

Foot and Ankle Medicine and Surgery

FOURTH EDITION

Leon Watkins

Watkins' Manual of Foot and Ankle Medicine and Surgery

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 $Dedicated\ to\ my\ wife\ Maria$

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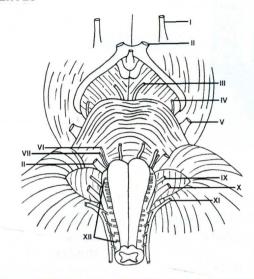


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CRANIAL NERVES



Nerve	Name*	Function	Туре
I	Olfactory	Smell	Sensory
П	Optic	Vision	Sensory
Ш	Oculomotor	Eye muscles, accommodation	Motor
IV	Trochlear	One eye muscle	Motor
V	Trigeminal	Sensation to face/oral, muscles of mastication	Both
VI	Abducens	One eye muscle	Motor
VII	Facial	Taste, muscles of facial expression, secretions of lacrimal, mucosal, and some saliva glands	Both
VIII	Vestibulocochlear (or Auditory)	Hearing, sense of equilibrium	Sensory
IX	Glossopharyngeal	Sensation from pharynx, taste, one pharyngeal muscle, secretion of one saliva gland	Both
X	Vagus Sensation from pharynx and larynx, taste, muscles of palate, pharynx, larynx, and one tongue muscle, parasympathetic to thorax and upper abdomen		Both
XI	Accessory	Two neck muscles	Motor
XII	Hypoglossal	Tongue muscles	Motor

 $[^]a$ Mnemonic for names of cranial nerves: On Old Olympus Towering Top A Fin And German Viewed A Hop.

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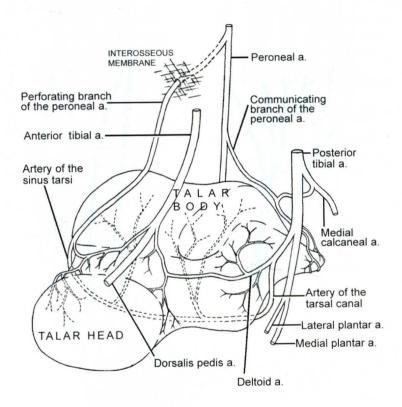
BLOOD SUPPLY TO THE TALUS

Posterior tubercle: The medial calcaneal artery anastomoses with a branch from the peroneal artery to supply this area.

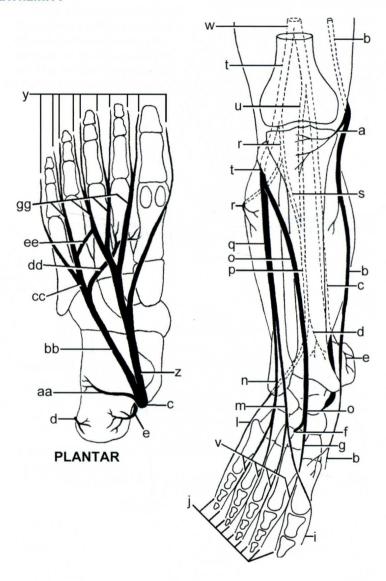
Body: Supplied by the artery of the sinus tarsi and the artery of the tarsal canal; both anastomose

with each other as well as with the deltoid branches

Head/neck: Supplied by direct branches off the dorsalis pedis artery or anterior tibial artery and the anastomoses that the dorsalis pedis makes with the deltoid branches and the artery of the sinus tarsi



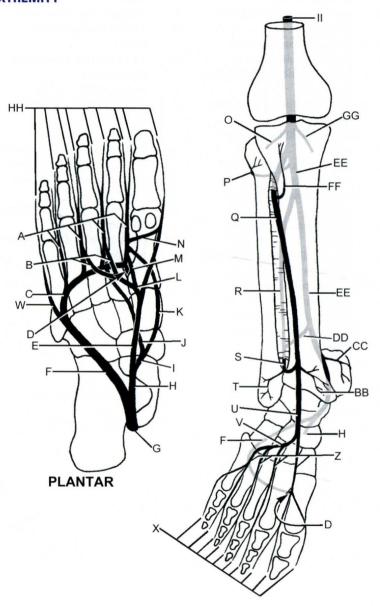
NERVES TO THE LOWER EXTREMITY



- a. Infrapatellar branch of the saphenous nerve
- b. Saphenous nerve (L3, L4)
- c. Tibial nerve
- d. Lateral calcaneal nerve
- e. Medial calcaneal nerve
- f. Lateral branch of deep peroneal nerve
- g. Medial branch of deep peroneal nerve
- 1st dorsal digital proper nerve
- j. 2nd to 10th dorsal digital proper nerve
- l. Lateral dorsal cutaneous nerve
- m. Medial dorsal cutaneous nerve
- Intermediate dorsal cutaneous nerve
- o. Deep peroneal nerve
- p. Sural nerve
- q. Superficial peroneal nerve
- r. Lateral sural cutaneous nerve

- s. Peroneal communicating branch
- t. Common peroneal nerve
- u. Medial sural cutaneous nerve
- v. 1st to 4th common dorsal digital nerve
- w. Sciatic nerve (L4-S3)
- y. 1st to 10th proper plantar digital nerve
- z. Medial plantar nerve
- aa. Infracalcaneal nerve (nerve to the abductor digiti minimi), a.k.a. Baxter's nerve
- bb. Lateral plantar nerve
- cc. Superficial branch of lateral plantar nerve
- dd. Deep branch of lateral plantar nerve
- ee. Communicating branch
- gg. 1st to 4th common plantar digital nerve

BLOOD SUPPLY TO THE LOWER EXTREMITY



Arteries of The Lower Extremity

- A. 1st to 4th plantar metatarsal arteries
- B. 2nd and 3rd common superficial plantar digital arteries
- C. Medial or deep branch of the lateral plantar artery (deep plantar arch)
- D. Deep plantar artery
- E. Superficial branch of medial plantar artery
- F. Lateral plantar artery
- G. Posterior tibial artery
- H. Medial plantar artery
- I. Deep branch of the medial plantar arteryJ. Lateral branch of the deep
- J. Lateral branch of the deep branch of the medial plantar artery
- Medial branch of the deep branch of the medial plantar artery
- L. Lateral branch of the superficial branch of the medial plantar artery
- M. 1st common superficial plantar digital artery
- N. Digital branch of the 1st plantar metatarsal artery

- O. Lateral sural artery (an end artery)
- P. Circumflex fibular artery
- Q. Anterior tibial artery
- R. Peroneal artery
- S. Perforating branch of peroneal artery
- T. Anterior lateral malleolar artery
- U. Dorsalis pedis artery
- V. Arcuate artery
- W. Superficial branch of the lateral plantar artery
- X. 1st to 10th dorsal digital proper arteries
- Z. 1st to 4th dorsal metatarsal arteries
- BB. Anterior medial malleolar artery
- CC. Medial calcaneal artery
- DD. Communicating branch of the peroneal artery
- EE. Posterior tibial artery
- FF. Anterior tibial recurrent artery
- GG. Medial sural artery (an end artery)
- HH. 1st to 4th plantar digital proper artery
- II. Femoral artery

ANKLE LIGAMENTS

8

DELTOID LIGAMENT

