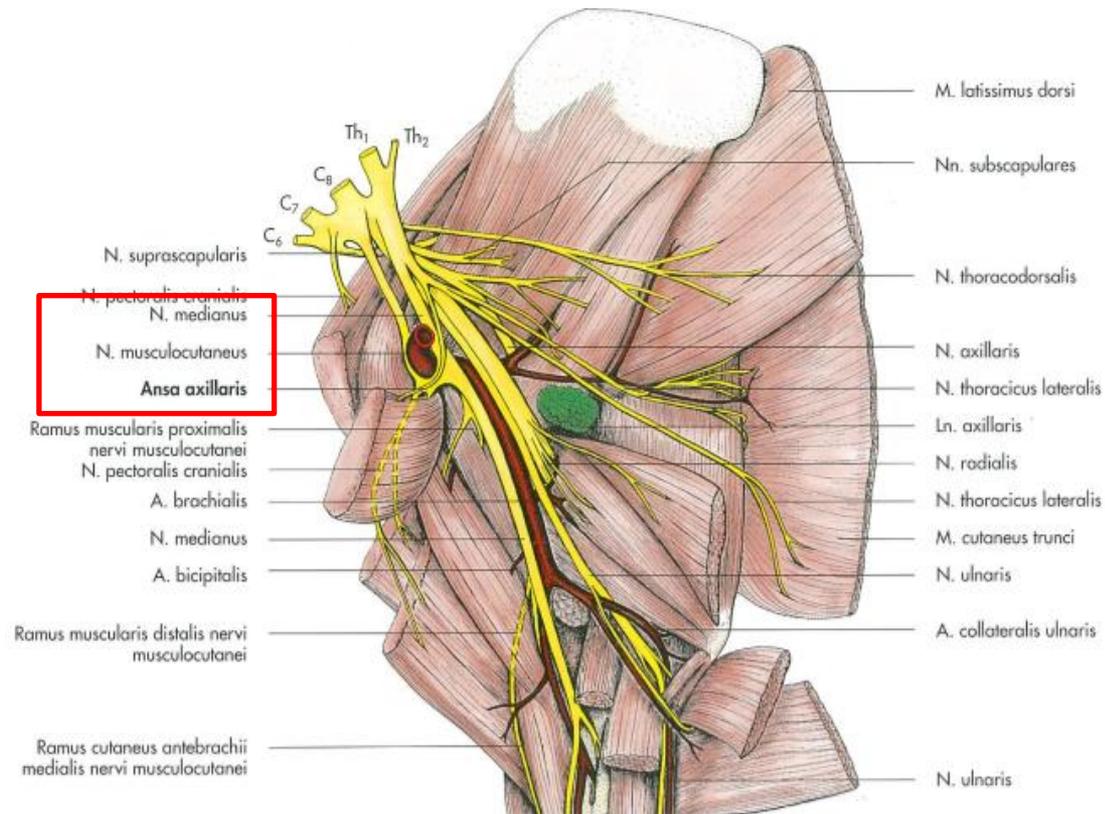


The **musculocutaneous n.** (1) innervates the coracobrachialis m. (2), the biceps brachii m. (3), and the brachialis m. (4). Also, the musculocutaneous n. sends a communicating branch (5) to the median nerve and ends as the medial cutaneous antebrachial n. (6). The **median n.** (7) and the **ulnar n.** (8) originate from a common trunk (9). The ulnar n. gives off the caudal cutaneous antebrachial n. (10). Identify the **radial n.** (11) passing laterally and the thoracodorsal n. (12). Branches of the axillary n. are evident (arrows).

ARMGEFLECHT (PLEXUS BRACHIALIS)

11. NERVUS MEDIANUS:

- bei den Hft. bildet mit dem N. musculocutaneus zusammen die Ansa axillaris

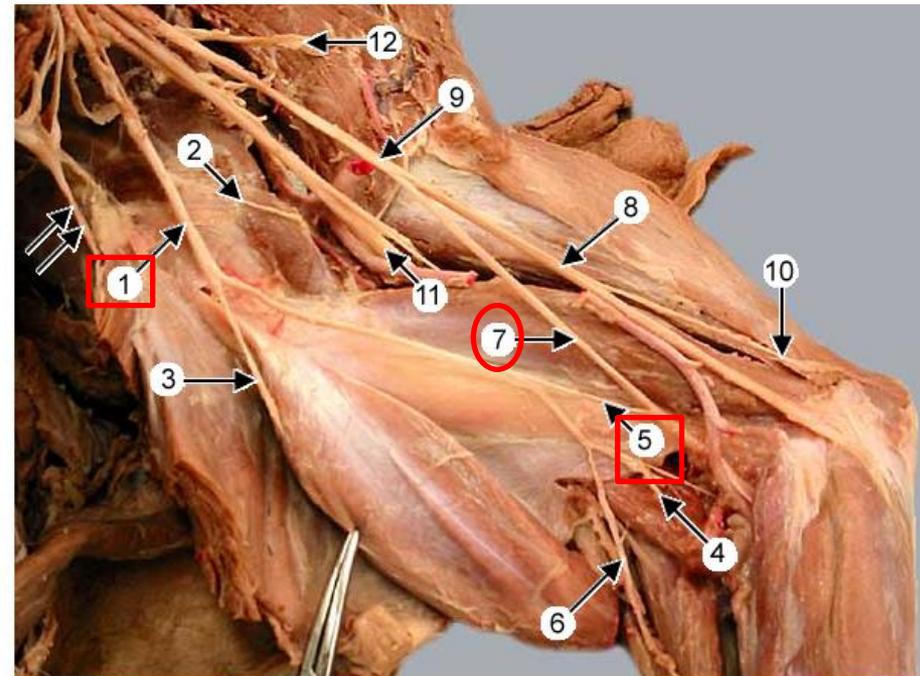
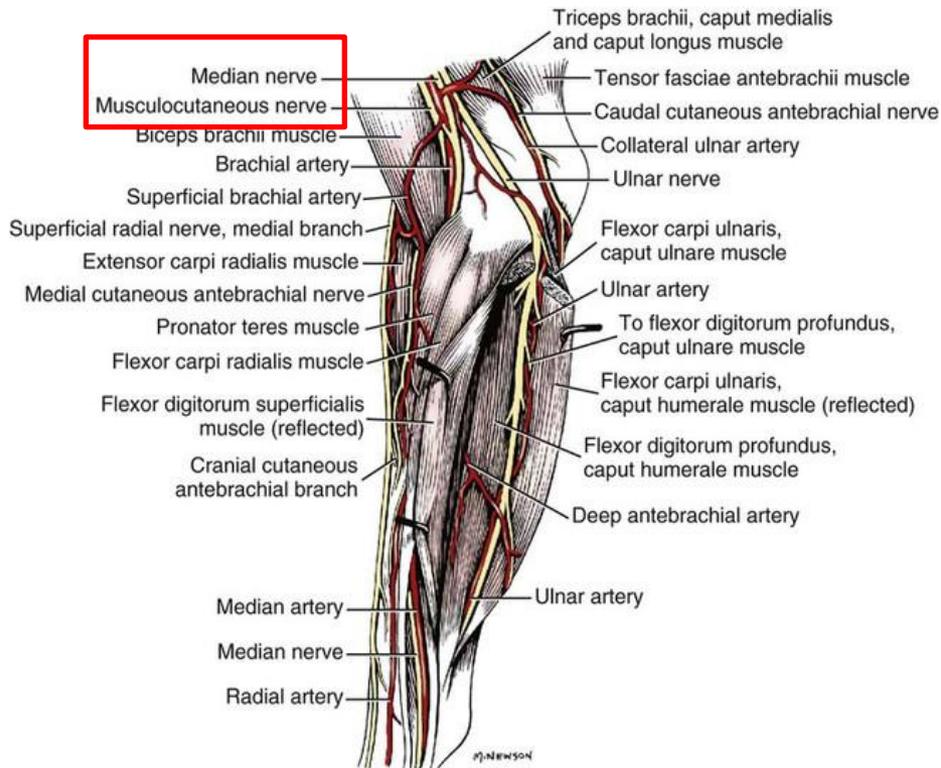


Eq.

ARMGEFLECHT (PLEXUS BRACHIALIS)

11. NERVUS MEDIANUS:

- beim Hd. erhält der N. medianus oberhalb des Ellenbogens einen Verbindungsast vom N. musculocutaneus



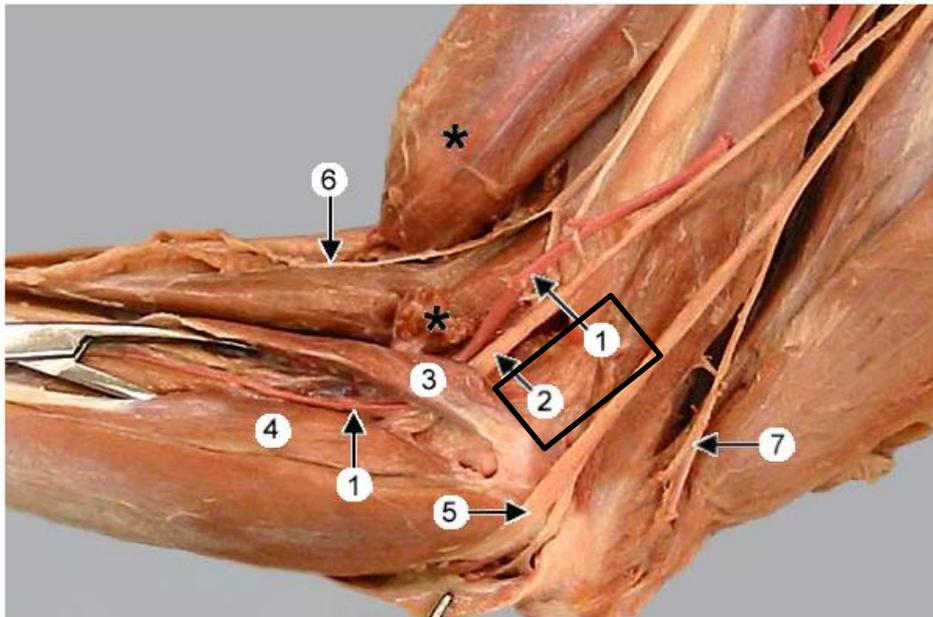
Craniomedial view of the brachium. The **musculocutaneous n.** (1) innervates the coracobrachialis m. (2), the biceps brachii m. (3), and the brachialis m. (4). Also, the musculocutaneous n. sends a communicating branch (5) to the median nerve and ends as the medial cutaneous antebrachial n. (6). The **median n.** (7) and the **ulnar n.** (8) originate from a common trunk (9). The ulnar n. gives off the caudal cutaneous antebrachial n. (10). Identify the **radial n.** (11) passing laterally and the thoracodorsal n. (12). The nerve to the cleidobrachialis m. is evident (double arrows).

ARMGEFLECHT (PLEXUS BRACHIALIS)

11. NERVUS MEDIANUS:

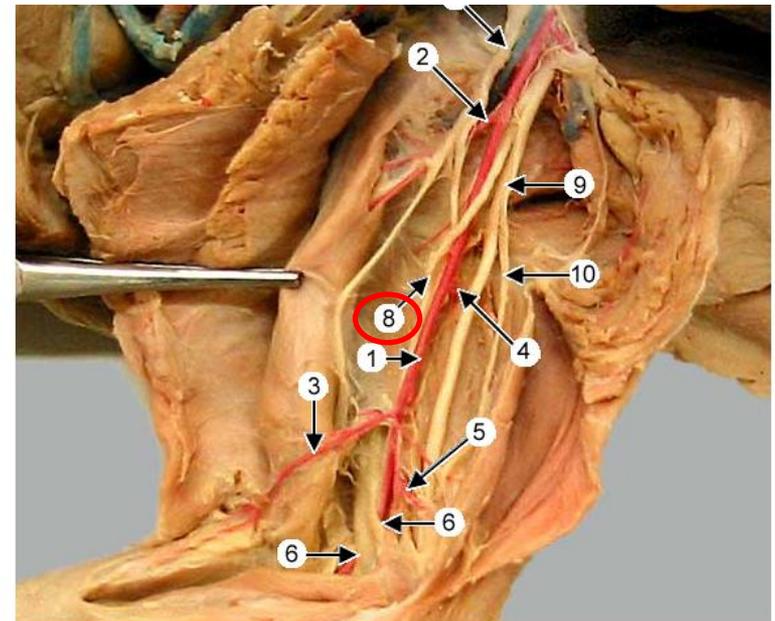
verläßt:

- mit der A. brachialis bzw. A. mediana über die mediale Fläche des Oberarms
- über die mediale Fläche des Ellenbogengelenks zum Unterarm
- *bei der Katze durch das Foramen suprachondylare zum Unterarm*



Medial view of the elbow region, the biceps brachii m. has been cut and reflected (asterisks). The **brachial a.** (1) and **median n.** (2) pass deep to the pronator teres m. (3). The nerve proceeds deep to the flexor carpi radialis m. (4) as it innervates caudal antebrachial muscles. The **ulnar n.** (5) also innervates caudal antebrachial muscles. Notice the medial cutaneous antebrachial n. (6) and the caudal cutaneous antebrachial n. (7).

<http://vanat.cvm.umn.edu/carnLabs/Lab14/img14-4.html>



Cat, medial brachium. The **brachial a.** (1) gives off a combined cranial circumflex humeral and bicipital a. (2) and a superficial brachial a. (3). Caudal branches of the brachial a. are: **deep brachial a.** (4) and **collateral ulnar a.** (5). In the cat, the brachial a. passes through the supracondylar foramen (6) of the humerus.

Find the following nerves on the medial surface of the brachium: **musculocutaneous n.** (7), **median n.** (8), and **ulnar n.** (9), which gives off a caudal cutaneous antebrachial n. (10).

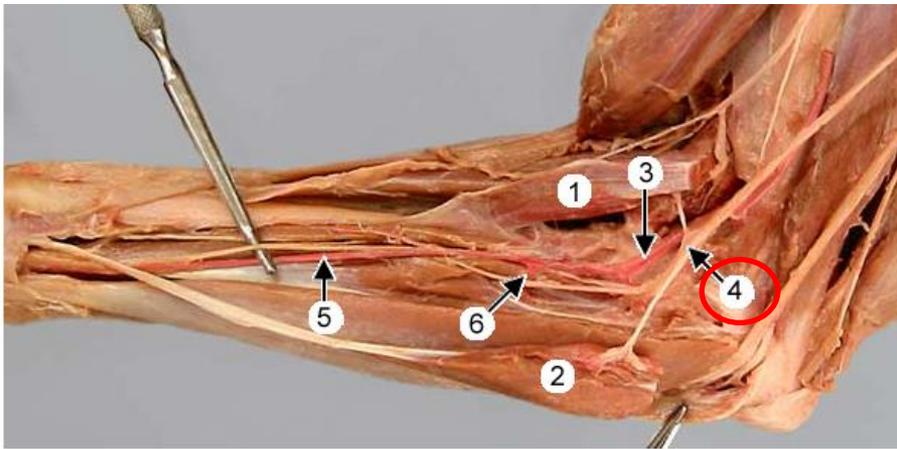
<http://vanat.cvm.umn.edu/carnLabs/Lab13/img13-7.html>

ARMGEFLECHT (PLEXUS BRACHIALIS)

11. NERVUS MEDIANUS:

verläßt:

- unter dem M. pronator teres an die kaudomediale Seite des Unterarms
- am Unterarm verläuft zwischen M. felxor carpi radialis und tiefen Zehenbeuger



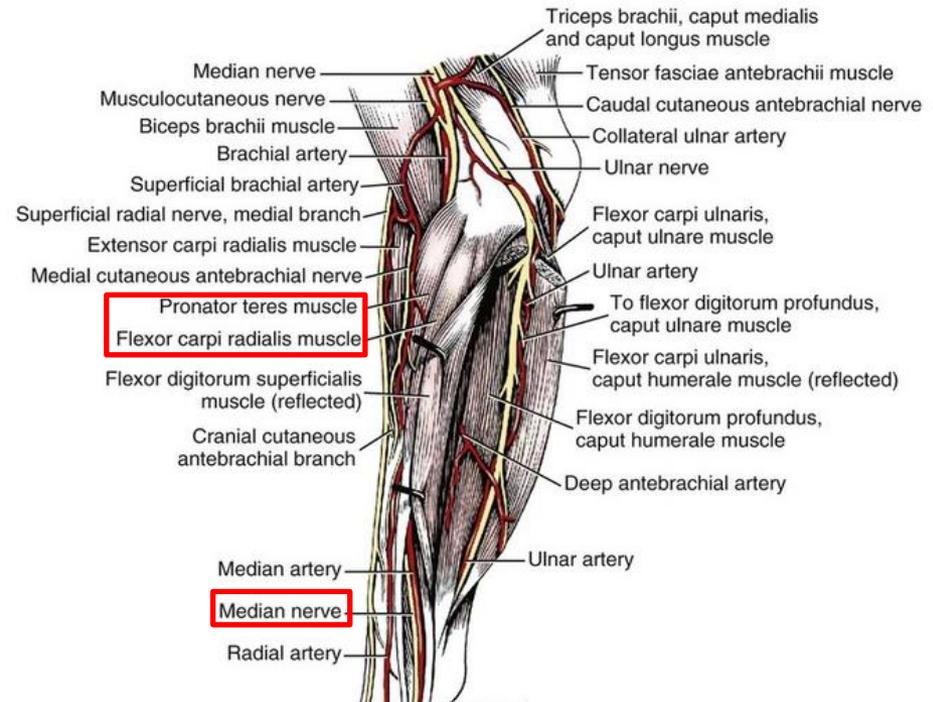
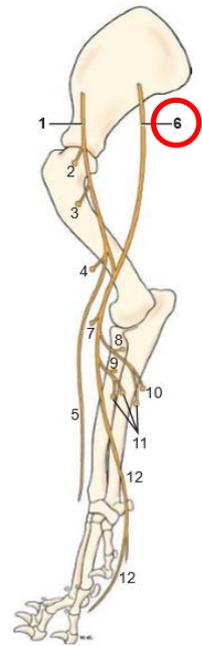
Medial view of the antebrachium. The pronator teres m. (1) and the flexor carpi radialis m. (2) have been cut and reflected. The **brachial a.** (3) and **median n.** (4) run together into the proximal antebrachium. After giving off a common interosseus a. (not clearly visible), the brachial a. continues as the median a. (5) which gives off the deep antebrachial a. (6). The median n. (elevated by a probe) runs with the **median a.** toward the carpal canal.

<http://vanat.cvm.umn.edu/carnLabs/Lab14/lmg14-6.html>



Canine: Distribution of
Musculocutaneous and Median
Nerves, Right Forelimb (Medial View)

1. Musculocutaneous nerve
2. Coracobrachialis
3. Biceps brachii
4. Brachialis
5. Skin of the medial antebrachium
6. Median nerve
7. Pronator teres
8. Flexor carpi radialis
9. Pronator quadratus
10. Superficial digital flexor
11. Deep digital flexor, humeral, ulnar, and radial heads
12. Skin of the caudal antebrachium and palmar paw



ARMGEFLECHT (PLEXUS BRACHIALIS)

11. NERVUS MEDIANUS:

am Karpalgelenk entsendet :

Rami musculares für:

- a) **M. flexor digitorum superficialis (Flfr.)**
- b) **M. flexor carpi rad.**
- c) **M. pronator teres**
- d) **M. pronator quadratus (Flfr.)**
- e) **Caput radiale et humerale des M. flexor digitorum prof.**

Gelenke	Nerven
Schultergelenk	N. axillaris, N. suprascapularis
Ellbogengelenk und Karpalgelenk	N. medianus, N. ulnaris
Fesselgelenk und Zehengelenke	Nn. palmares, Nn. digitales

N. medianus

M. flexor carpi radialis,
M. pronator teres,
M. pronator quadratus,
M. flexor digitorum profundus (zum Teil),
M. flexor digitorum superficialis (zum Teil)

Haut palmar am Mittelfuß
und an den Zehen (mit N. ulnaris)

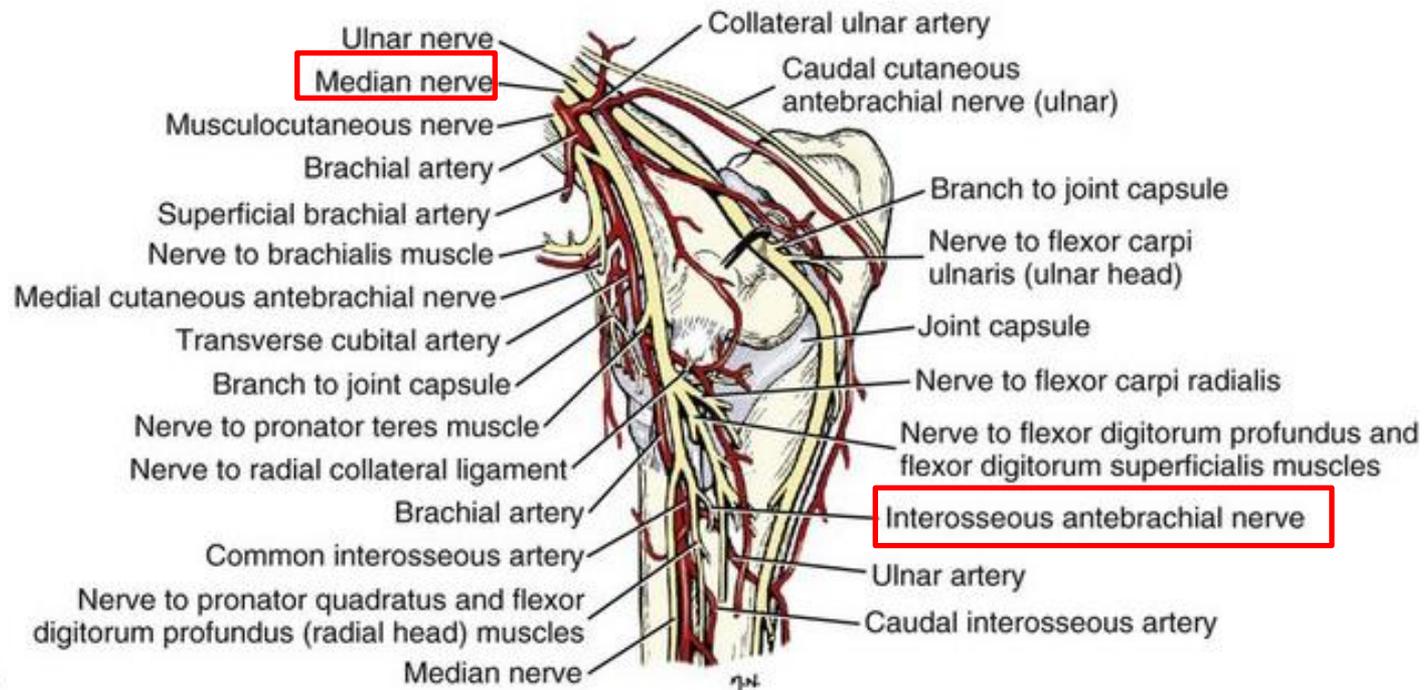
ARMGEFLECHT (PLEXUS BRACHIALIS)

11. NERVUS MEDIANUS:

in der Gegend der Unterarmspalte:

b. N. interosseus antebrachii:

❖ versorgt das Periost am Unterarm mit sensible Fasern



ARMGEFLECHT (PLEXUS BRACHIALIS)

DER DISTALE TEIL DES NERVUS MEDIANUS zeigt tierartlich Unterschiede:

bei den Flfr.

a. den RAMUS PALMARIS unterhalb der Mitte des Vorarms abgibt

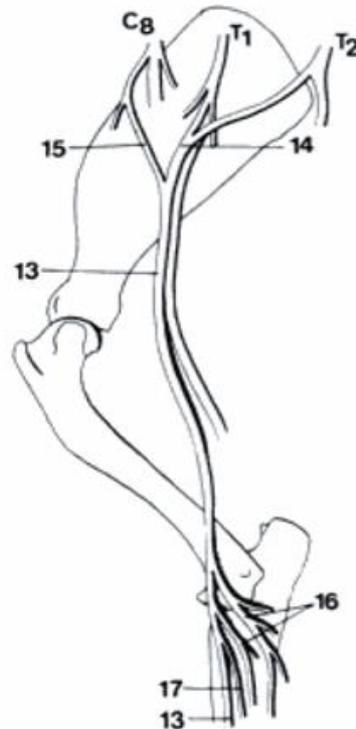
- zieht mit der A. mediana zwischen den oberflächlichen und tiefen Zehenbeuger zum Karpus

teilt sich:

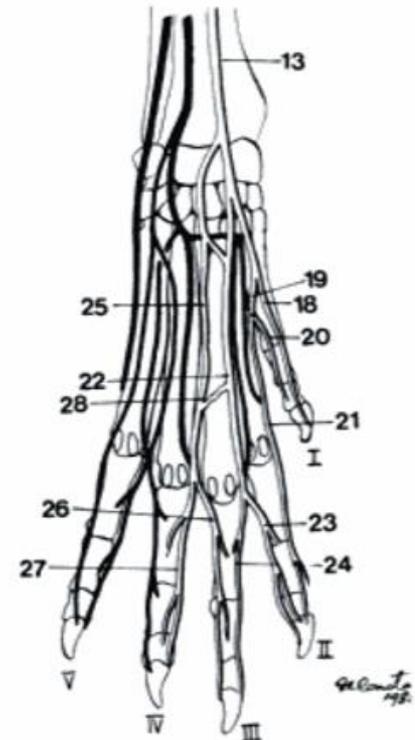
b. RAMUS MEDIALIS

c. RAMUS LATERALIS

- 13. N. medianus
- 14. Radix medialis von N. medianus
- 15. Radix lateralis von N. medianus
- 16. Rami musculares
- 17. N. interosseus antebrachii
- 18. N. digitalis palmaris I. abaxialis
- 19. N. digitalis palmaris comm. I.
- 20. N. digitalis palmaris proprius I. axialis
- 21. N. digitalis proprius II. abaxialis
- 22. N. digitalis palmaris comm. II.
- 23. N. digitalis palmaris proprius II. axialis
- 24. N. digitalis palmaris proprius III. abaxialis
- 25. N. digitalis palmaris comm. III.
- 26. N. digitalis palmaris proprius IV. axialis
- 27. N. digitalis palmaris proprius IV. axialis
- 28. R. communicans (Fe)



D N. medianus – right shoulder, brachium, elbow, medial aspect (ca)



E N. medianus – left manus, palmar aspect (fe)

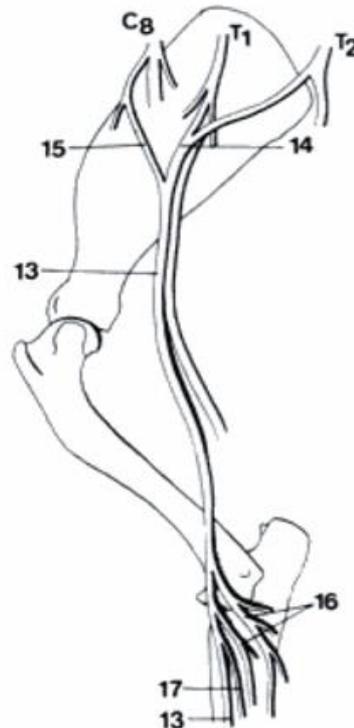
ARMGEFLECHT (PLEXUS BRACHIALIS)

N. MEDIANUS bei den Fldr.

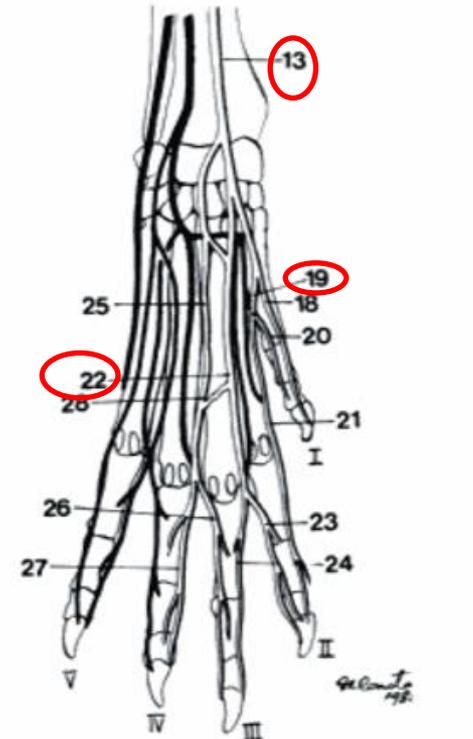
b. RAMUS MEDIALIS gabelt sich:

- ❖ in die Nn. digitales palmares comm. I.
- ❖ in die Nn. digitales palmares comm. II.

13. N. medianus
14. Radix medialis von N. medianus
15. Radix lateralis von N. medianus
16. Rami musculares
17. N. interosseus antebrachii
18. N. digitalis palmaris I. abaxialis
19. N. digitalis palmaris comm. I.
20. N. digitalis palmaris proprius I. axialis
21. N. digitalis proprius II. abaxialis
22. N. digitalis palmaris comm. II.
23. N. digitalis palmaris proprius II. axialis
24. N. digitalis palmaris proprius III. abaxialis
25. N. digitalis palmaris comm. III.
26. N. digitalis palmaris proprius IV. axialis
27. N. digitalis palmaris proprius IV. abaxialis
28. R. communicans (Fe)



D N. medianus – right shoulder, brachium, elbow, medial aspect (ca)



E N. medianus – left manus, palmar aspect (fe)

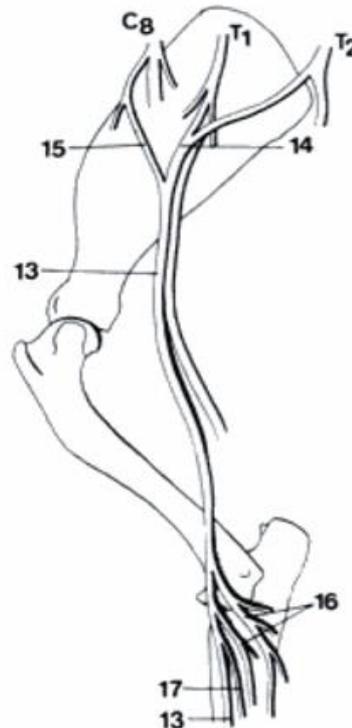
ARMGEFLECHT (PLEXUS BRACHIALIS)

N. MEDIANUS bei den Fibr.

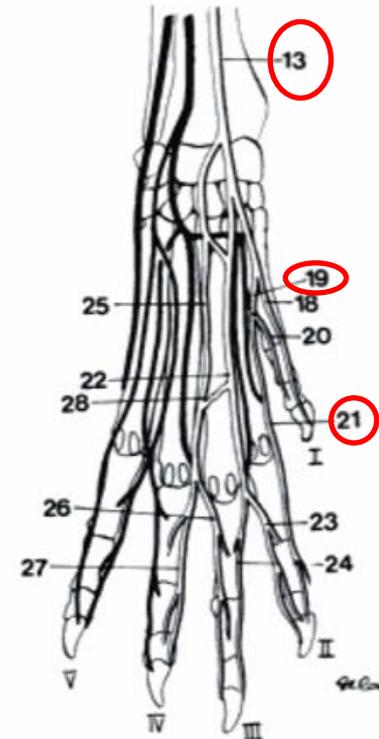
b. RAMUS MEDIALIS gablet sich:

❖ Nn. digitales palmares comm. I. gibt den N. digitalis palmaris II. abaxialis ab

- 13. N. medianus
- 14. Radix medialis von N. medianus
- 15. Radix lateralis von N. medianus
- 16. Rami musculares
- 17. N. interosseus antebrachii
- 18. N. digitalis palmaris I. abaxialis
- 19. N. digitalis palmaris comm. I.
- 20. N. digitalis palmaris proprius I. axialis
- 21. N. digitalis proprius II. abaxialis
- 22. N. digitalis palmaris comm. II.
- 23. N. digitalis palmaris proprius II. axialis
- 24. N. digitalis palmaris proprius III. abaxialis
- 25. N. digitalis palmaris comm. III.
- 26. N. digitalis palmaris proprius IV. axialis
- 27. N. digitalis palmaris proprius IV. abaxialis
- 28. R. communicans (Fe)



D N. medianus – right shoulder, brachium, elbow, medial aspect (ca)



E N. medianus – left manus, palmar aspect (fe)

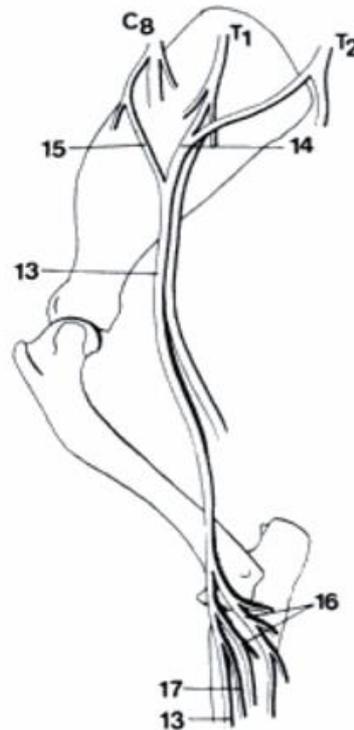
ARMGEFLECHT (PLEXUS BRACHIALIS)

N. MEDIANUS bei den Fibr.

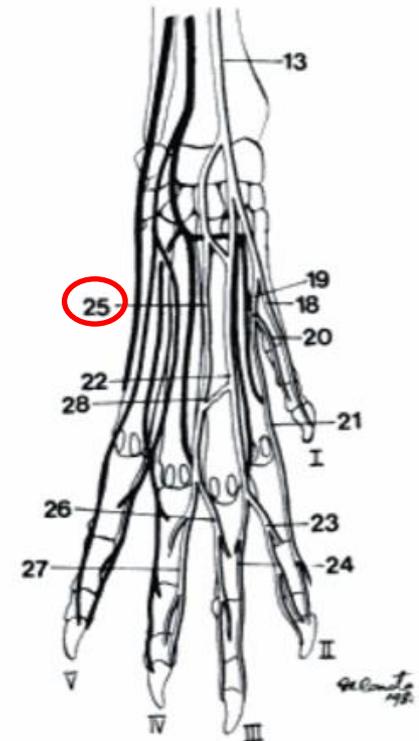
c. RAMUS LATERALIS gabelt sich:

❖ in die Nn. digitales palmares III.

- 13. N. medianus
- 14. Radix medialis von N. medianus
- 15. Radix lateralis von N. medianus
- 16. Rami musculares
- 17. N. interosseus antebrachii
- 18. N. digitalis palmaris I. abaxialis
- 19. N. digitalis palmaris comm. I.
- 20. N. digitalis palmaris proprius I. axialis
- 21. N. digitalis proprius II. abaxialis
- 22. N. digitalis palmaris comm. II.
- 23. N. digitalis palmaris proprius II. axialis
- 24. N. digitalis palmaris proprius III. abaxialis
- 25. N. digitalis palmaris comm. III.
- 26. N. digitalis palmaris proprius IV. axialis
- 27. N. digitalis palmaris proprius IV. axialis
- 28. R. communicans (Fe)



D N. medianus – right shoulder, brachium, elbow, medial aspect (ca)



E N. medianus – left manus, palmar aspect (fc)

ARMGEFLECHT (PLEXUS BRACHIALIS)

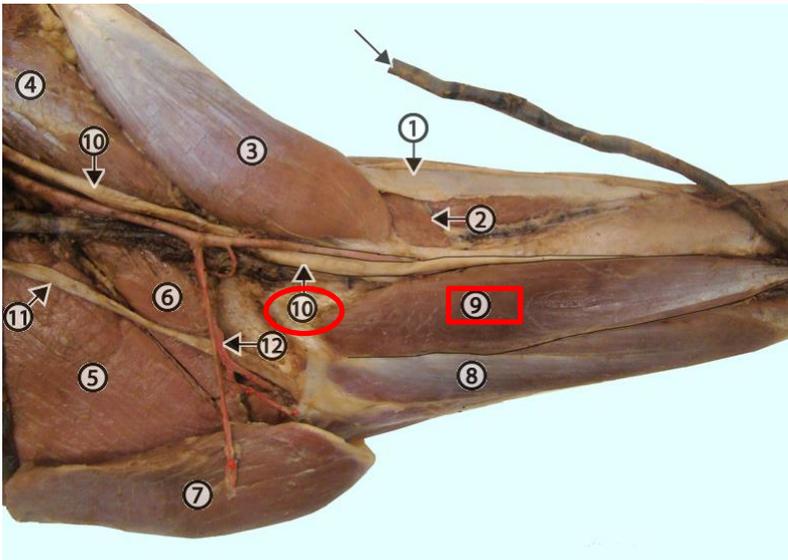
N.MEDIANUS beim Pfd.

- verläuft der N. medianus unter dem M. flexor carpi radialis

gibt

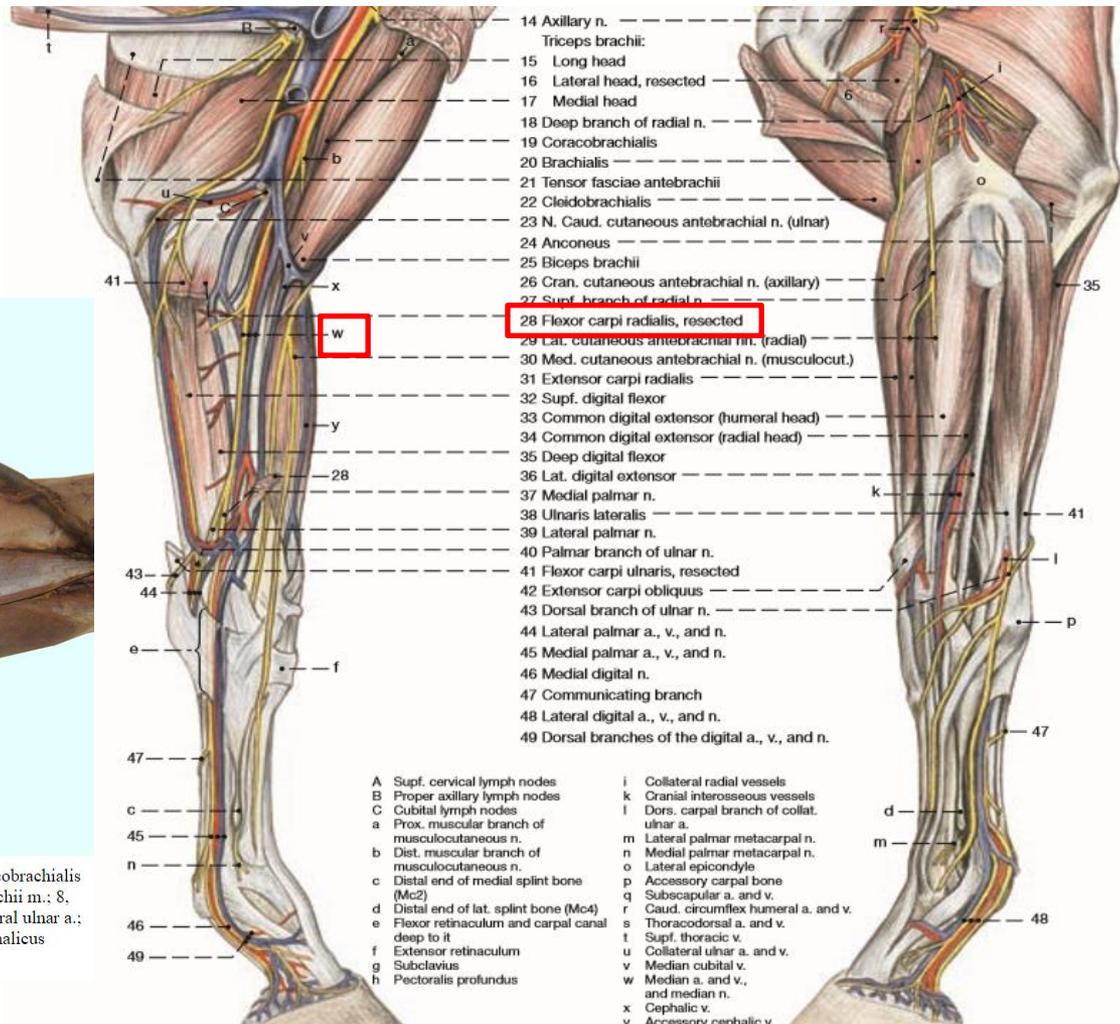
a. die Muskeläste

b. den N. interosseus antebrachii an



Medial antebrachium. 1, lacertus fibrosus; 2, brachialis m.; 3, biceps brachii m.; 4, coracobrachialis m.; 5, long head of triceps m.; 6, medial head of the triceps m.; 7, tensor fasciae antebrachii m.; 8, flexor carpi ulnaris m.; 9, flexor carpi radialis m.; 10, median n.; 11, ulnar n.; 12, collateral ulnar a.; unlabeled arrow, cephalic vein. [Contrary to the lab guide, the pectorals and brachiocephalic muscles have been removed.]

<http://vanat.cvm.umn.edu/ungDissect/Lab02/Img2-9.html>

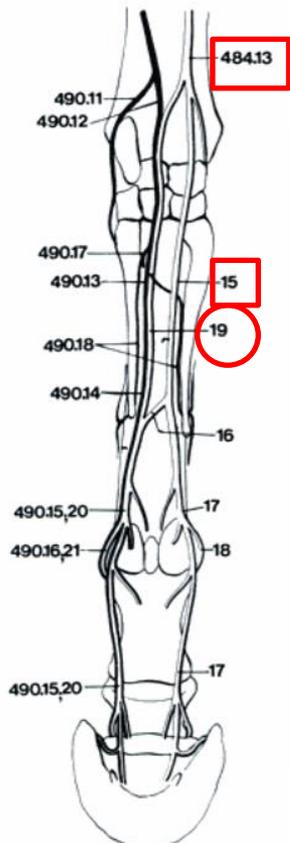


ARMGEFLECHT (PLEXUS BRACHIALIS)

beim Pfd.

N. MEDIANUS in der distalen Hälfte des Unterarms teilt sich in einen:

- a. Ramus medialis bzw. N. palmaris medialis
- b. Ramus lateralis bzw. N. palmaris lateralis



15 *N. palmaris medialis* [*N. digitalis palmaris communis II*]. Medial palmar nerve, descends through Canalis carpi and along the medial border of the tendon of *M. flexor digitalis profundus*. C D

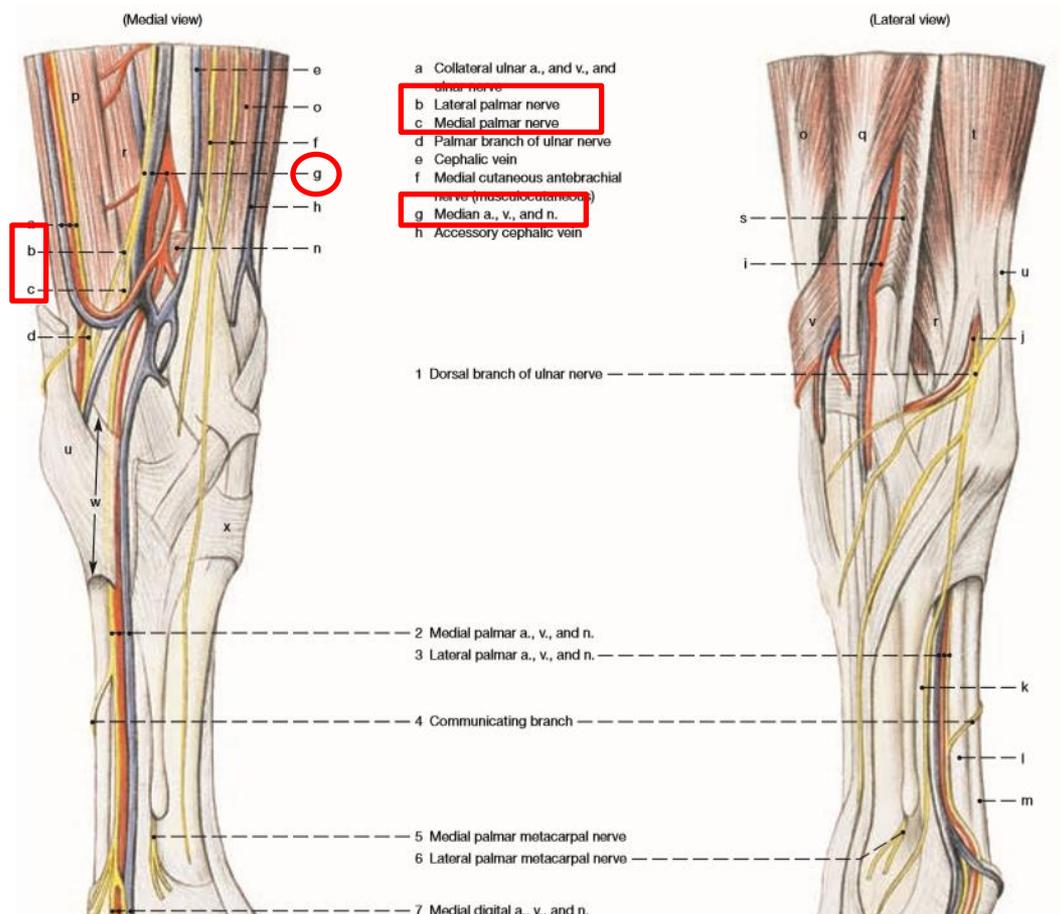
16 *Ramus communicans*. Communicating branch between Nn. palmares in the middle of metacarpus, on the surface of the tendon of *M. flexor digitalis superficialis*. C D

17 *N. digitalis palmaris [proprius] medialis*. Palmar [proper] medial digital nerve, continuation of *N. palmaris medialis* in the digital area, along the tendons of the digital flexors. C D

18 *Ramus dorsalis*. Dorsal branch, arises at the level of *Articulatio metacarpophalangea* and runs obliquely towards the *Facies dorsalis* of the digit. In some specimens it gives off an intermediate branch. In others, *N. digitalis palmaris medialis* gives off the intermediate branch. C D

19 *N. palmaris lateralis* [*N. digitalis palmaris communis III*]. Lateral palmar nerve, accompanies the tendon of *M. flexor digitalis profundus* on the lateral side of the metacarpus after receiving the *Ramus palmaris* of *N. ulnaris*. C

C Nn. medianus and ulnaris – left manus, palmar aspect (eq)



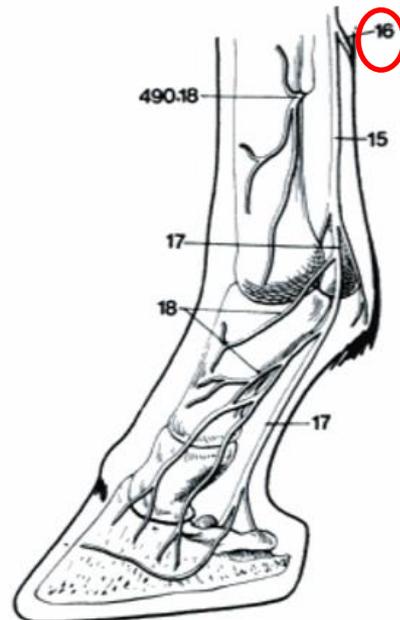
ARMGEFLECHT (PLEXUS BRACHIALIS)

N. MEDIANUS beim Pfd.

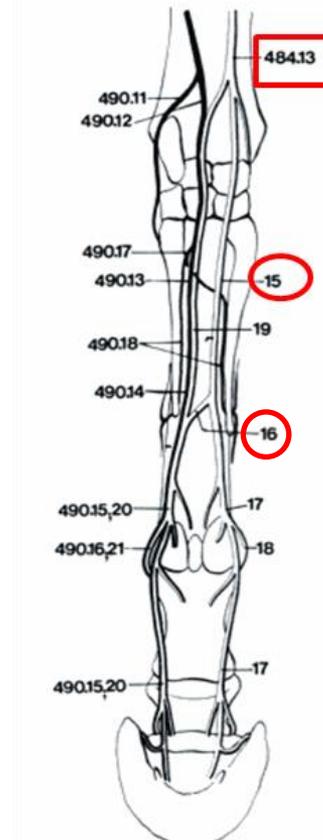
a. Ramus medialis bzw. N. palmaris medialis:

gibt in der Mitte des Mittelfußes:

1. N. palmaris medialis
2. Ramus communicans
3. N. palmaris lateralis



D N. medianus, right digit, medial aspect (cq)



C Nn. medianus and ulnaris – left manus, palmar aspect (cq)

15 *N. palmaris medialis* [*N. digitalis palmaris communis II*]. Medial palmar nerve, descends through Canalis carpi and along the medial border of the tendon of *M. flexor digitalis profundus*. C D

16 *Ramus communicans*. Communicating branch between Nn. palmares in the middle of metacarpus, on the surface of the tendon of *M. flexor digitalis superficialis*. C D

17 *N. digitalis palmaris [proprius] medialis*. Palmar [proper] medial digital nerve, continuation of *N. palmaris medialis* in the digital area, along the tendons of the digital flexors. C D

18 *Ramus dorsalis*. Dorsal branch, arises at the level of *Articulatio metacarpophalangea* and runs obliquely towards the *Facies dorsalis* of the digit. In some specimens it gives off an intermediate branch. In others, *N. digitalis palmaris medialis* gives off the intermediate branch. C D

19 *N. palmaris lateralis* [*N. digitalis palmaris communis III*]. Lateral palmar nerve, accompanies the tendon of *M. flexor digitalis profundus* on the lateral side of the metacarpus after receiving the *Ramus palmaris* of *N. ulnaris*. C

ARMGEFLECHT (PLEXUS BRACHIALIS)

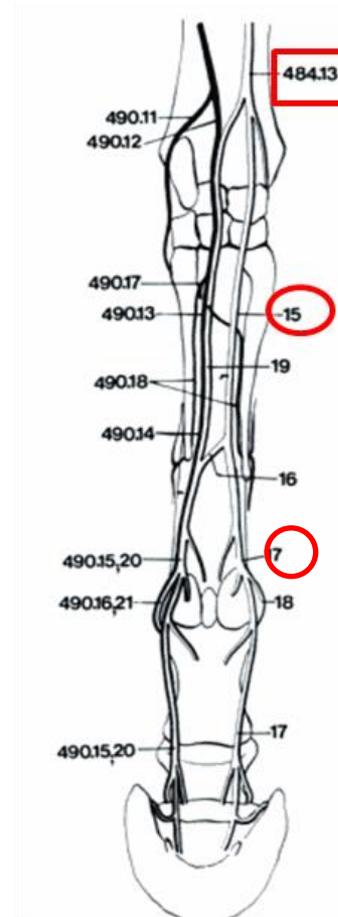
N. MEDIANUS beim Pfd.

a. Ramus medialis bzw. N. palmaris medialis:

1. N. palmaris medialis:

- oberhalb des Fesselgelenks teilt sich:

A. N. digitalis palmaris medialis



15 *N. palmaris medialis* [*N. digitalis palmaris communis II*]. Medial palmar nerve, descends through Canalis carpi and along the medial border of the tendon of *M. flexor digitalis profundus*. C D

16 *Ramus communicans*. Communicating branch between Nn. palmares in the middle of metacarpus, on the surface of the tendon of *M. flexor digitalis superficialis*. C D

17 *N. digitalis palmaris [proprius] medialis*. Palmar [proper] medial digital nerve, continuation of *N. palmaris medialis* in the digital area, along the tendons of the digital flexors. C D

18 *Ramus dorsalis*. Dorsal branch, arises at the level of *Articulatio metacarpophalangea* and runs obliquely towards the *Facies dorsalis* of the digit. In some specimens it gives off an intermediate branch. In others, *N. digitalis palmaris medialis* gives off the intermediate branch. C D

19 *N. palmaris lateralis* [*N. digitalis palmaris communis III*]. Lateral palmar nerve, accompanies the tendon of *M. flexor digitalis profundus* on the lateral side of the metacarpus after receiving the *Ramus palmaris* of *N. ulnaris*. C

C Nn. medianus and ulnaris – left manus, palmar aspect (eq)

ARMGEFLECHT (PLEXUS BRACHIALIS)

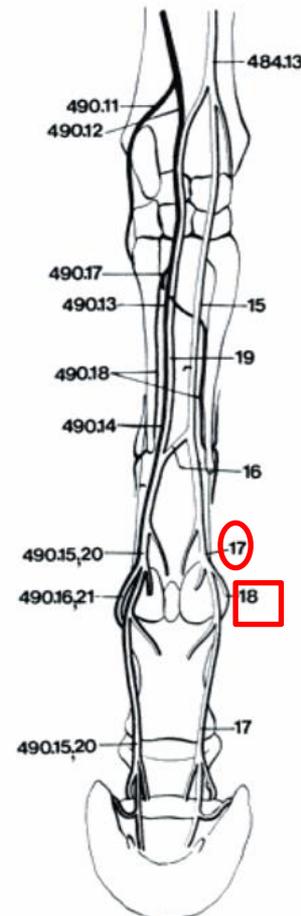
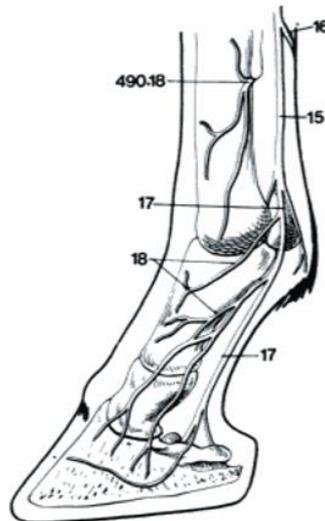
N. MEDIANUS beim Pfd.

a. Ramus medialis bzw. N. palmaris medialis:

1. N. palmaris medialis:

A. N. digitalis palmaris medialis lassen sich 4 Hauptäste unterscheiden:

- a) Ramus caudalis
- b) Ramus dorsalis
- c) Ramus palmaris
- d) Ramus intermedius



- 15 *N. palmaris medialis* [*N. digitalis palmaris communis II*]. Medial palmar nerve, descends through Canalis carpi and along the medial border of the tendon of *M. flexor digitalis profundus*. C D
- 16 *Ramus communicans*. Communicating branch between *Nn. palmares* in the middle of metacarpus, on the surface of the tendon of *M. flexor digitalis superficialis*. C D
- 17 *N. digitalis palmaris [proprius] medialis*. Palmar [proper] medial digital nerve, continuation of *N. palmaris medialis* in the digital area, along the tendons of the digital flexors. C D
- 18 *Ramus dorsalis*. Dorsal branch, arises at the level of *Articulatio metacarpophalangea* and runs obliquely towards the *Facies dorsalis* of the digit. In some specimens it gives off an intermediate branch. In others, *N. digitalis palmaris medialis* gives off the intermediate branch. C D
- 19 *N. palmaris lateralis* [*N. digitalis palmaris communis III*]. Lateral palmar nerve, accompanies the tendon of *M. flexor digitalis profundus* on the lateral side of the metacarpus after receiving the *Ramus palmaris* of *N. ulnaris*. C
- 20 *N. digitalis palmaris [proprius] lateralis*. Palmar (proper) lateral digital nerve, continuation of *N. palmaris lateralis*. C
- 21 *Ramus dorsalis*. Dorsal branch, arises at the level of *Articulatio metacarpophalangea* and runs obliquely towards the *Facies dorsalis* of the digit. C

ARMGEFLECHT (PLEXUS BRACHIALIS)

N. MEDIANUS beim Pfd.

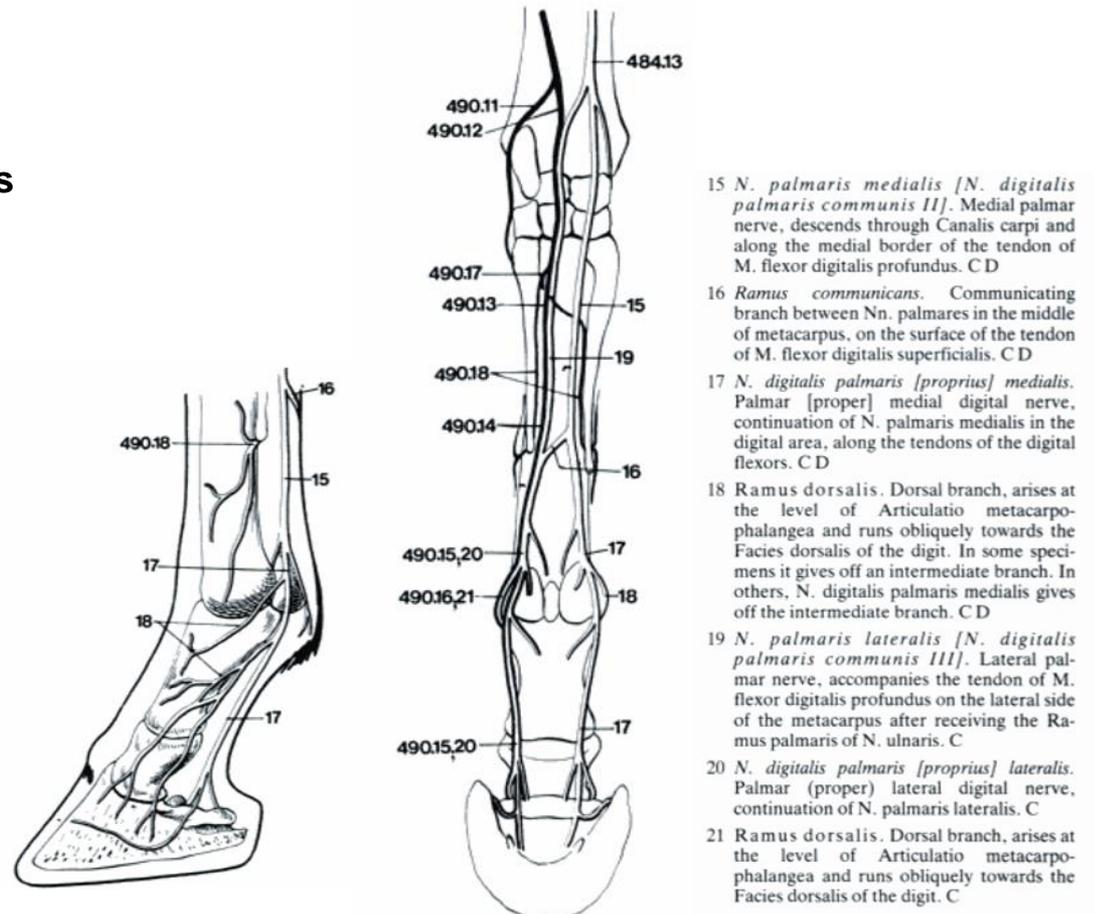
a. Ramus medialis bzw. N. palmaris medialis:

1. N. palmaris medialis:

A. N. digitalis palmaris medialis

a. Ramus caudalis:

- Spornast
- innerviert die Gegend des Sporns



ARMGEFLECHT (PLEXUS BRACHIALIS)

N. MEDIANUS beim Pfd.

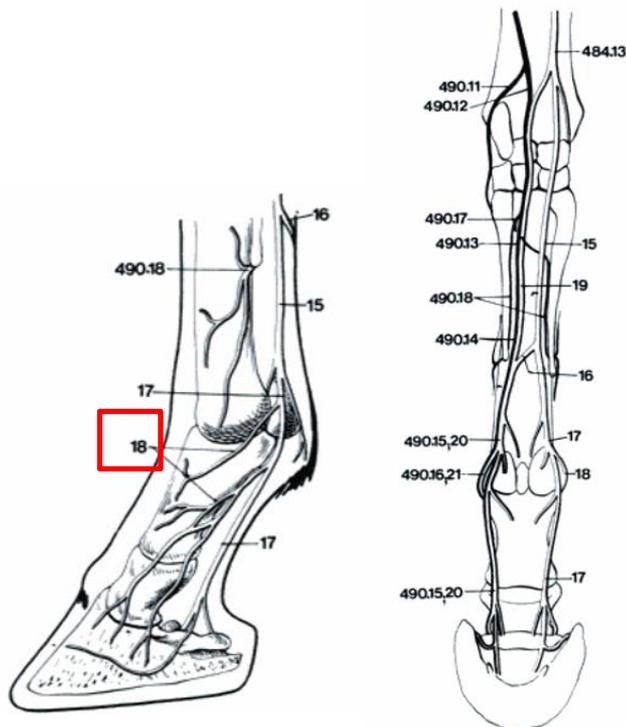
a. Ramus medialis bzw. N. palmaris medialis:

1. N. palmaris medialis:

A. N. digitalis palmaris medialis

b. Ramus dorsalis:

- versorgt die dorsomediale Seite des Fesselgelenks bis zum Kronrand
- mit den Endästen des N. metacarpeus palmaris med. des N. ulnaris Verbindungen eingeht



15 *N. palmaris medialis* [*N. digitalis palmaris communis II*]. Medial palmar nerve, descends through Canalis carpi and along the medial border of the tendon of *M. flexor digitalis profundus*. C D

16 *Ramus communicans*. Communicating branch between Nn. palmares in the middle of metacarpus, on the surface of the tendon of *M. flexor digitalis superficialis*. C D

17 *N. digitalis palmaris [proprius] medialis*. Palmar [proper] medial digital nerve, continuation of *N. palmaris medialis* in the digital area, along the tendons of the digital flexors. C D

18 *Ramus dorsalis*. Dorsal branch, arises at the level of *Articulatio metacarpophalangea* and runs obliquely towards the *Facies dorsalis* of the digit. In some specimens it gives off an intermediate branch. In others, *N. digitalis palmaris medialis* gives off the intermediate branch. C D

19 *N. palmaris lateralis* [*N. digitalis palmaris communis III*]. Lateral palmar nerve, accompanies the tendon of *M. flexor digitalis profundus* on the lateral side of the metacarpus after receiving the *Ramus palmaris* of *N. ulnaris*. C

20 *N. digitalis palmaris [proprius] lateralis*. Palmar (proper) lateral digital nerve, continuation of *N. palmaris lateralis*. C

21 *Ramus dorsalis*. Dorsal branch, arises at the level of *Articulatio metacarpophalangea* and runs obliquely towards the *Facies dorsalis* of the digit. C

ARMGEFELCHT (PLEXUS BRACHIALIS)

N. MEDIANUS beim Pfd.

a. Ramus medialis bzw. N. palmaris medialis:

1. N. palmaris medialis:

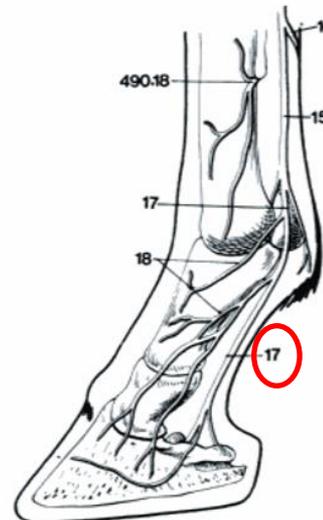
A. N. digitalis palmaris medialis lassen sich 4 Hauptäste unterscheiden:

c. Ramus palmaris:

- Ballenast abgibt

spaltet sich:

- ✓ in den N. coronarius für Kron – und Hufgelenkkapsel
- ✓ in den Hufgelenkäfte für Hufgelenk, Strahlbein, Bursa podotrochlearis, Trachtenwand
- ✓ In den Wandrinnenast (R. parietalis)



15 *N. palmaris medialis* [*N. digitalis palmaris communis II*]. Medial palmar nerve, descends through Canalis carpi and along the medial border of the tendon of *M. flexor digitalis profundus*. C D

16 *Ramus communicans*. Communicating branch between *Nn. palmares* in the middle of metacarpus, on the surface of the tendon of *M. flexor digitalis superficialis*. C D

17 *N. digitalis palmaris [proprius] medialis*. Palmar [proper] medial digital nerve, continuation of *N. palmaris medialis* in the digital area, along the tendons of the digital flexors. C D

18 *Ramus dorsalis*. Dorsal branch, arises at the level of *Articulatio metacarpophalangea* and runs obliquely towards the *Facies dorsalis* of the digit. In some specimens it gives off an intermediate branch. In others, *N. digitalis palmaris medialis* gives off the intermediate branch. C D

19 *N. palmaris lateralis* [*N. digitalis palmaris communis III*]. Lateral palmar nerve, accompanies the tendon of *M. flexor digitalis profundus* on the lateral side of the metacarpus after receiving the *Ramus palmaris* of *N. ulnaris*. C

ARMGEFLECHT (PLEXUS BRACHIALIS)

N. MEDIANUS beim Pfd.

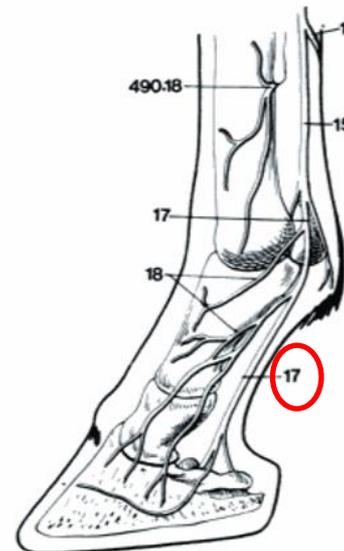
a. Ramus medialis bzw. N. palmaris medialis:

1. N. palmaris medialis:

A. N. digitalis palmaris medialis lassen sich 4 Hauptäste unterscheiden:

❖ Ramus intermedius:

- inkonstans
- zieht mit der V. digitalis med. gegen den Kronrand
- Am Kronrand anastomosiert mit dem N. coronarius



15 *N. palmaris medialis* [*N. digitalis palmaris communis III*]. Medial palmar nerve, descends through Canalis carpi and along the medial border of the tendon of *M. flexor digitalis profundus*. C D

16 *Ramus communicans*. Communicating branch between *Nn. palmares* in the middle of metacarpus, on the surface of the tendon of *M. flexor digitalis superficialis*. C D

17 *N. digitalis palmaris [proprius] medialis*. Palmar [proper] medial digital nerve, continuation of *N. palmaris medialis* in the digital area, along the tendons of the digital flexors. C D

18 *Ramus dorsalis*. Dorsal branch, arises at the level of *Articulatio metacarpophalangea* and runs obliquely towards the *Facies dorsalis* of the digit. In some specimens it gives off an intermediate branch. In others, *N. digitalis palmaris medialis* gives off the intermediate branch. C D

19 *N. palmaris lateralis* [*N. digitalis palmaris communis III*]. Lateral palmar nerve, accompanies the tendon of *M. flexor digitalis profundus* on the lateral side of the metacarpus after receiving the *Ramus palmaris* of *N. ulnaris*. C

ARMGEFLECHT (PLEXUS BRACHIALIS)

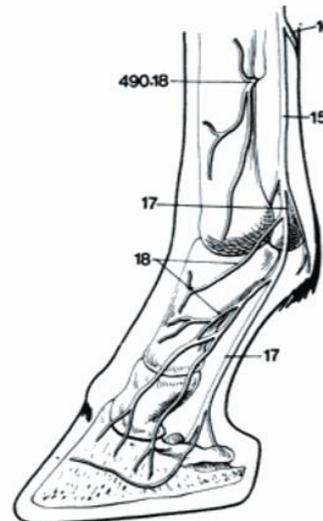
N. MEDIANUS beim Pfd.

a. Ramus lateralis bzw. N. palmaris lateralis:

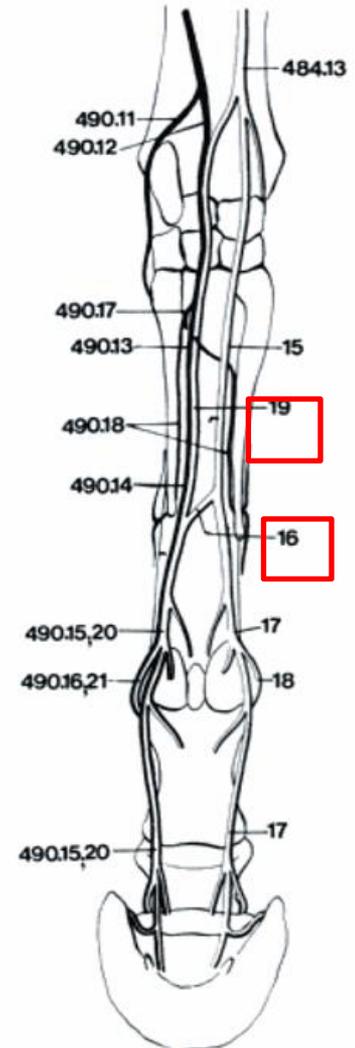
- zieht in laterodistale Richtung gegen die Beugefläche des Karpus
- verbindet sich mit dem R. palmaris n. Ulnaris zum N. palmaris lateralis

N. palmaris lateralis:

- verläuft zehenwärts entlang dem lateralen Rand der tiefen Beugesehne
- nimmt den R. communicans des N. palmaris med. auf
- verhält sich von Fesselgelenk als N. digitalis palmaris lat.



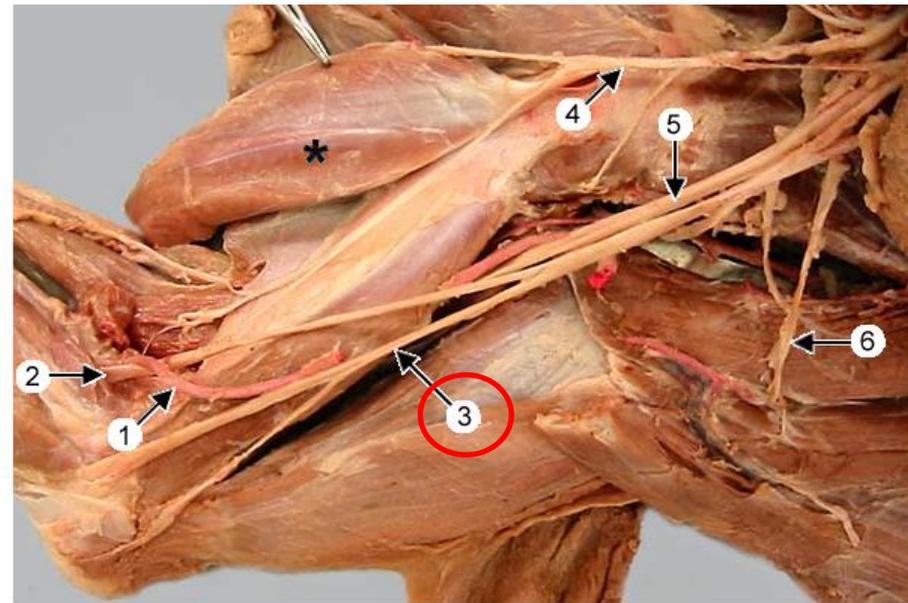
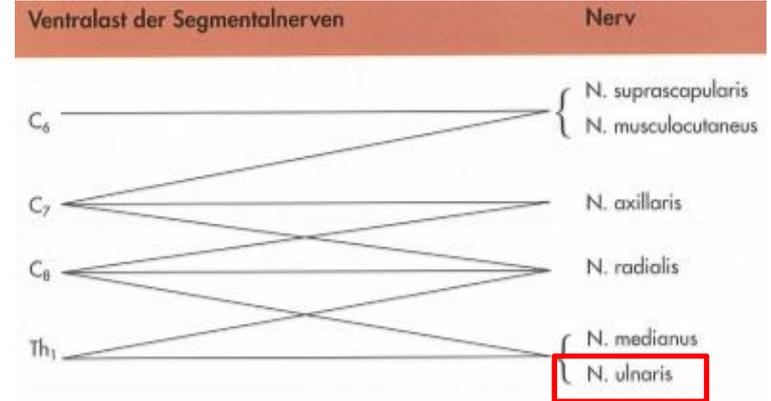
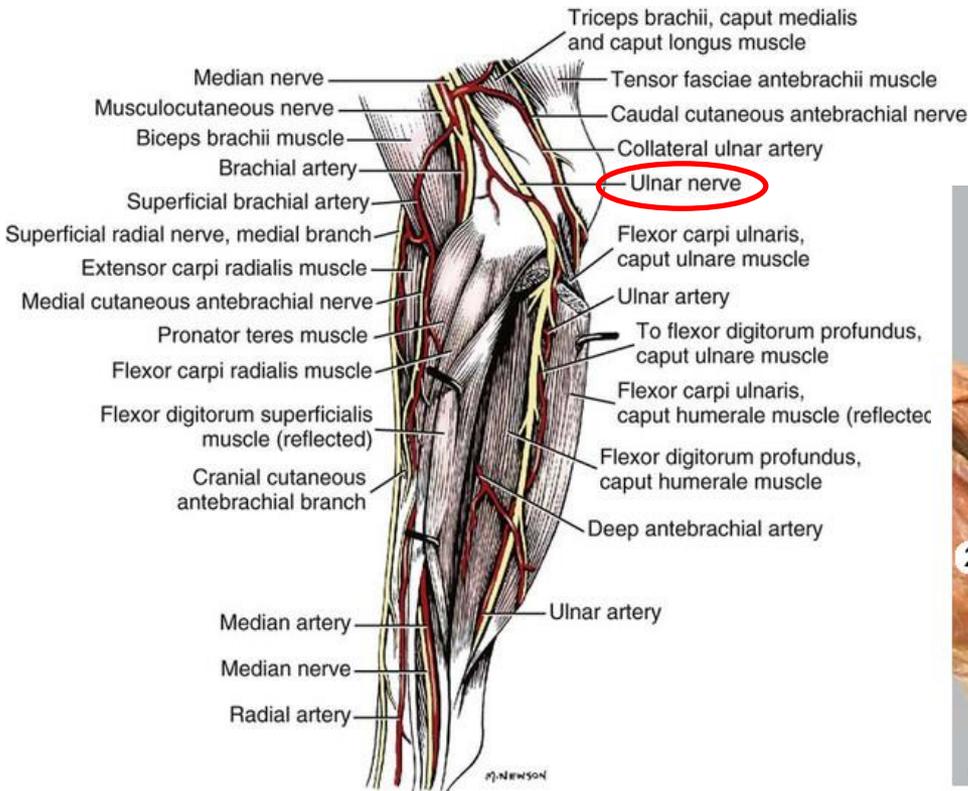
- N. palmaris medialis [N. digitalis palmaris communis II].* Medial palmar nerve, descends through Canalus carpi and along the medial border of the tendon of M. flexor digitalis profundus. C D
- Ramus communicans.* Communicating branch between Nn. palmares in the middle of metacarpus, on the surface of the tendon of M. flexor digitalis superficialis. C D
- N. digitalis palmaris [proprius] medialis.* Palmar [proper] medial digital nerve, continuation of N. palmaris medialis in the digital area, along the tendons of the digital flexors. C D
- Ramus dorsalis.* Dorsal branch, arises at the level of Articulatio metacarpophalangea and runs obliquely towards the Facies dorsalis of the digit. In some specimens it gives off an intermediate branch. In others, N. digitalis palmaris medialis gives off the intermediate branch. C D
- N. palmaris lateralis [N. digitalis palmaris communis III].* Lateral palmar nerve, accompanies the tendon of M. flexor digitalis profundus on the lateral side of the metacarpus after receiving the Ramus palmaris of N. ulnaris. C
- N. digitalis palmaris [proprius] lateralis.* Palmar (proper) lateral digital nerve, continuation of N. palmaris lateralis. C
- Ramus dorsalis.* Dorsal branch, arises at the level of Articulatio metacarpophalangea and runs obliquely towards the Facies dorsalis of the digit. C



ARMGEFLECHT (PLEXUS BRACHIALIS)

12. NERVUS ULNARIS:

- bei Hd., Wdk., Pfd. aus C8, Th1-2
- medial am Oberarm verläuft mit dem N. medianus



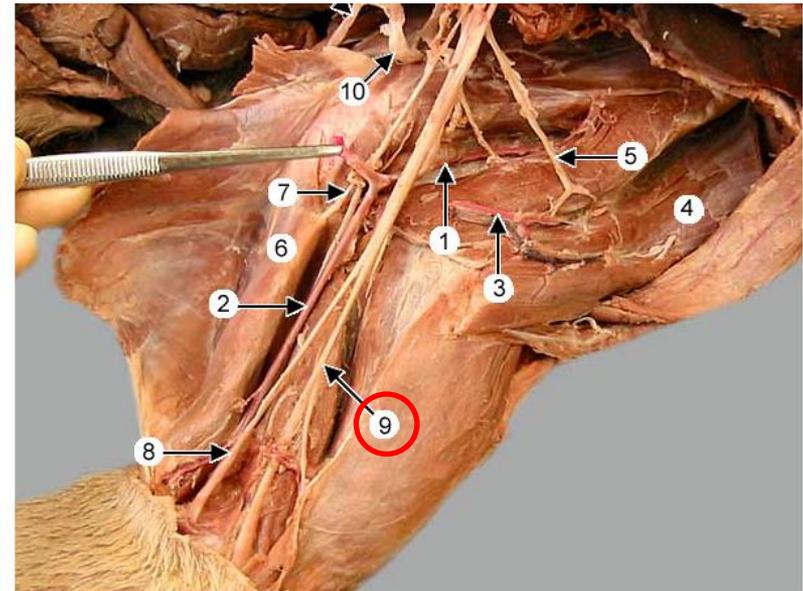
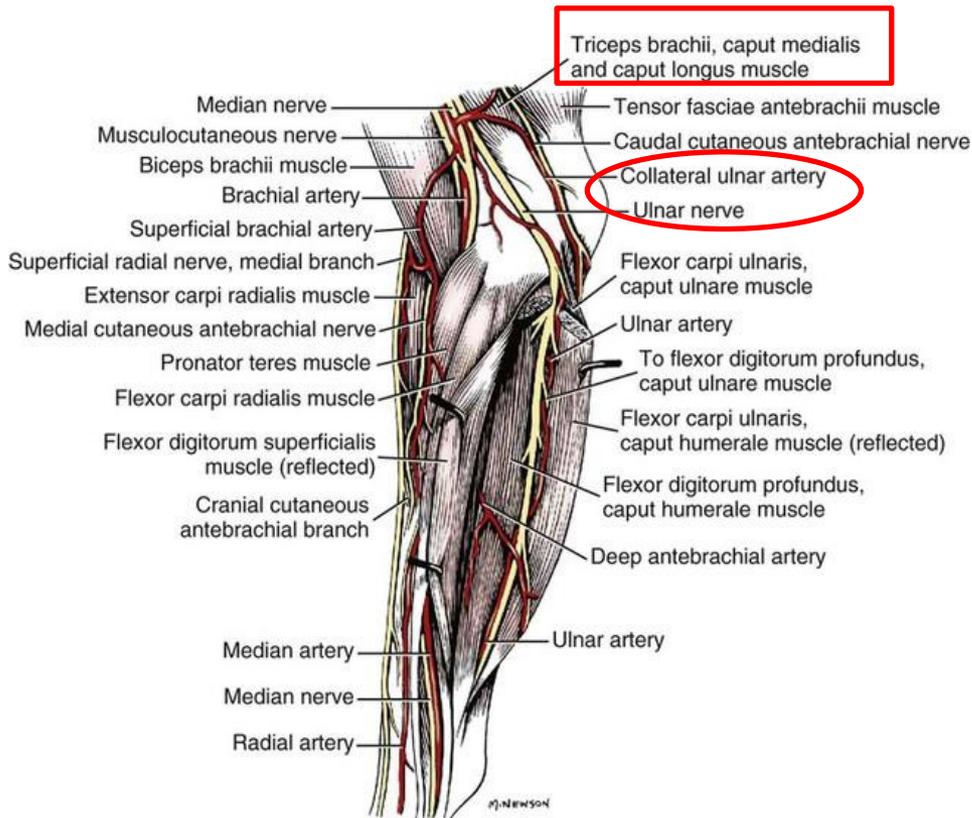
Medial view of the brachium. The **brachial a.** (1) has been transected in the brachium. The artery accompanies the **median n.** (2) into the antebrachium. Also notice the **ulnar n.** (3), **musculocutaneous n.** (4), **radial n.** (5), and **thoracodorsal n.** (6). The biceps brachii m. (asterisk) is reflected.

ARMGEFLECHT (PLEXUS BRACHIALIS)

12. NERVUS ULNARIS:

beim Hd:

- übertrifft der A. brachialis entlang bis zur Abgangsstelle der A. collateralis ulnaris
- am unteren Rand des Caput medialis des Trizeps brachii bedeckt



Medial view of the scapular region and brachium. The **axillary a.** (held in forceps) gives off a large **subscapular a.** (1) and then becomes the **brachial a.** (2), after sending a cranial circumflex humeral a. (not visible) to the biceps brachii m. The subscapular a. gives rise to the **thoracodorsal a.** (3) which supplies the latissimus dorsi m. (4), as does the **thoracodorsal n.** (5) from the brachial plexus.

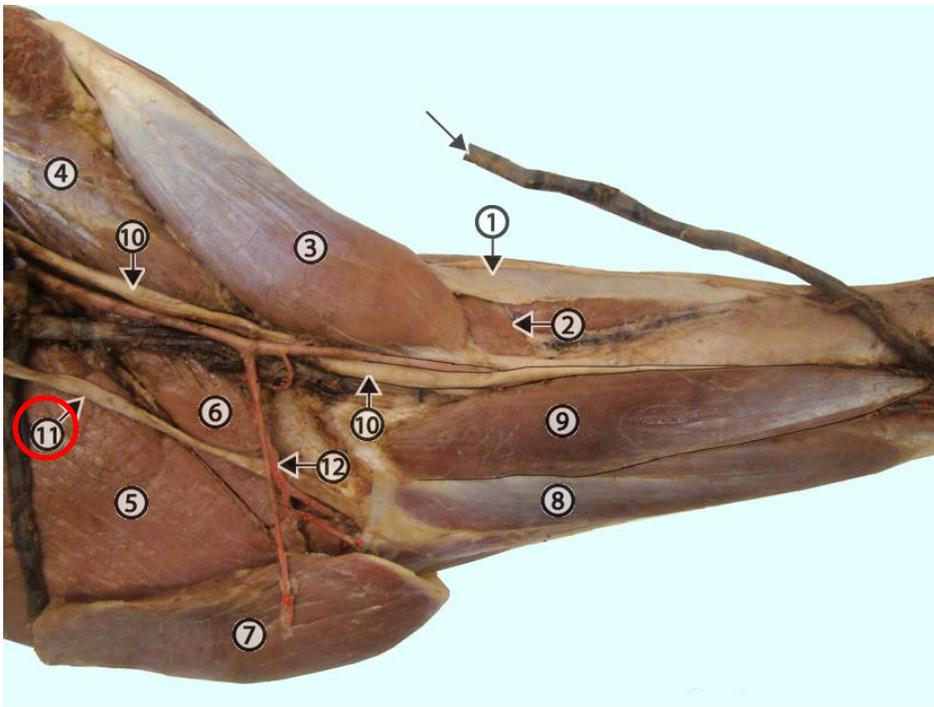
Also, find: biceps brachii m. (6) innervated by the musculocutaneous n. (7), median n. (8), ulnar n. (9), suprascapular n. (10), and nerve to the cleidobrachialis m. (11).

ARMGEFLECHT (PLEXUS BRACHIALIS)

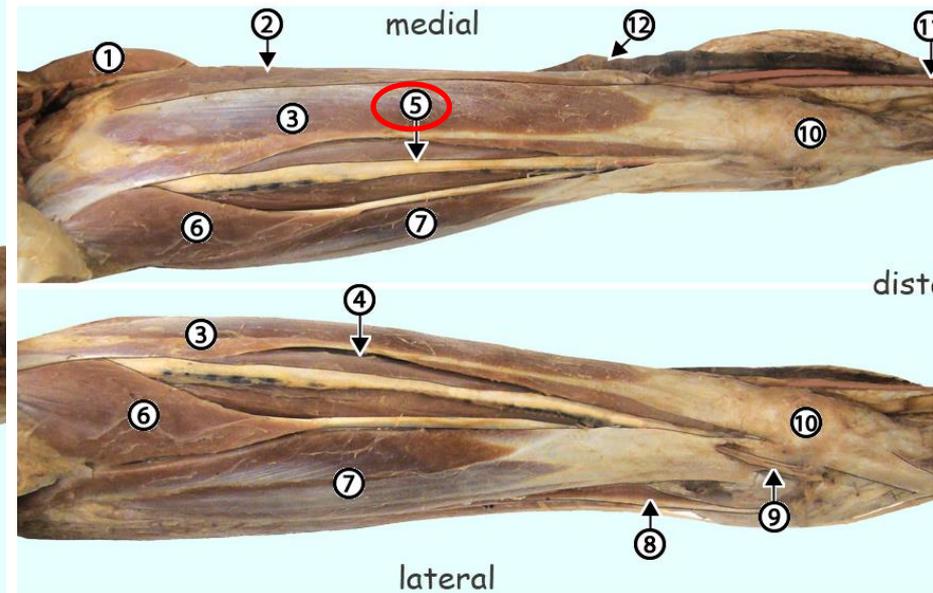
12. NERVUS ULNARIS:

beim Pfd.

- vom M. tensor fasciae antebrachii bedeckt
- zur Streckseite des Ellenbogens zieht



Medial antebrachium. 1, lacertus fibrosus; 2, brachialis m.; 3, biceps brachii m.; 4, coracobrachialis m.; 5, long head of triceps m.; 6, medial head of the triceps m.; 7, tensor fasciae antebrachii m.; 8, flexor carpi ulnaris m.; 9, flexor carpi radialis m.; 10, median n.; 11, ulnar n.; 12, collateral ulnar a.; unlabeled arrow, cephalic vein. [Contrary to the lab guide, the pectorals and brachiocephalicus muscles have been removed.]



Caudal antebrachium of left forelimb, two views. 1, biceps brachii m.; 2, flexor carpi radialis m.; 3, flexor carpi ulnaris m.; 4, superficial digital flexor m.; 5, ulnar n.; 6, ulnar head of deep digital flexor m.; 7, ulnaris lateralis m.; 8, lateral digital extensor m.; 9, dorsal branch of ulnar n.; 10, approximate location of accessory carpal bone; 11, medial palmar a.; 12, cephalic vein.

<http://vanat.cvm.umn.edu/ungDissect/Lab02/Img2-11.html>

<http://vanat.cvm.umn.edu/ungDissect/Lab02/Img2-9.html>

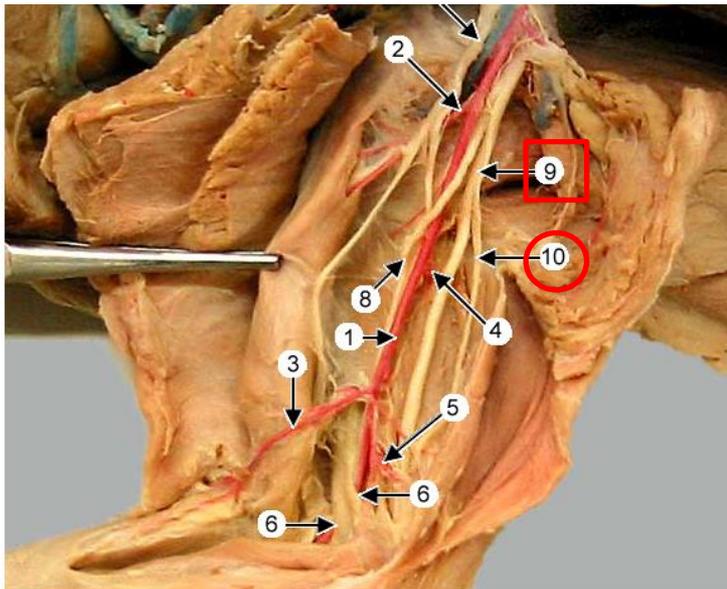
ARMGEFLECHT (PLEXUS BRACHIALIS)

ÄRTE des NERVUS ULNARIS:

1. N. CUTANEUS ANTEBRACHII CAUDALES:

innerviert:

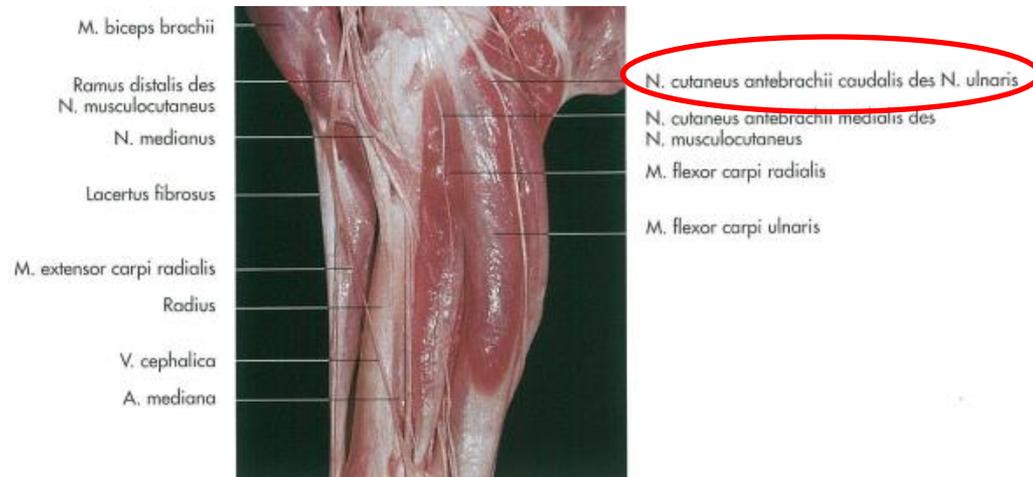
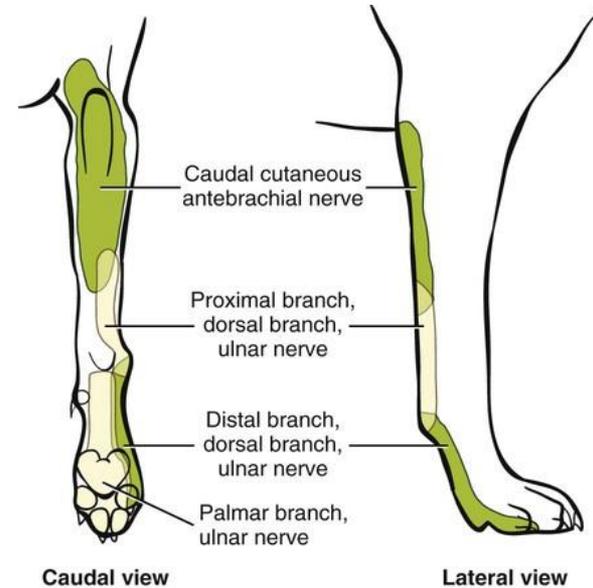
- die Haut an der Hinterseite des Vorarms
- beim Pfd. sendet einen Ast an das Karpalgelenk



Cat, medial brachium. The **brachial a.** (1) gives off a combined cranial circumflex humeral and bicipital a. (2) and a superficial brachial a. (3). Caudal branches of the brachial a. are: **deep brachial a.** (4) and **collateral ulnar a.** (5). In the cat, the brachial a. passes through the **supracondylar foramen** (6) of the humerus.

Find the following nerves on the medial surface of the brachium: **musculocutaneous n.** (7), **median n.** (8), and **ulnar n.** (9), which gives off a caudal cutaneous antebrachial n. (10).

<http://vanat.cvm.umn.edu/carnLabs/Lab13/img13-7.html>

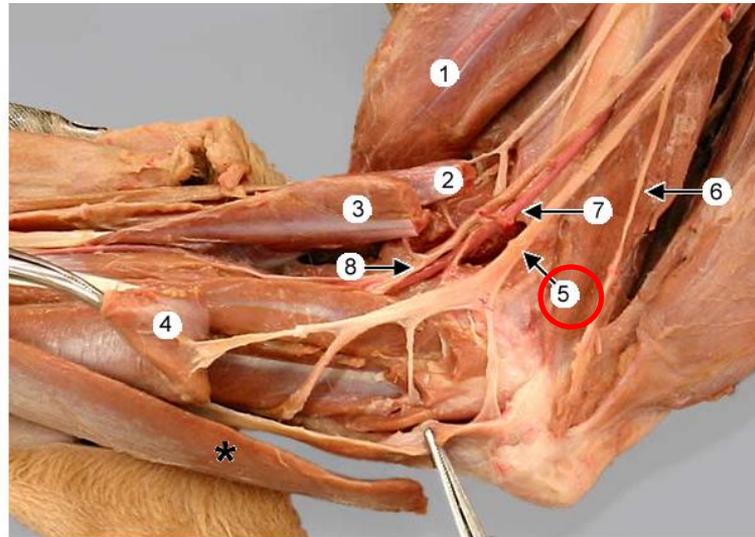
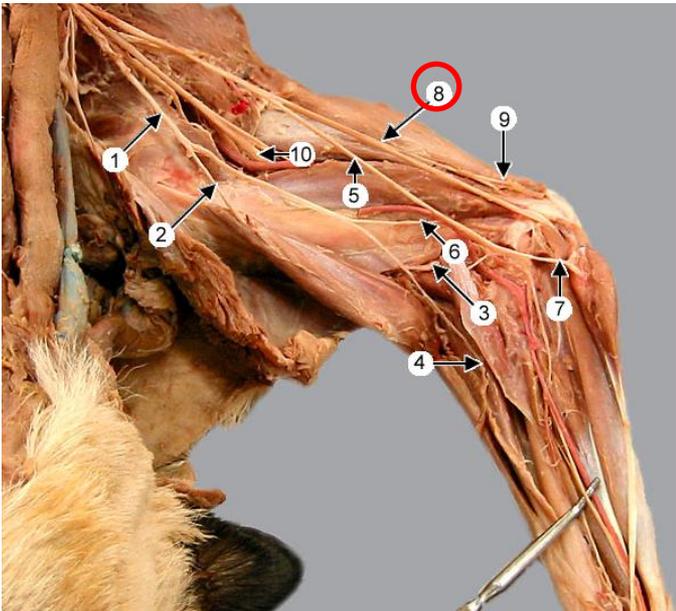


autnerven am Unterarm der rechten Vordergliedmaße eines Pferdes (Medialansicht), Präparat Dr. R. Macher, Wien.

ARMGEFLECHT (PLEXUS BRACHIALIS)

NERVUS ULNARIS:

- zieht über den Epicondylus medialis humeri zur Streckseite des Ellenbogens
- unter dem M. anconeus
- gibt Äste für Ellenbogengelenk ab
- tritt unter dem Caput ulnare des M. flexor carpi ulnaris an die Hinterseite des Unterarms
- proximal am Radius gibt die Rr. musculares ab



Caudomedial view of the elbow region. The biceps brachii m. (1) has been cut and reflected. Also, the following muscles have been cut and reflected: pronator teres m. (2), flexor carpi radialis m. (3), flexor carpi ulnaris m. humeral head (4), and superficial digital flexor m. (asterisk). The ulnar n. (5) can be seen innervating caudal antebrachial muscles after giving off the caudal cutaneous antebrachial n. (6). The brachial a. (7) and median n. (8) run together in the proximal antebrachium.

Medial view of the brachium and antebrachium. The musculocutaneous n. (1) sends branches to the biceps brachii m. (2) and the brachialis m. (3) and ends as the medial cutaneous antebrachial n. (4). The median n. (5) receives a communicating branch (6) from the musculocutaneous n and then innervates caudal muscles of the antebrachium (7) before continuing (elevated by a probe) to innervate the palmar surface of the manus. The ulnar n. (8) gives off the caudal cutaneous antebrachial n. (9) and also innervates caudal muscles of the antebrachium before continuing distally to the lateral surface of the manus. Observe the radial n. (10) passing laterally.

<http://vanat.cvm.umn.edu/carnLabs/Lab14/lmg14-1.html>

ARMGEFELECHT (PLEXUS BRACHIALIS)

RAMI MUSCULARES des NERVUS ULNARIS:

innervieren den:

- **M. flexor carpi ulnaris**
- **M. flexor digitorum superficialis ulnare Seite**
- **Caput ulnare und die laterale , proximale Portion des Caput humerale des M. flexor digitorum prof.**

N. ulnaris

M. flexor carpi ulnaris,
M. flexor digitorum profundus (zum Teil),
M. flexor digitorum superficialis (zum Teil),
Mm. interossei

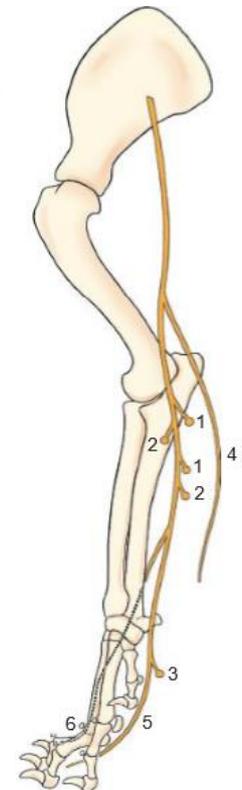
Haut kaudal am Unterarm, dorsolateral am Mittelfuß und der Zehe

Gelenke	Nerven
Schultergelenk	N. axillaris, N. suprascapularis
Ellbogengelenk und Karpalgelenk	N. medianus, N. ulnaris
Fesselgelenk und Zehengelenke	Nn. palmares, Nn. digitales



Canine: Distribution of the Ulnar Nerve, Right Forelimb (Medial View)

1. Flexor carpi ulnaris, ulnar and humeral heads
2. Deep digital flexor, ulnar and humeral heads
3. Interossei
4. Skin of caudal antebrachium
5. Skin of palmar paw
6. Skin of fifth metacarpal, lateral surface of digit

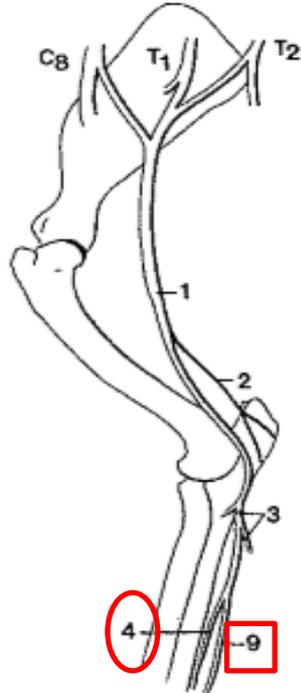


ARMGEFLECHT (PLEXUS BRACHIALIS)

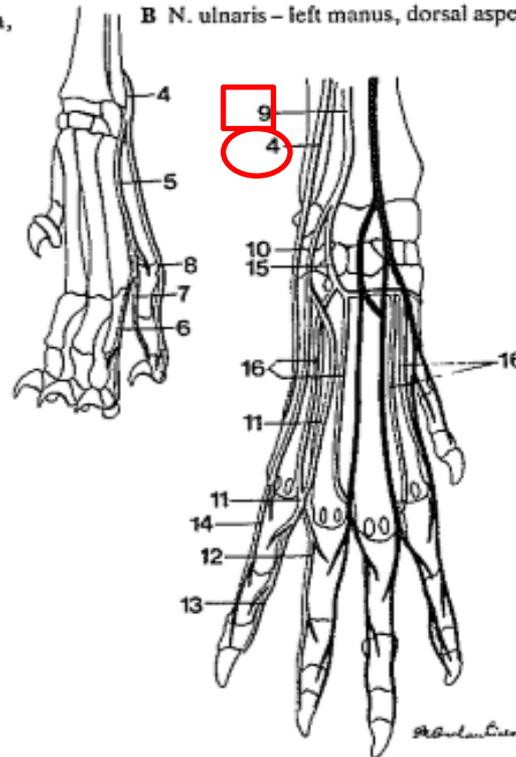
NERVUS ULNARIS:

- im weiteren verlauf wird von der A. collateralis ulnaris begleitet
- läuft in der Rinne zwischen M. flexor und extensor carpi ulnaris zehenwärts
- oberhalb des Karpus teilt auf in einen:
 - a. Ramus dorsalis
 - b. Ramus palmaris

A N. ulnaris – right shoulder, brachium, antebrachium, medial aspect (ca)



B N. ulnaris – left manus, dorsal aspect (fe)



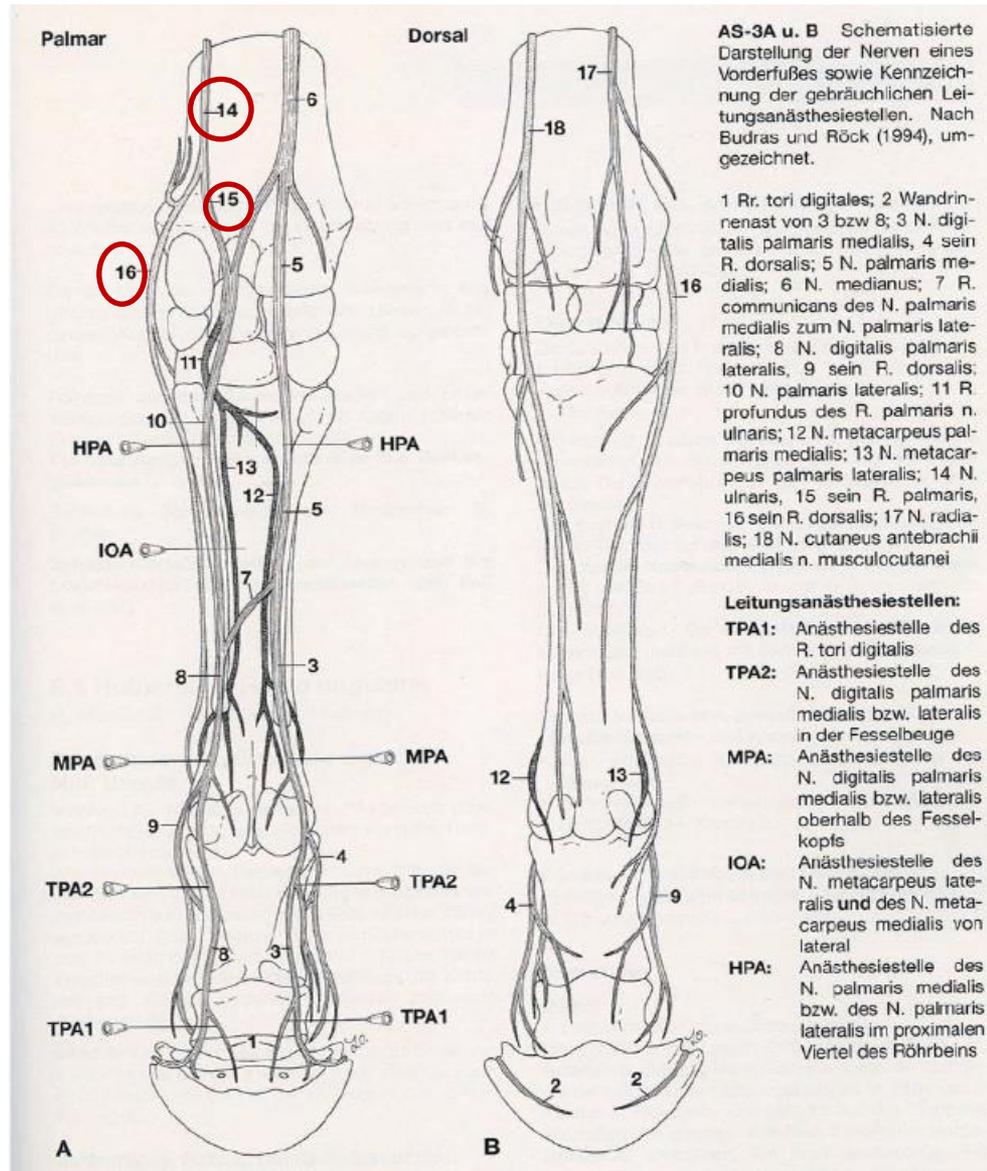
C N. ulnaris – left manus, palmar aspect (c)

- 1 **N. ulnaris**. Ulnar nerve, originates from C8, T1 (T2 bo, eq, sometimes ca, ov, cap), runs caudal to N. medianus, supplies the Mm. flexor carpi ulnaris, flexor digitalis superficialis (eq), flexor digitorum/digitalis profundus (caput ulnare and parts of caput humerale), and skin of the caudal side of forearm and the lateral side of manus. A, 483 A, 487 A B C
- 2 **N. cutaneus antebrachii caudalis***. Caudal cutaneous antebrachial nerve, becomes apparent on the caudal border of the olecranon. A
- 3 **Rami musculares**. Muscular branches, to M. flexor carpi ulnaris, M. flexor digitorum/digitalis superficialis (eq, sometimes bo), and M. flexor digitorum/digitalis profundus (caput ulnare and parts of caput humerale). A
- 4 **Ramus dorsalis**. Dorsal branch. A B C, 485 B
- 5 **N. digitalis dorsalis communis IV (fe)**. Dorsal common digital nerve IV. B
- 6 **N. digitalis dorsalis proprius IV abaxialis (fe)**. Abaxial dorsal proper digital nerve IV, runs on the dorsal aspect of the abaxial side of digit IV. B
- 7 **N. digitalis dorsalis proprius V axialialis (fe)**. Axial dorsal proper digital nerve V, runs on the dorsal aspect of the axial side of digit V. B
- 8 **N. digitalis dorsalis V abaxialis**. Abaxial dorsal digital nerve V, on the dorsal aspect of abaxial side of digit V. B, 485 B
- 9 **Ramus palmaris**. Palmar branch. A C
- 10 **Ramus superficialis**. Superficial branch. C
- 11 **N. digitalis palmaris communis IV**. Palmar common digital nerve IV, receives N. metacarpeus palmaris IV. C
- 12 **N. digitalis palmaris proprius IV abaxialis**. Abaxial palmar proper digital nerve IV, runs on the palmar aspect of the abaxial side of digit IV. C
- 13 **N. digitalis palmaris proprius V axialialis**. Axial palmar proper digital nerve V, runs on the palmar aspect of the axial side of digit V. C
- 14 **N. digitalis palmaris V abaxialis**. Abaxial palmar digital nerve V, runs on the palmar aspect of the abaxial side of digit V. C
- 15 **Ramus profundus**. Deep branch. C
- 16 **Nn. metacarpei palmares (ca)**. Palmar metacarpal nerves I, II, III, IV, reinforce the Nn. digitales palmares communes at the Articulatio metacarpophalangea. C

ARMGEFLECHT (PLEXUS BRACHIALIS)

NERVUS ULNARIS:

- a. Ramus dorsalis
- b. Ramus palmaris



ARMGEFLECHT (PLEXUS BRACHIALIS)

die zwei Hauptäste des NERVUS ULNARIS verhalten sich tierartig unterschiedlich:

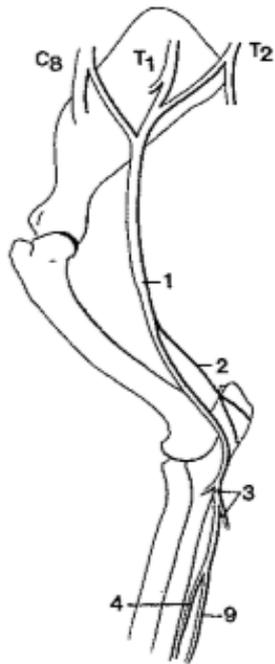
RAMUS DORSALIS:

- schlägt sich um die laterale Seite des Karpus auf die dorsolaterale Fläche des Mittelfußes

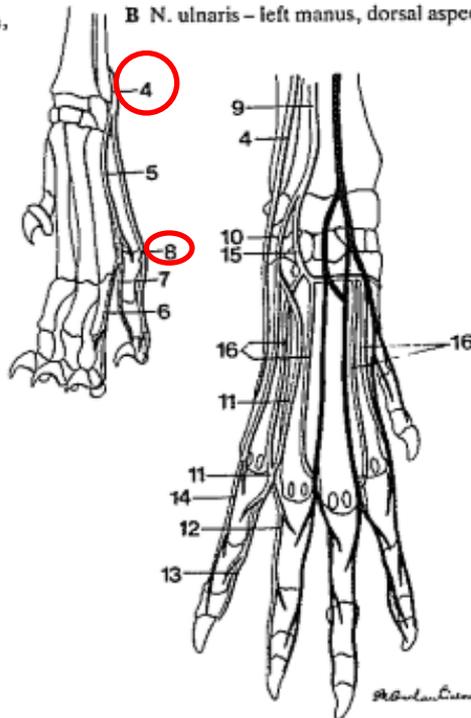
bei den Flfr. :

- liefert den N. digitalis dorsalis V. abaxialis
- verbindet sich mit dem N. digitalis dors. comm. IV. des N. radialis

A N. ulnaris – right shoulder, brachium, antebrachium, medial aspect (ca)



B N. ulnaris – left manus, dorsal aspect (fe)



C N. ulnaris – left manus, palmar aspect (c)

- 1 N. ulnaris. Ulnar nerve, originates from C8, T1 (T2 bo, eq, sometimes ca, ov, cap), runs caudal to N. medianus, supplies the Mm. flexor carpi ulnaris, flexor digitalis superficialis (eq), flexor digitorum/digitalis profundus (caput ulnare and parts of caput humerale), and skin of the caudal side of forearm and the lateral side of manus. A, 483 A, 487 A B C
- 2 N. cutaneus antebrachii caudalis*. Caudal cutaneous antebrachial nerve, becomes apparent on the caudal border of the olecranon. A
- 3 Rami musculares. Muscular branches, to M. flexor carpi ulnaris, M. flexor digitorum/digitalis superficialis (eq, sometimes bo), and M. flexor digitorum/digitalis profundus (caput ulnare and parts of caput humerale). A

- 4 Ramus dorsalis. Dorsal branch. A B C, 485 B
- 5 N. digitalis dorsalis communis IV (fe). Dorsal common digital nerve IV. B
- 6 N. digitalis dorsalis proprius IV abaxialis (fe). Abaxial dorsal proper digital nerve IV, runs on the dorsal aspect of the abaxial side of digit IV. B
- 7 N. digitalis dorsalis proprius V axialis (fe). Axial dorsal proper digital nerve V, runs on the dorsal aspect of the axial side of digit V. B
- 8 N. digitalis dorsalis V abaxialis. Abaxial dorsal digital nerve V, on the dorsal aspect of abaxial side of digit V. B, 485 B
- 9 Ramus palmaris. Palmar branch. A C
- 10 Ramus superficialis. Superficial branch. C
- 11 N. digitalis palmaris communis IV. Palmar common digital nerve IV, receives N. metacarpeus palmaris IV. C
- 12 N. digitalis palmaris proprius IV abaxialis. Abaxial palmar proper digital nerve IV, runs on the palmar aspect of the abaxial side of digit IV. C
- 13 N. digitalis palmaris proprius V axialis. Axial palmar proper digital nerve V, runs on the palmar aspect of the axial side of digit V. C
- 14 N. digitalis palmaris V abaxialis. Abaxial palmar digital nerve V, runs on the palmar aspect of the abaxial side of digit V. C
- 15 Ramus profundus. Deep branch. C
- 16 Nn. metacarpei palmares (ca). Palmar metacarpal nerves I, II, III, IV, reinforce the Nn. digitales palmares communes at the Articulatio metacarpophalangea. C

ARMGEFLECHT (PLEXUS BRACHIALIS)

N. ULNARIS RAMUS DORSALIS:

beim Pfd. :

- tritt zwischen den beiden Schenkeln des M. extensor carpi ulnaris an die dorsolaterale Seite des Metacarpus
- zieht als N. metacarpeus dorsalis lateralis dem Griffelbein entlang bis zum Fesselgengend
- beim Fesselgengend sich in seine Endzweige aufteilt
- mit Ästen des N. palmaris lat. Verbindungen eingeht



Abb. 14-69. Topographie der Zehe an der linken Vordergliedmaße des Pferdes (Lateralansicht, die Sehne des Sporns ist nicht eingezeichnet).

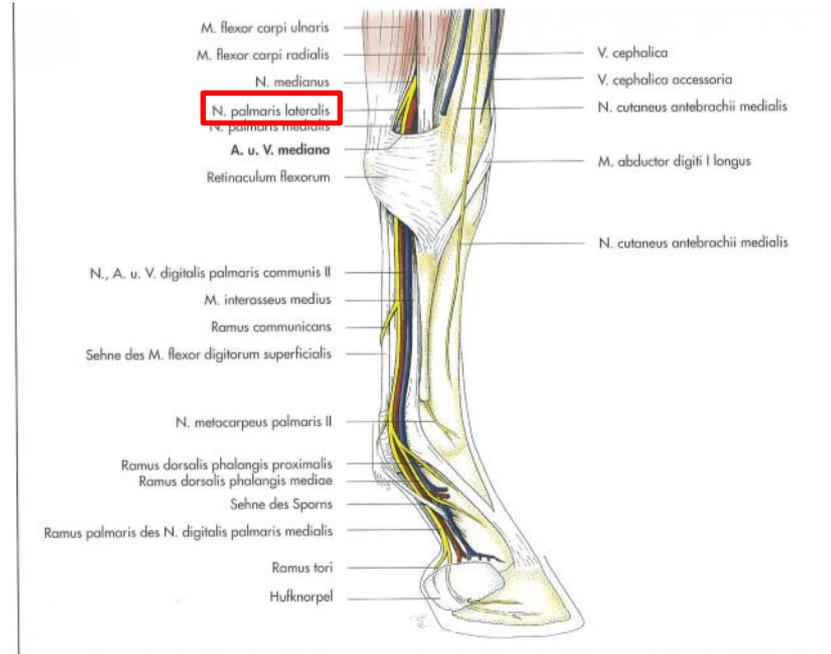


Abb. 14-70. Topographie der Zehen an der linken Vordergliedmaße des Pferdes (Medialansicht).

ARMGEFLECHT (PLEXUS BRACHIALIS)

N. ULNARIS RAMUS PALMARIS:

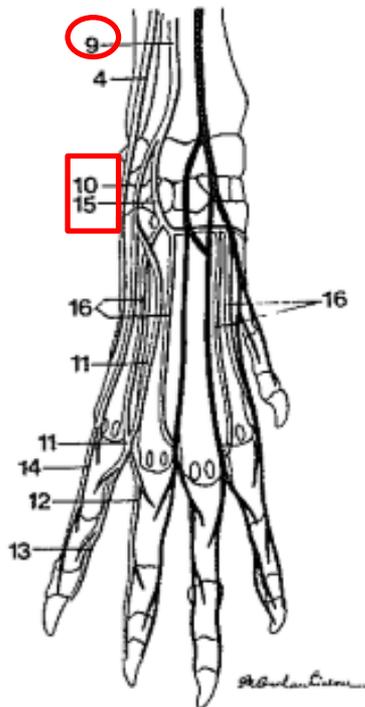
beim Hd:

- Teilt sich oberhalb des Karpus in einen:

a. RAMUS SUPERFICIALIS

b. RAMUS PROFUNDUS

- beide medial vom Os carpi accessorium über die Beugefläche des Vorderfußwurzelgelenken zehenwärts ziehen



C N. ulnaris – left manus, palmar aspect (ca)

- 4 *Ramus dorsalis*. Dorsal branch. A B C, 485 B
- 5 *N. digitalis dorsalis communis IV* (fe). Dorsal common digital nerve IV. B
- 6 *N. digitalis dorsalis proprius IV abaxialis* (fe). Abaxial dorsal proper digital nerve IV, runs on the dorsal aspect of the abaxial side of digit IV. B
- 7 *N. digitalis dorsalis proprius V axialis* (fe). Axial dorsal proper digital nerve V, runs on the dorsal aspect of the axial side of digit V. B
- 8 *N. digitalis dorsalis V abaxialis*. Abaxial dorsal digital nerve V, on the dorsal aspect of abaxial side of digit V. B, 485 B
- 9 *Ramus palmaris*. Palmar branch. A C
- 10 *Ramus superficialis*. Superficial branch. C
- 11 *N. digitalis palmaris communis IV*. Palmar common digital nerve IV, receives N. metacarpeus palmaris IV. C
- 12 *N. digitalis palmaris proprius IV abaxialis*. Abaxial palmar proper digital nerve IV, runs on the palmar aspect of the abaxial side of digit IV. C
- 13 *N. digitalis palmaris proprius V axialis*. Axial palmar proper digital nerve V, runs on the palmar aspect of the axial side of digit V. C
- 14 *N. digitalis palmaris V abaxialis*. Abaxial palmar digital nerve V, runs on the palmar aspect of the abaxial side of digit V. C
- 15 *Ramus profundus*. Deep branch. C
- 16 *Nn. metacarpei palmares* (ca). Palmar metacarpal nerves I, II, III, IV, reinforce the Nn. digitales palmares communes at the Articulatio metacarpophalangea. C

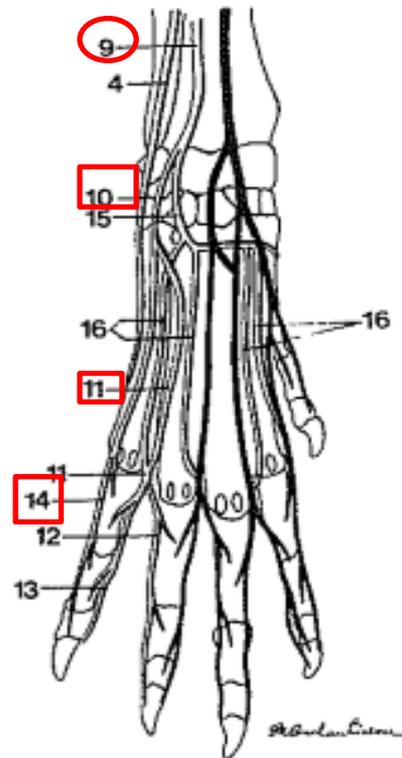
ARMGEFLECHT (PLEXUS BRACHIALIS)

RAMUS PALMARIS NERVUS ULNARIS:

beim Hd.

a. RAMUS SUPERFICIALIS gabelt sich in den:

1. N. digitalis palmaris V. abaxialis
2. N. digitalis palmaris comm. IV.



C N. ulnaris – left manus, palmar aspect (ca)

- 4 *Ramus dorsalis*. Dorsal branch. A B C, 485 B
- 5 *N. digitalis dorsalis communis IV (fe)*. Dorsal common digital nerve IV. B
- 6 *N. digitalis dorsalis proprius IV abaxialis (fe)*. Abaxial dorsal proper digital nerve IV, runs on the dorsal aspect of the abaxial side of the abaxial side of digit IV. B
- 7 *N. digitalis dorsalis proprius V axialis (fe)*. Axial dorsal proper digital nerve V, runs on the dorsal aspect of the axial side of digit V. B
- 8 *N. digitalis dorsalis V abaxialis*. Abaxial dorsal digital nerve V, on the dorsal aspect of abaxial side of digit V. B, 485 B
- 9 *Ramus palmaris*. Palmar branch. A C
- 10 *Ramus superficialis*. Superficial branch. C
- 11 *N. digitalis palmaris communis IV*. Palmar common digital nerve IV, receives N. metacarpeus palmaris IV. C
- 12 *N. digitalis palmaris proprius IV abaxialis*. Abaxial palmar proper digital nerve IV, runs on the palmar aspect of the abaxial side of digit IV. C
- 13 *N. digitalis palmaris proprius V axialis*. Axial palmar proper digital nerve V, runs on the palmar aspect of the axial side of digit V. C
- 14 *N. digitalis palmaris V abaxialis*. Abaxial palmar digital nerve V, runs on the palmar aspect of the abaxial side of digit V. C
- 15 *Ramus profundus*. Deep branch. C
- 16 *Nn. metacarpei palmares (ca)*. Palmar metacarpal nerves I, II, III, IV, reinforce the Nn. digitales palmares communes at the Articulatio metacarpophalangea. C

ARMGEFLECHT (PLEXUS BRACHIALIS)

RAMUS PALMARIS NERVUS ULNARIS:

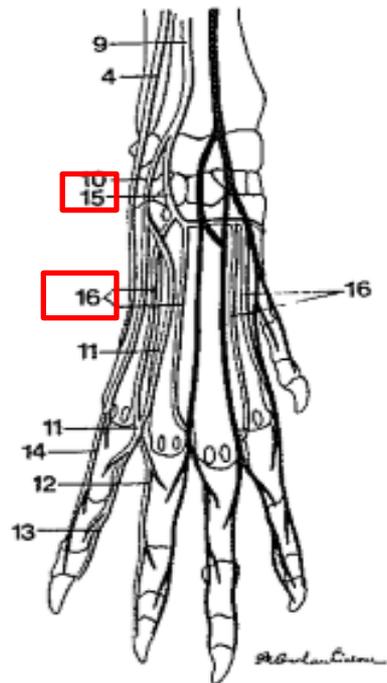
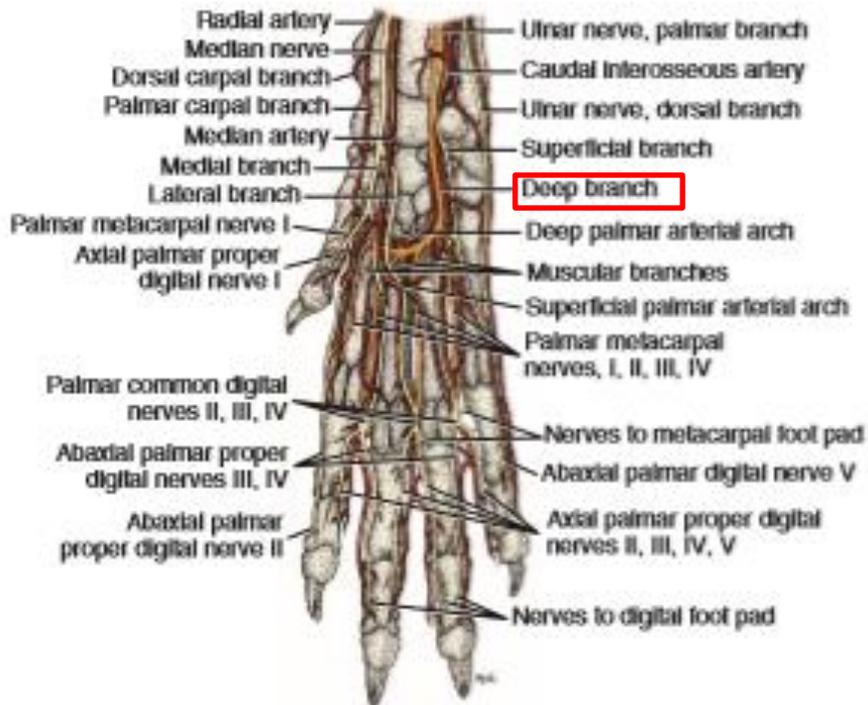
beim Hd.

b. **RAMUS PROFUNDUS** zieht distal vom Karpus medialwärts:

abgibt den:

1. Nn. metacarpei palmares

- Verbindung mit den Nn. digitales palmares comm. I-IV.



C N. ulnaris – left manus, palmar aspect (ca)

- 4 *Ramus dorsalis*. Dorsal branch. A B C, 485 B
- 5 *N. digitalis dorsalis communis IV* (fe). Dorsal common digital nerve IV. B
- 6 *N. digitalis dorsalis proprius IV abaxialis* (fe). Abaxial dorsal proper digital nerve IV, runs on the dorsal aspect of the abaxial side of digit IV. B
- 7 *N. digitalis dorsalis proprius V axialis* (fe). Axial dorsal proper digital nerve V, runs on the dorsal aspect of the axial side of digit V. B
- 8 *N. digitalis dorsalis V abaxialis*. Abaxial dorsal digital nerve V, on the dorsal aspect of abaxial side of digit V. B, 485 B
- 9 *Ramus palmaris*. Palmar branch. A C
- 10 *Ramus superficialis*. Superficial branch. C
- 11 *N. digitalis palmaris communis IV*. Palmar common digital nerve IV, receives N. metacarpeus palmaris IV. C
- 12 *N. digitalis palmaris proprius IV abaxialis*. Abaxial palmar proper digital nerve IV, runs on the palmar aspect of the abaxial side of digit IV. C
- 13 *N. digitalis palmaris proprius V axialis*. Axial palmar proper digital nerve V, runs on the palmar aspect of the axial side of digit V. C
- 14 *N. digitalis palmaris V abaxialis*. Abaxial palmar digital nerve V, runs on the palmar aspect of the abaxial side of digit V. C
- 15 *Ramus profundus*. Deep branch. C
- 16 *Nn. metacarpei palmares* (ca). Palmar metacarpal nerves I, II, III, IV, reinforce the Nn. digitales palmares communes at the Articulation metacarpophalangea. C

ARMGEFLECHT (PLEXUS BRACHIALIS)

RAMUS PALMARIS NERVUS ULNARIS:

beim Pfd.

- zieht oberhalb des Karpalgelens zwischen der Endsehne des M. flexor carpi ulnaris und den oberflächlichen Zehenbeuger nach medial
- vereinigt sich mit dem N. palmaris lat. des N. medianus
- begleitet von der A. metacarpalis palmaris III.
- trennt proximal am Metacarpus als RAMUS PROFUNDUS des R. palmaris n. ulnaris

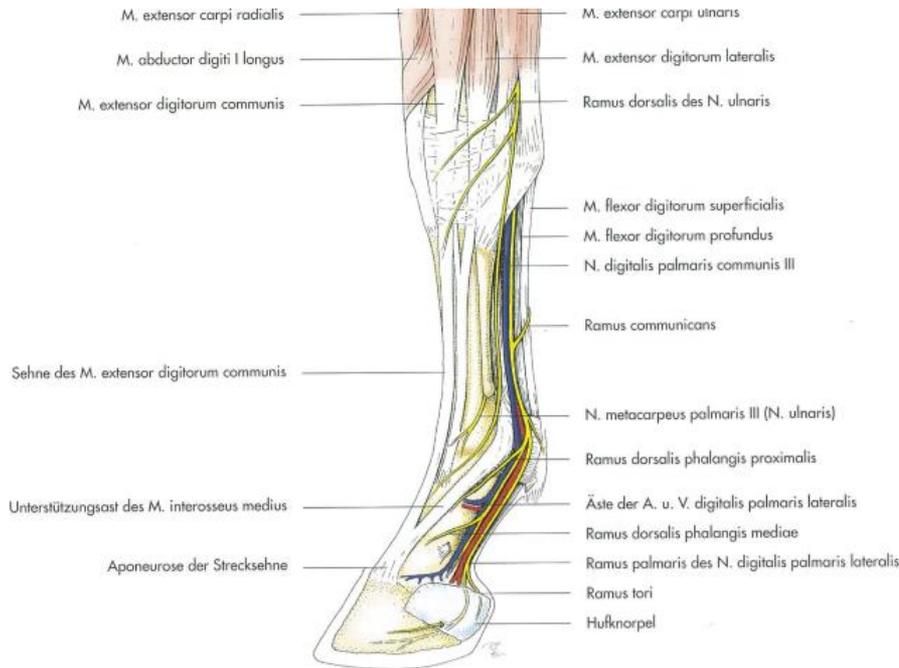


Abb. 14-69. Topographie der Zehe an der linken Vordergliedmaße des Pferdes (Lateralansicht, die Sehne des Sporns ist nicht eingezeichnet).

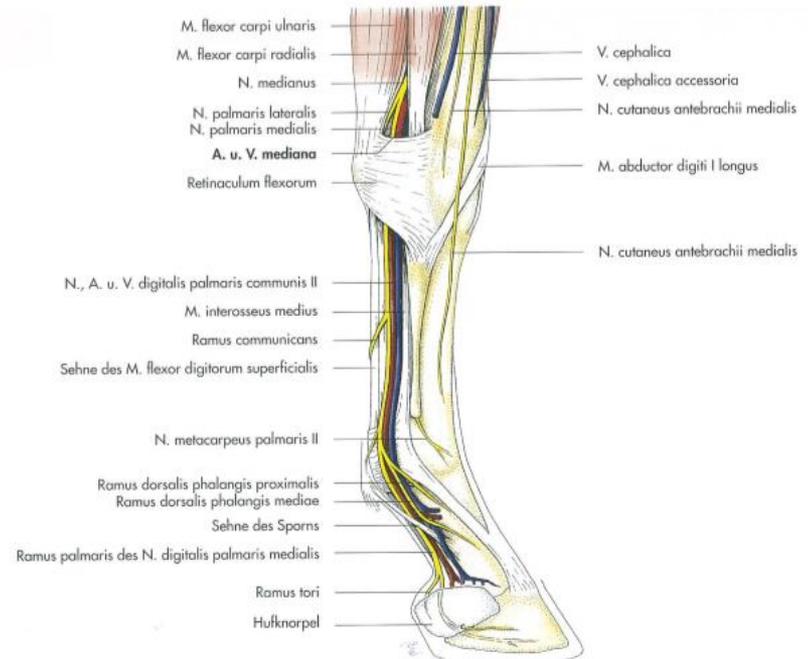


Abb. 14-70. Topographie der Zehen an der linken Vordergliedmaße des Pferdes (Medialansicht).

ARMGEFLECHT (PLEXUS BRACHIALIS)

RAMUS PALMARIS NERVUS ULNARIS:

beim Pfd.

RAMUS PROFUNDUS des R. PALMARIS N. ULNARIS:

- gibt Äste an den:

- **M. interosseus medius**

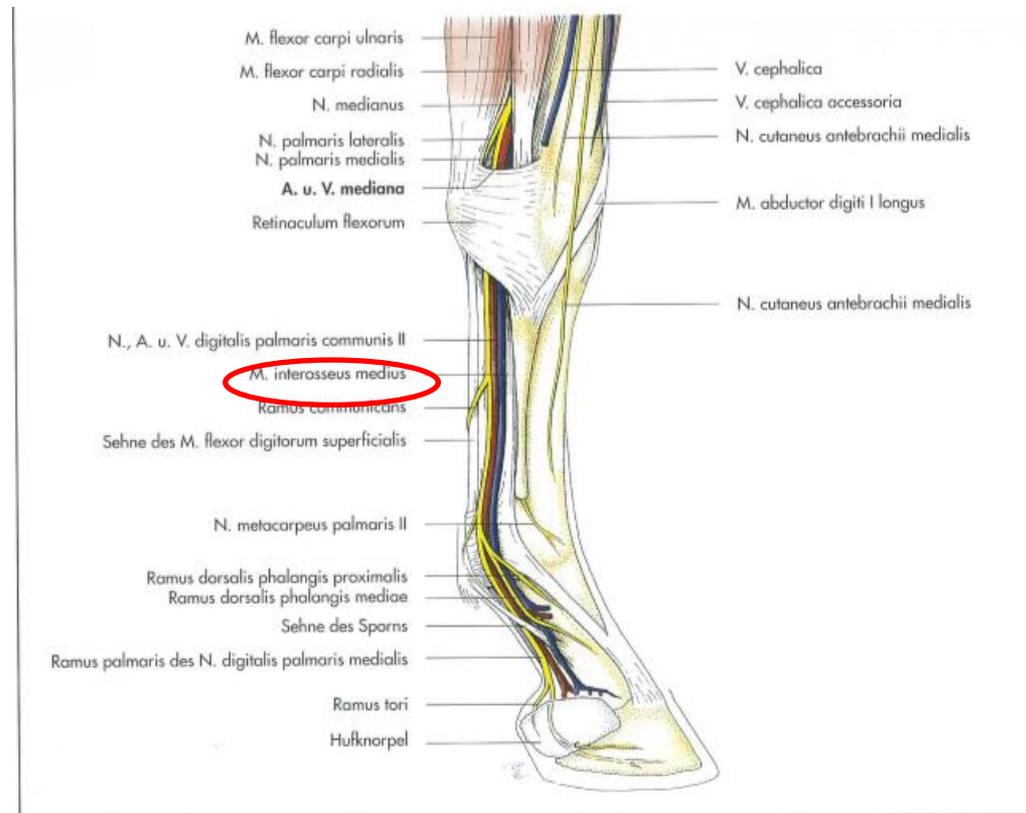


Abb. 14-70. Topographie der Zehen an der linken Vordergliedmaße des Pferdes (Medialansicht).

ARMGEFLECHT (PLEXUS BRACHIALIS)

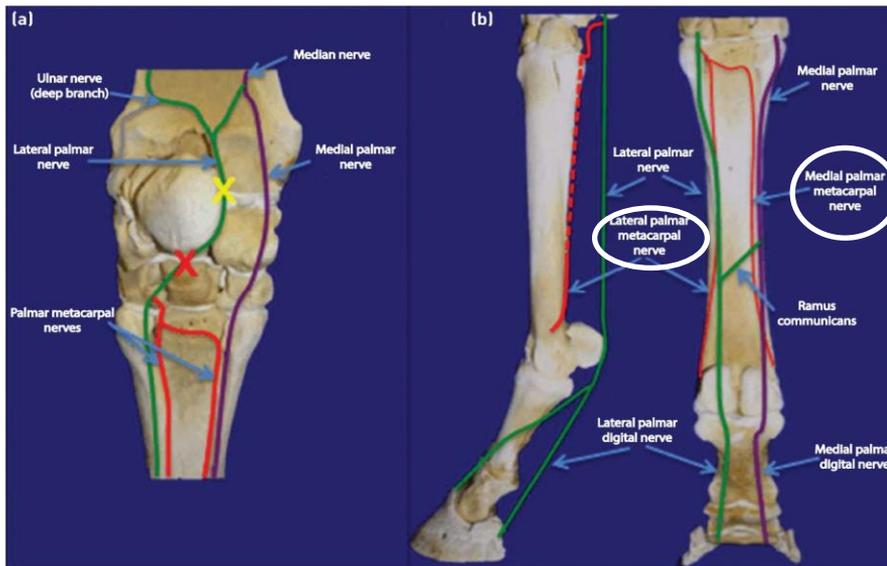
RAMUS PALMARIS NERVUS ULNARIS:

beim Pfd.

RAMUS PROFUNDUS des R. PALMARIS N. ULNARIS:

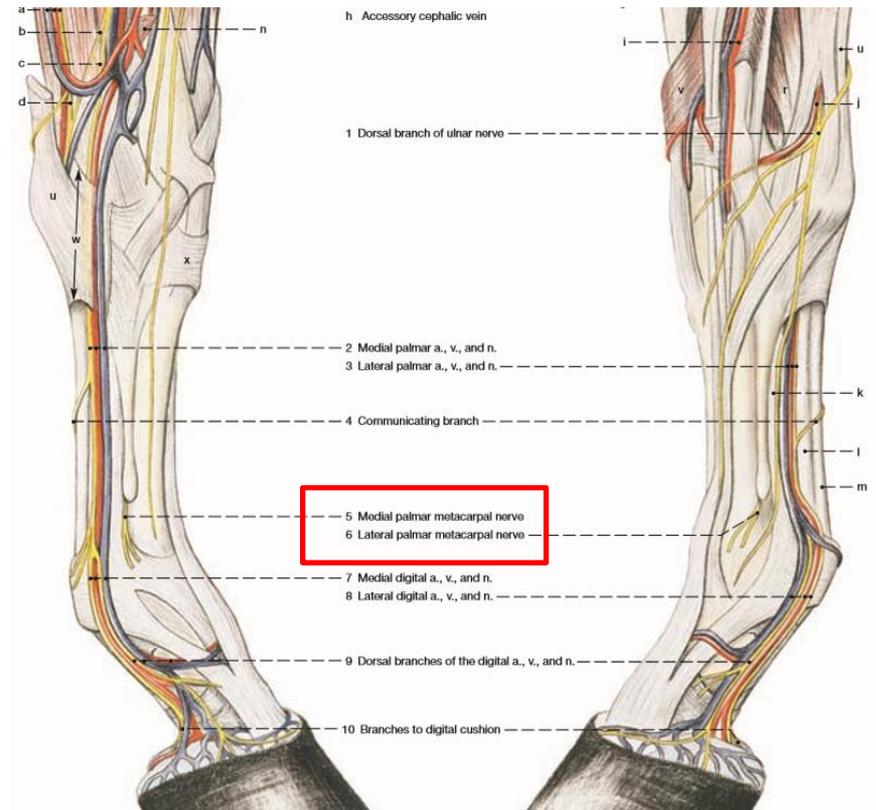
splatet sich in die:

- a) Nn. metacarpei palmares laterales
- b) Nn. metacarpei palmares mediales



<https://inpractice.bmj.com/content/38/2/82>

Thoracic limb anatomy. Neural anatomy of (a) the palmar aspect of the left carpus and (b) the lateral and palmar aspects of the left distal thoracic limb. Yellow cross Medial approach ([Castro and others 2005](#)), red cross Lateral approach ([Wheat and Jones 1981](#))

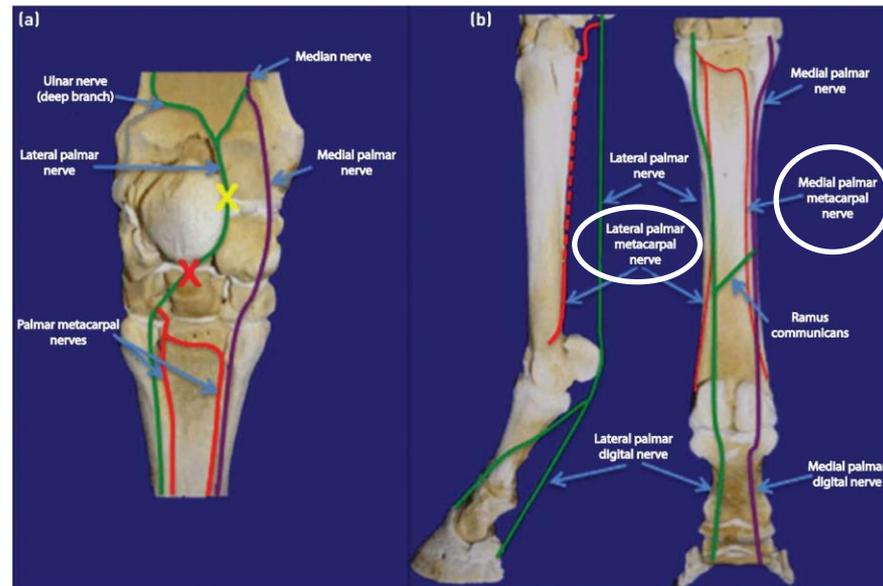


ARMGEFLECHT (PLEXUS BRACHIALIS)

beim Pfd.

RAMUS PROFUNDUS des R. PALMARIS N. ULNARIS:

- a) Nn. metacarpei palmares laterales
- b) Nn. metacarpei palmares mediales
- die beiden tiefen palmaren Metakarpalnerven verlaufen axial von den Griffelbeinen
- treten an die Oberfläche
- anastomisieren mit der Äste der Nn. palmares
- Innervation des Kron – und Hufgelenkes mitbeteiligt sein



<https://inpractice.bmj.com/content/38/2/82>

Thoracic limb anatomy. Neural anatomy of (a) the palmar aspect of the left carpus and (b) the lateral and palmar aspects of the left distal thoracic limb. Yellow cross Medial approach ([Castro and others 2005](#)), red cross Lateral approach ([Wheat and Jones 1981](#))

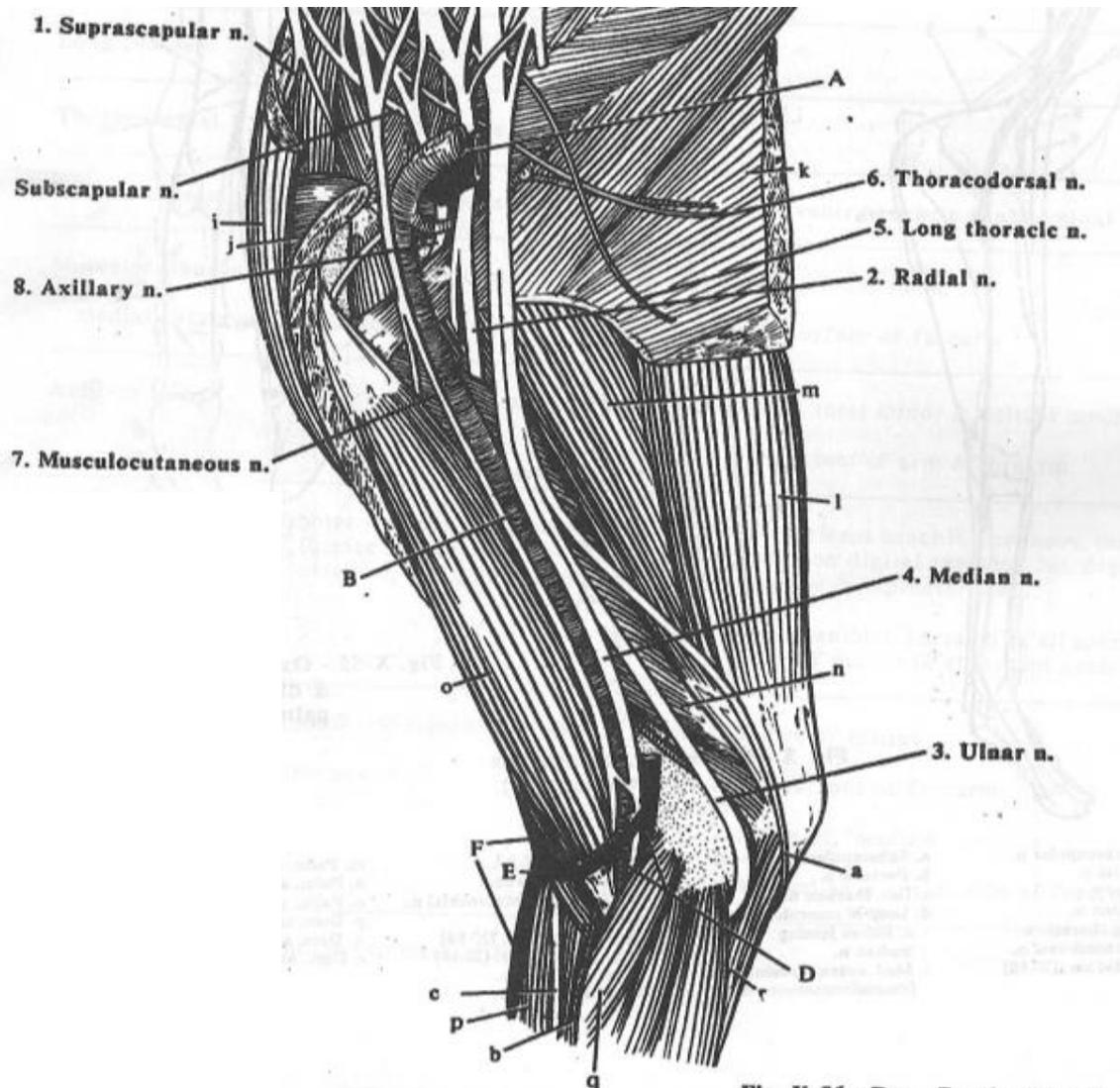


Fig. X-56 - Dog - Rt. shoulder & arm - med. view

- A. Axillary a.& v.
- B. Brachial a.
- C. Subscapular a.
- D. Median a.& v.
- E. Median cubital v.
- F. Cephalic v.
- G. Deep antebrachial a.
- H. Supf. brachial a.

- a. Caud. cutan. antebrachial n. (ulnar z.)
- b. Med. cutan. antebrachial n. (musculocutaneous n.)
- c. Supf. radial n., med. br.
- d. Radial n., deep br. (X-58)
- e. Supf. radial n., lat. br.
- f. Ulnar n., palm. br.
- g. Ulnar n., dors. br.
- h. Supraspinatus m. (X-56)
- i. Brachiocephalicus m.
- j. Supf. pectoral m.
- k. Latissimus dorsi m.
- l. Tensor fasciae antebrachii m.
- m. Triceps brachii m., long head
- n. Triceps brachii m., med. head
- o. Biceps brachii m.
- p. Extensor carpi radialis m.
- q. Pronator teres m.
- r. Supf. digital flexor m. (X-58)
- s. Flexor carpi ulnaris m.
- t. Common digital extensor m.

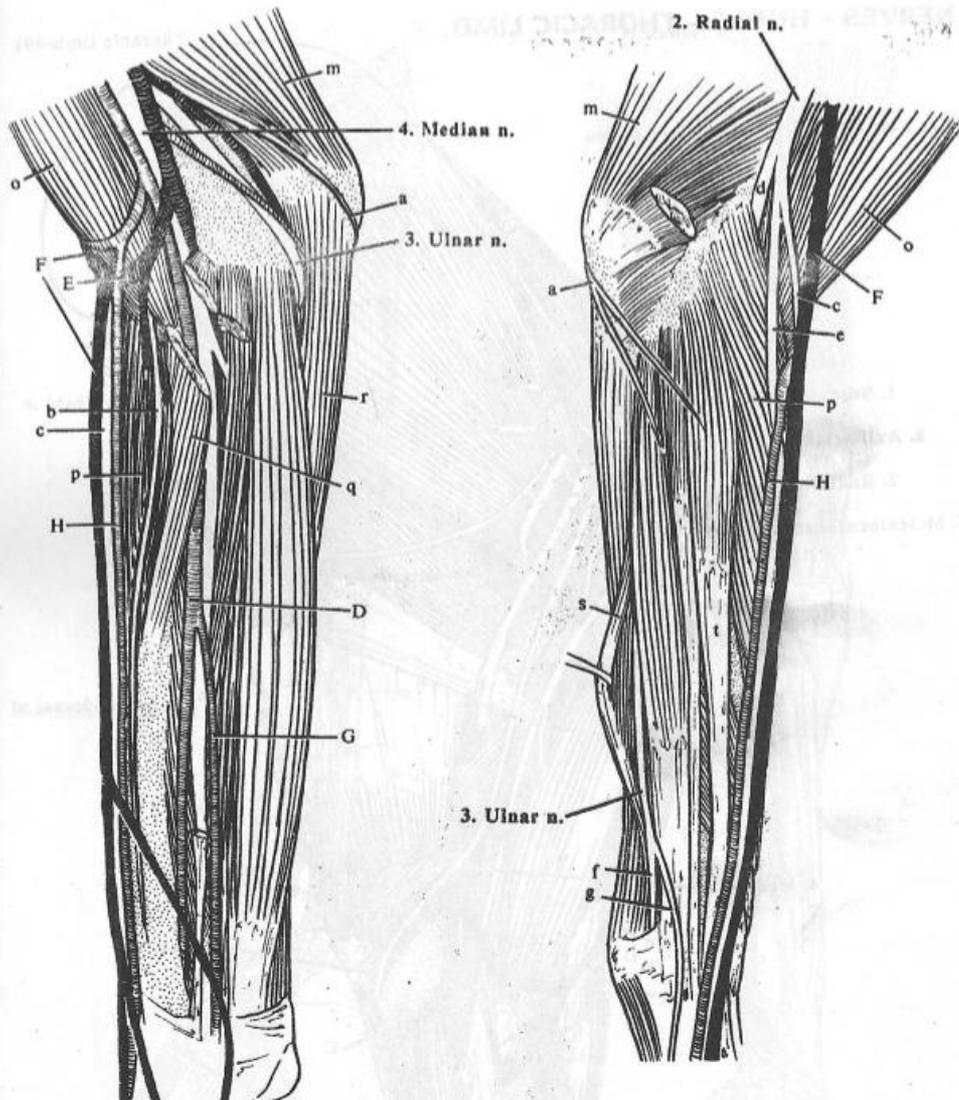


Fig. X-57 - Dog - Rt. forearm
- med. view

Fig. X-58 - Dog - Rt. forearm
- lat. view

- A. Axillary a.& v.
- B. Brachial a.
- C. Subscapular a.
- D. Median a.& v.
- E. Median cubital v.
- F. Cephalic v.
- G. Deep antebrachial a.
- H. Supf. brachial a.

- a. Caud. cutan. antebrachial n.
(ulnar n.)
- b. Med. cutan. antebrachial n.
(musculocutaneous n.)
- c. Supf. radial n., med. br.
- d. Radial n., deep br. (X-58)
- e. Supf. radial n., lat. br.
- f. Ulnar n., palm. br.
- g. Ulnar n., dors. br.
- h. Supraspinatus m. (X-56)
- i. Brachiocephalicus m.
- j. Supf. pectoral m.
- k. Latissimus dorsi m.
- l. Tensor fasciae antebrachii m.
- m. Triceps brachii m., long head
- n. Triceps brachii m., med. head
- o. Biceps brachii m.
- p. Extensor carpi radialis m.
- q. Pronator teres m.
- r. Supf. digital flexor m. (X-58)
- s. Flexor carpi ulnaris m.
- t. Common digital extensor m.

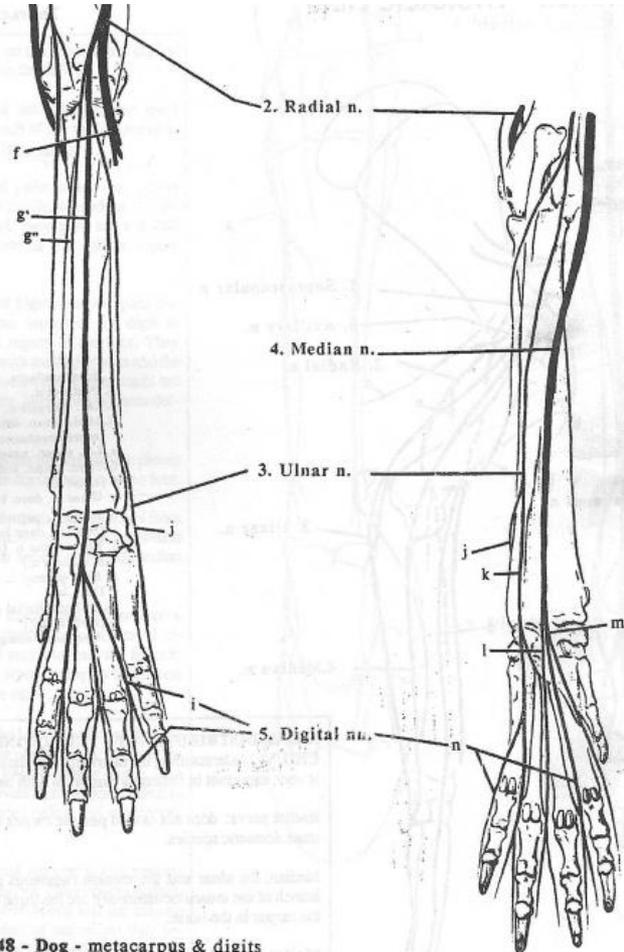
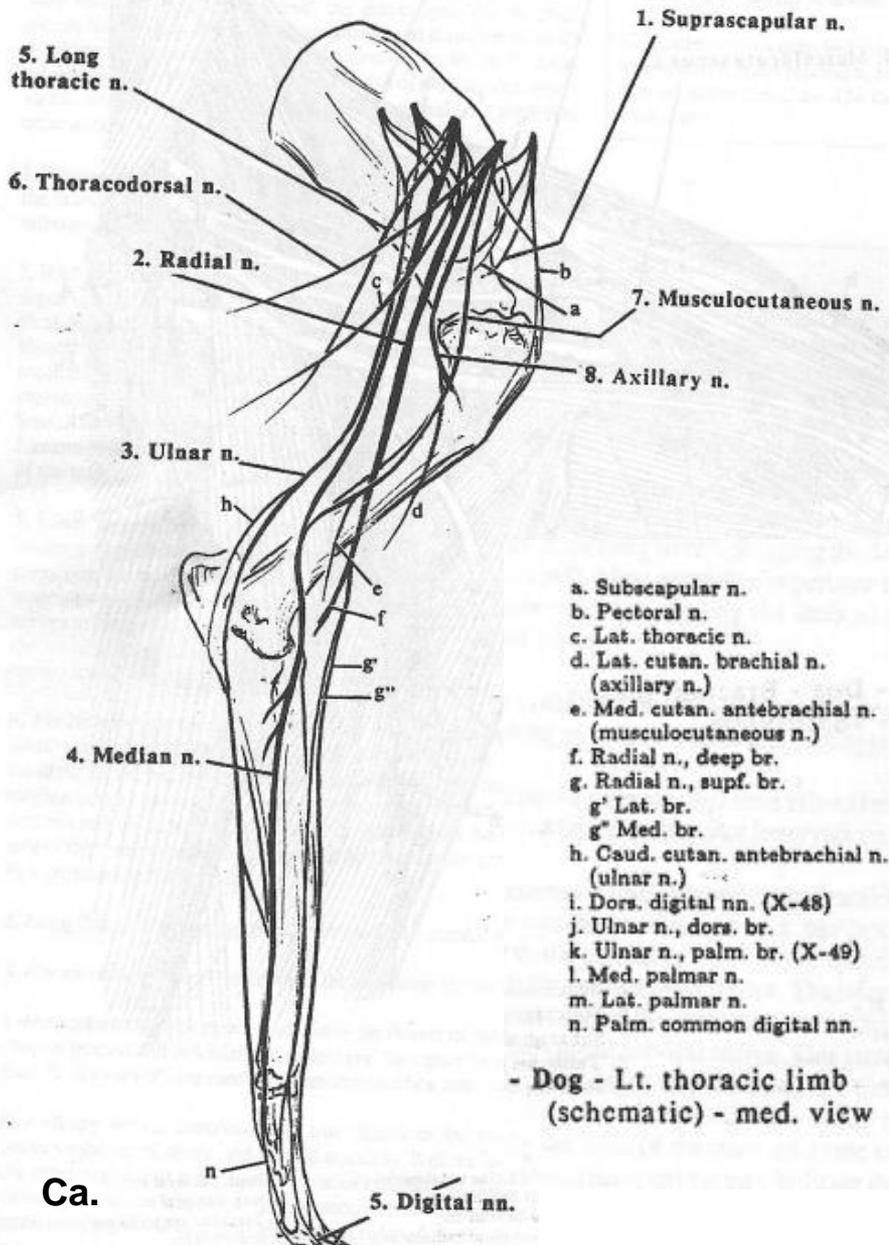
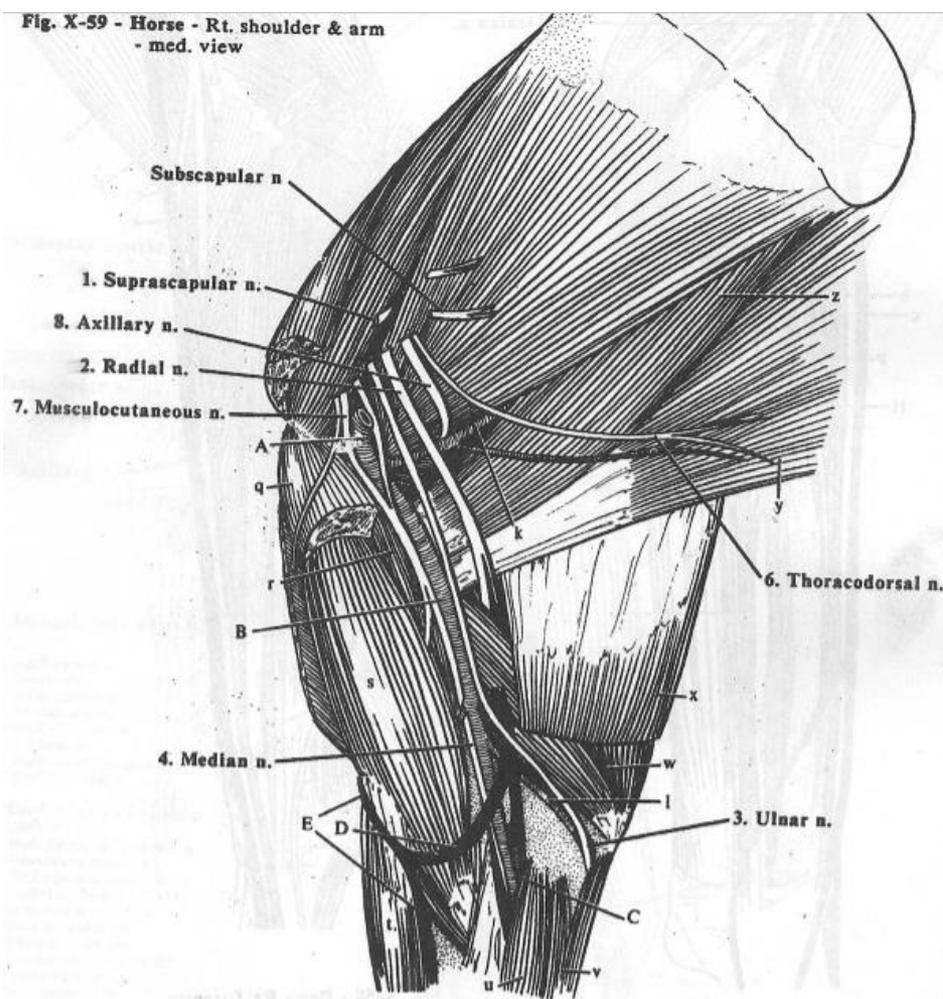


Fig. X-48 - Dog - metacarpus & digits (schematic) - dors. view

Fig. X-49 - Dog - Lt. metacarpus & digits (schematic) - palm. view

**Fig. X-59 - Horse - Rt. shoulder & arm
- med. view**

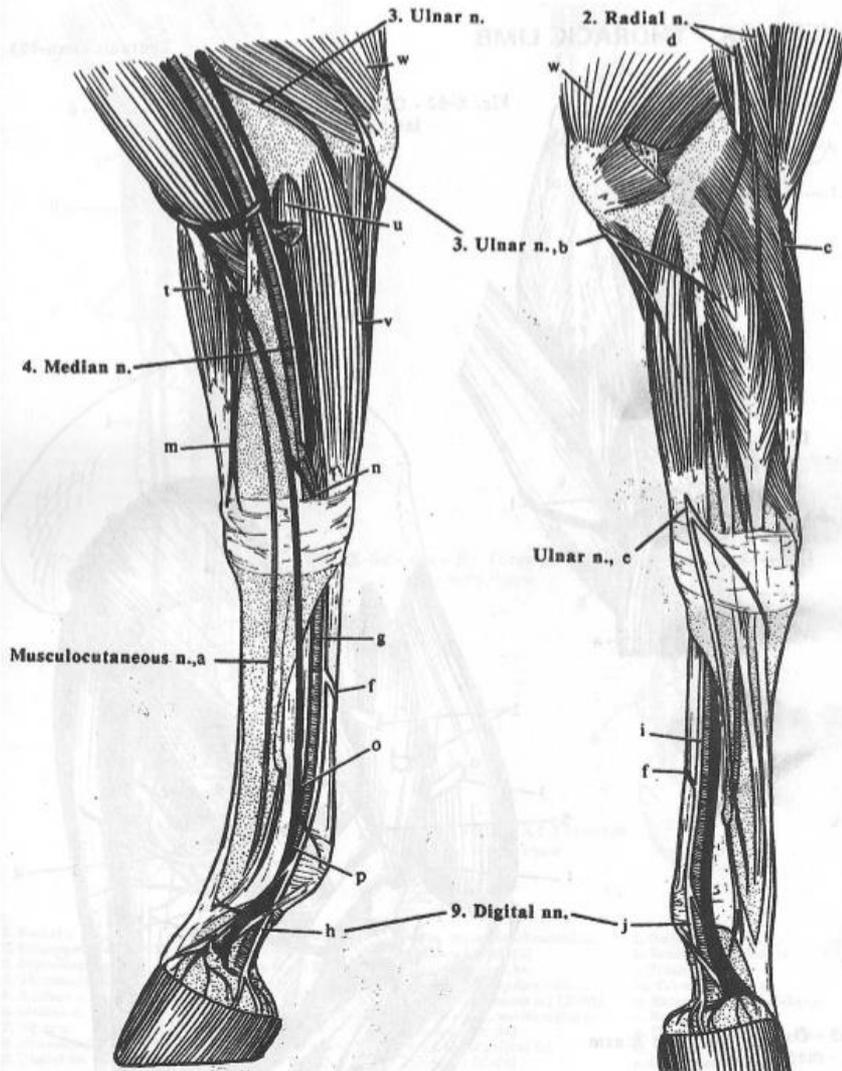


A. Axillary a.
B. Brachial a.
C. Median a. & v.
D. Median cubital v.
E. Cephalic v.
F. Med. a. & v.
G. Digital a. & v.

a. Med. cutan. antebrachial n.
(musculocutaneous n.)
b. Caud. cutan. antebrachial n.
(ulnar n.) (X-60)
c. Lat. cutan. antebrachial n.
(radial n.) (X-61)
d. Radial n., deep br.
e. Ulnar n., dors. br.
f. Communicating br.
g. Med. palmar n. (X-60)

h. Med. palmar digital n.
i. Lat. palmar n. (X-61)
j. Lat. palmar digital n.
k. Subscapular a. (X-59)
l. Collateral ulnar a. & v.
m. Accessory cephalic v. (X-60)
n. Radial a. & v.
o. Med. palmar a. & v.
p. Med. digital a. & v.
q. Deep pectoral m. (X-59)

r. Coracobrachialis m.
s. Biceps brachii m.
t. Extensor carpi radialis m.
u. Flexor carpi radialis m.
v. Flexor carpi ulnaris m.
w. Triceps brachii m.
x. Tensor fasciae antebrachii m.
y. Latissimus dorsi m.
z. Teres major m.



- a. Med. cutan. antebrachial n.
(musculocutaneous n.)
- b. Med. palmar metacarpal n.
(ulnar n., deep br.)
- c. Med. palmar n.
- d. Dors. br.
- e. Med. palmar digital n.
- f. Ulnar n., dors br. (X-67)
- g. Lat. palmar metacarpal n.
(ulnar n., deep br.)
- h. Lat. palmar n.
(median & ulnar nn.)
- i. Lat. palmar digital nn.
- j. Med. palmar v. (X-66)
- k. Suspensory lig.
- l. Med. digital a. & v.
- m. Coronary venous plexus
- n. Lat. digital a. (X-67)

**Fig. X-60 - Horse - Rt. forearm
- med. view**

**Fig. X-61 - Horse - Rt. forearm
- lat. view**

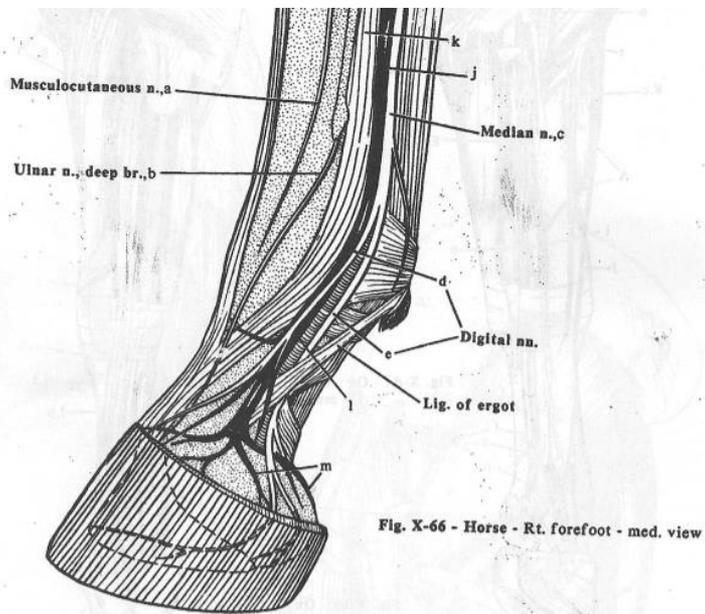
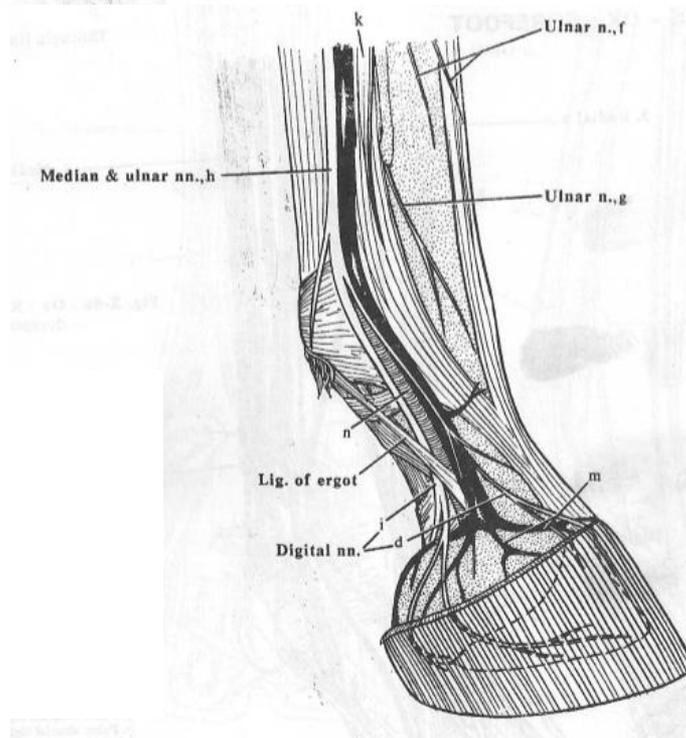


Fig. X-66 - Horse - Rt. forefoot - med. view



- a. Med. cutan. antebrachial n. (musculocutaneous n.)
- b. Med. palmar metacarpal n. (ulnar n., deep br.)
- c. Med. palmar n.
- d. Dors. br.
- e. Med. palmar digital n.
- f. Ulnar n., dors br. (X-67)
- g. Lat. palmar metacarpal n. (ulnar n., deep br.)
- h. Lat. palmar n. (median & ulnar nn.)
- i. Lat. palmar digital nn.
- j. Med. palmar v. (X-66)
- k. Suspensory lig.
- l. Med. digital a. & v.
- m. Coronary venous plexus
- n. Lat. digital a. (X-67)

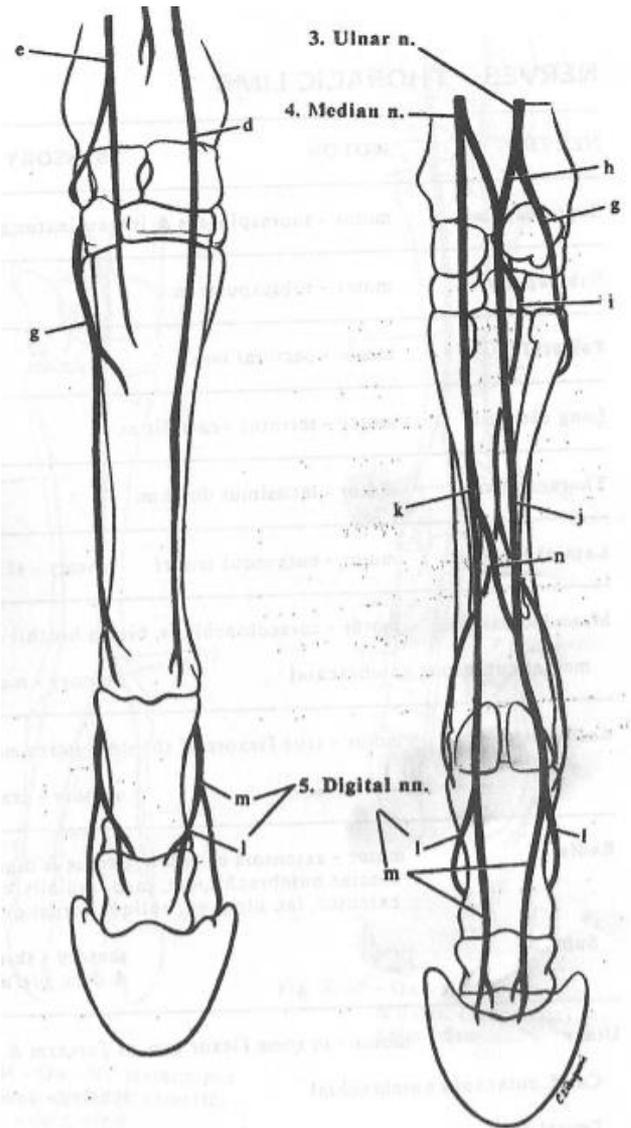
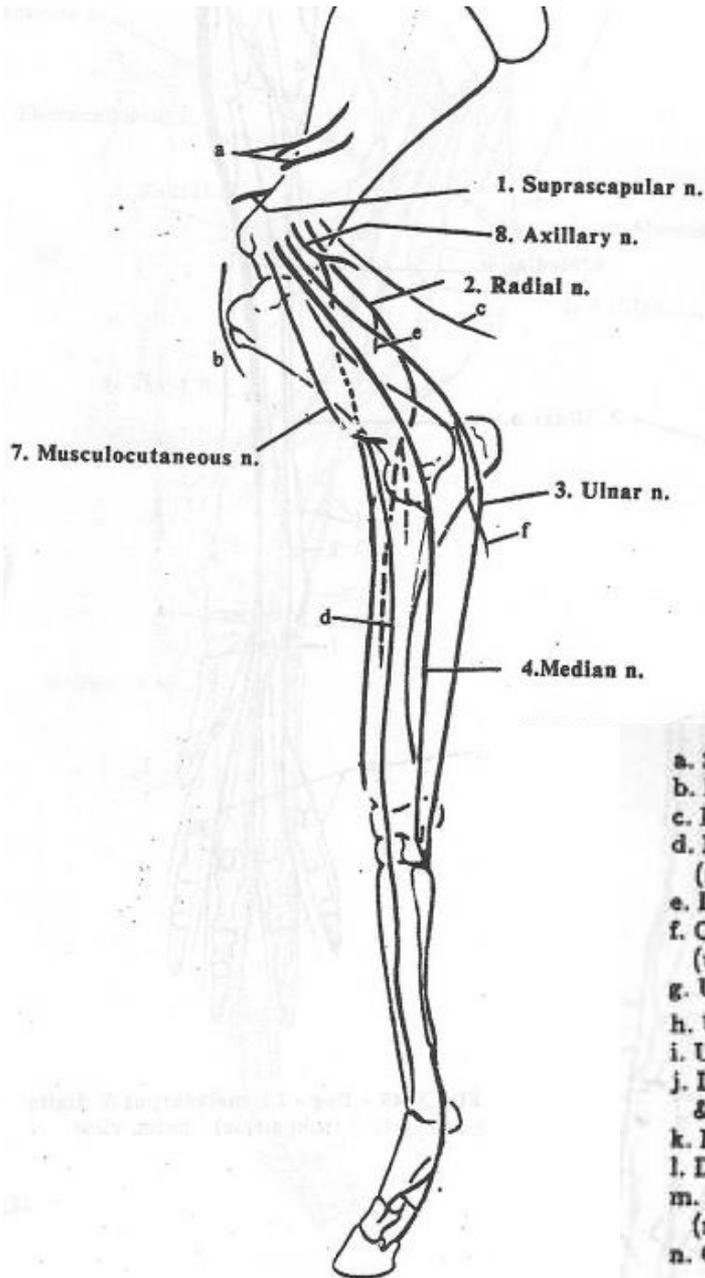


Fig. X-51 - Horse - Rt. metacarpus & digit (schematic) - dors. view

Fig. X-52- Horse - Rt. metacarpus & digit (schematic) - palm. view

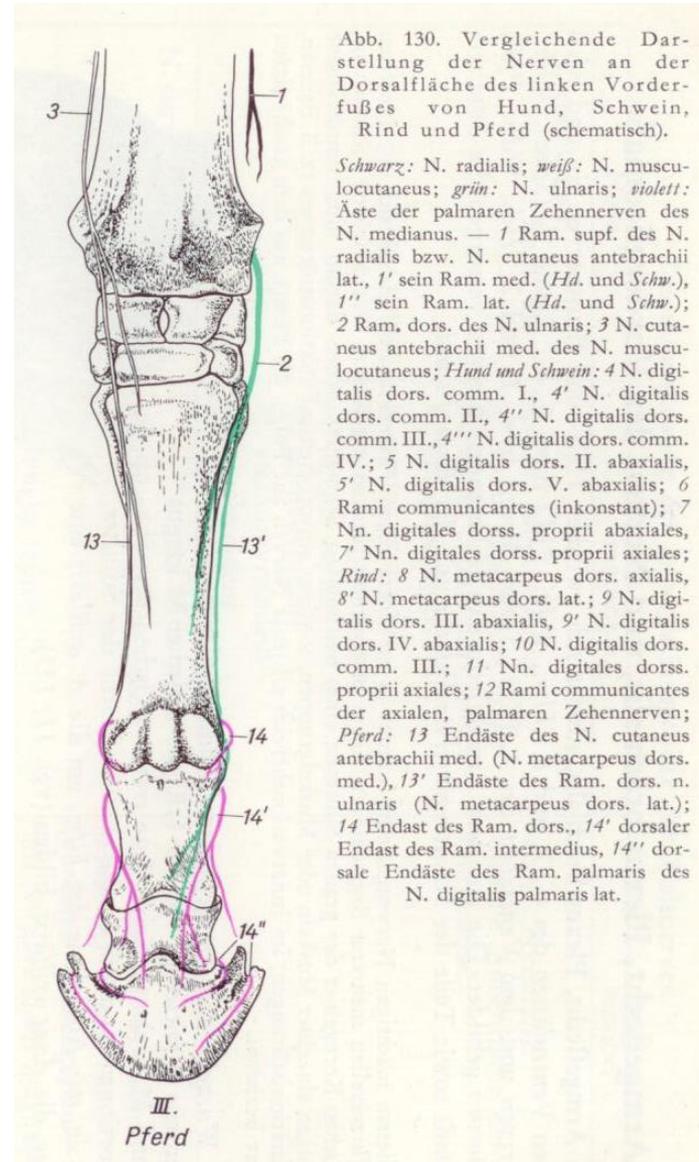
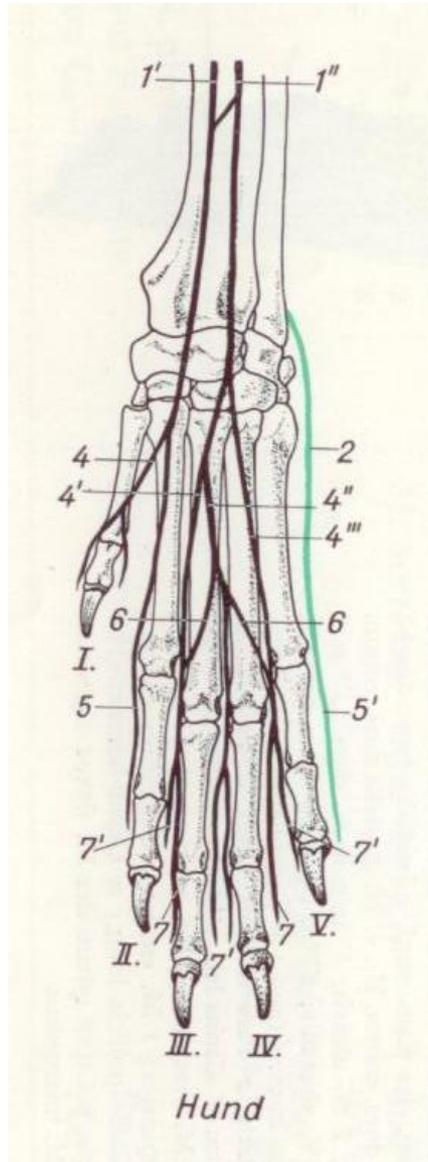


Abb. 130. Vergleichende Darstellung der Nerven an der Dorsalfläche des linken Vorderfußes von Hund, Schwein, Rind und Pferd (schematisch).

Schwarz: N. radialis; weiß: N. musculocutaneus; grün: N. ulnaris; violett: Äste der palmaren Zehennerven des N. medianus. — 1 Ram. supf. des N. radialis bzw. N. cutaneus antebrachii lat., 1' sein Ram. med. (Hd. und Schw.), 1'' sein Ram. lat. (Hd. und Schw.); 2 Ram. dors. des N. ulnaris; 3 N. cutaneus antebrachii med. des N. musculocutaneus; Hund und Schwein: 4 N. digitalis dors. comm. I., 4' N. digitalis dors. comm. II., 4'' N. digitalis dors. comm. III., 4''' N. digitalis dors. comm. IV.; 5 N. digitalis dors. II. abaxialis, 5' N. digitalis dors. V. abaxialis; 6 Rami communicantes (inkonstant); 7 Nn. digitales dors. proprii abaxiales, 7' Nn. digitales dors. proprii axiales; Rind: 8 N. metacarpeus dors. axialis, 8' N. metacarpeus dors. lat.; 9 N. digitalis dors. III. abaxialis, 9' N. digitalis dors. IV. abaxialis; 10 N. digitalis dors. comm. III.; 11 Nn. digitales dors. proprii axiales; 12 Rami communicantes der axialen, palmaren Zehennerven; Pferd: 13 Endäste des N. cutaneus antebrachii med. (N. metacarpeus dors. med.), 13' Endäste des Ram. dors. n. ulnaris (N. metacarpeus dors. lat.); 14 Endast des Ram. dors., 14' dorsaler Endast des Ram. intermedius, 14'' dorsale Endäste des Ram. palmaris des N. digitalis palmaris lat.

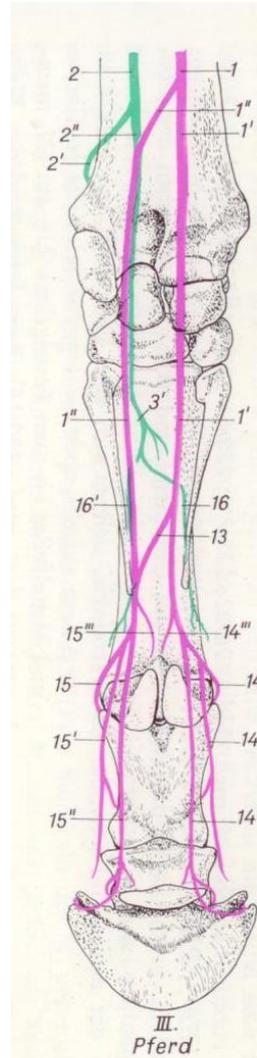
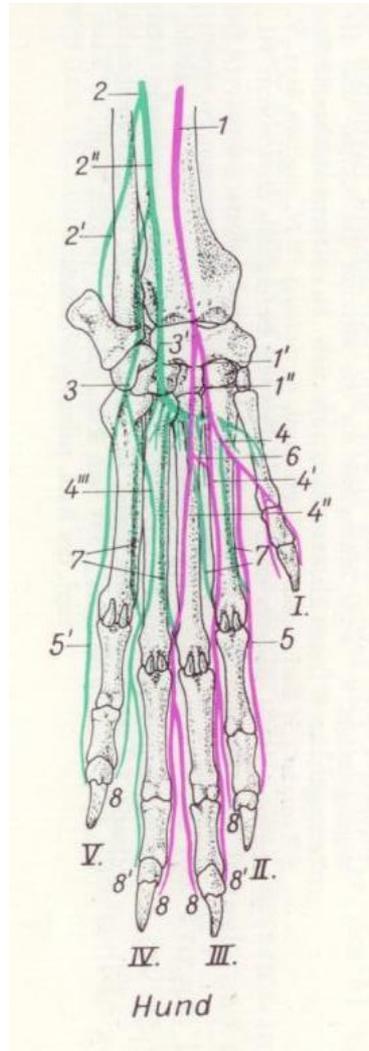


Abb. 131. Vergleichende Darstellung der Nerven an der Palmar- (Volar-)seite des linken Vorderfußes von Hund, Schwein, Rind und Pferd (schematisch).

Grün: N. ulnaris; violett: N. medianus; 1 N. medianus, 1' sein Ram. med. (beim *Rd.* und *Pfd.* N. palmaris med.), 1'' sein Ram. lat. (beim *Rd.* und *Pfd.* N. palmaris lat.), 1''' Ram. communicans zum Ram. supf. des Ram. palmaris n. ulnaris (*Schw.*); 2 N. ulnaris, 2' sein Ram. dors., 2'' sein Ram. palmaris; 3 Ram. supf. des Ram. palmaris n. ulnaris, 3' Ram. prof. des Ram. palmaris n. ulnaris; *Hund* und *Schwein*: 4 N. digitalis palmaris comm. I., 4' N. digitalis palmaris comm. II., 4'' N. digitalis palmaris comm. III., 4''' N. digitalis palmaris comm. IV.; 5 N. digitalis palmaris II. abaxialis, 5' N. digitalis palmaris V. abaxialis; 6 Ram. communicans (inkonstant); 7 Nn. metacarpi palmares; 8 Nn. digitales palmares proprii axiales, 8' Nn. digitales palmares proprii abaxiales; *Rind*: 9 N. digitalis palmaris III. abaxialis, 9' Zweig für mediale Afterklaue, 9'' N. digitalis palmaris III. axialis; 10 N. digitalis palmaris IV. abaxialis, 10' Zweig für laterale Afterklaue, 10'' N. digitalis palmaris IV. axialis; 11 N. digitalis palmaris communis III.; 12 Nn. digitales palmares proprii axiales; *Pferd*: 13 Ram. communicans; 14 Ram. dors., 14' Ram. intermedius, 14'' Ram. palmaris, 14''' Ram. caud. (Spornast) des N. digitalis palmaris med.; 15 Ram. dors., 15' Ram. intermedius, 15'' Ram. palmaris, 15''' Ram. caud. des N. digitalis palmaris lat.; 16 N. metacarpeus palmaris med., 16' N. metacarpeus palmaris lat.

Nerven der Vordergliedmaße

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