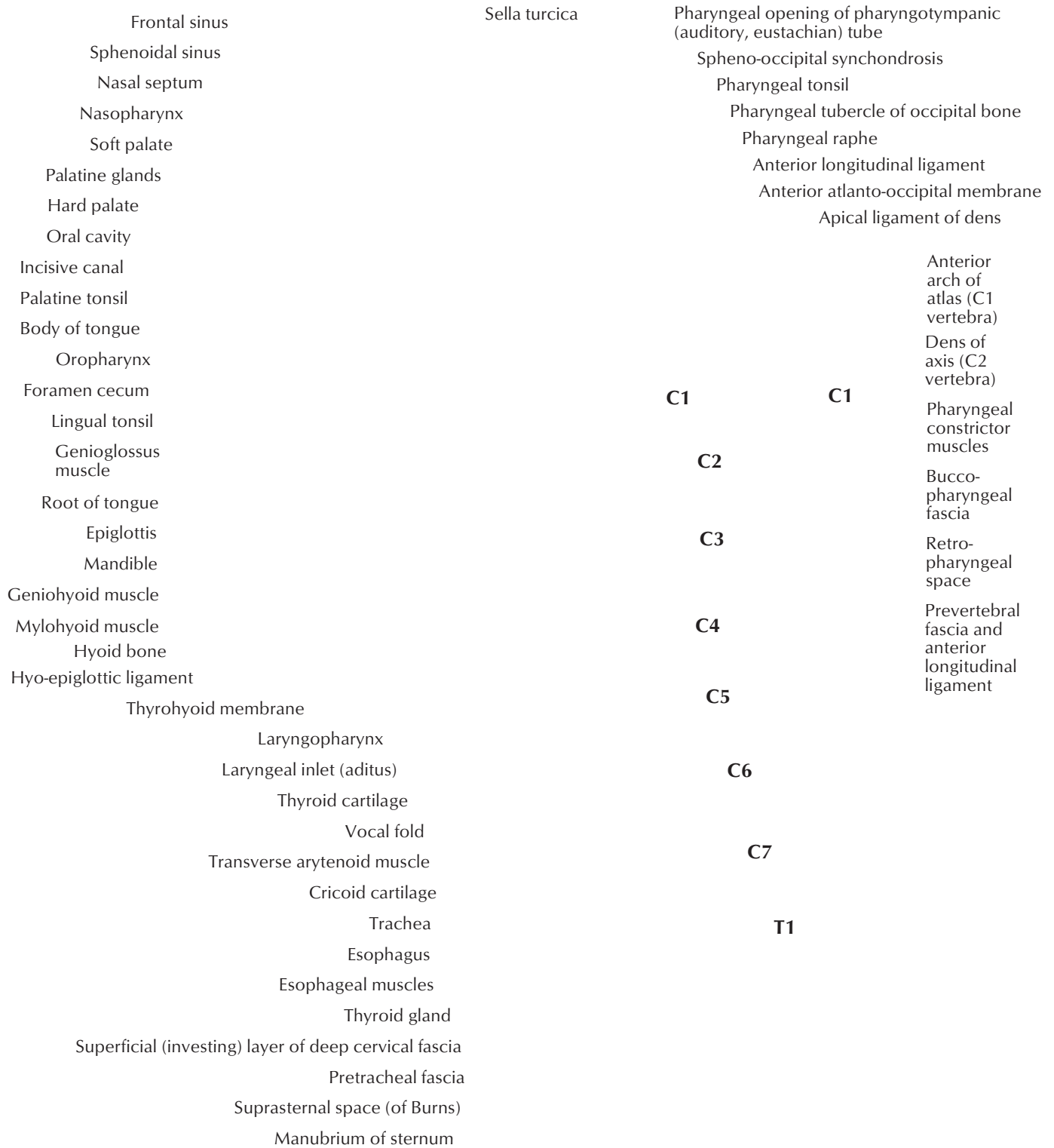


# Tongue and Salivary Glands: Sections

<b>Horizontal section below lingula of mandible (superior view) demonstrating bed of parotid gland</b>	Orbicularis oris muscle	
	Buccinator muscle	
	Buccopharyngeal fascia	
	Facial artery and vein	
	Pterygomandibular raphe	
	Lingual nerve and superior pharyngeal constrictor muscle	
	Masseter muscle	
	Palatoglossus muscle in palatoglossal arch	
	Palatine tonsil	
	Palatopharyngeus muscle in palatopharyngeal arch	
	Ramus of mandible	
	Inferior alveolar artery, vein, and nerve to mylohyoid	
	Medial pterygoid muscle	
	Styloglossus muscle	
	Facial nerve (VII)	
	Retromandibular vein	
	External carotid artery	
	Parotid gland	
	Stylopharyngeus muscle	
	Stylohyoid muscle	
Sternocleidomastoid muscle	Axis (C2)	
Digastric muscle (posterior belly)		
Internal jugular vein, internal carotid artery, and nerves IX, X, and XII in carotid sheath	Longus capitis muscle Prevertebral fascia	
Superior cervical sympathetic ganglion	Buccopharyngeal fascia and retropharyngeal space	
	Superior longitudinal muscle Vertical and transverse muscles of tongue Inferior longitudinal muscle Styloglossus muscle Buccinator muscle Muscles of facial expression Hyoglossus muscle Genioglossus muscle Sublingual salivary gland Submandibular duct Mandibular canal, inferior alveolar artery, vein, and nerve Lingual nerve Nerve to mylohyoid Vena comitans of hypoglossal nerve (to lingual vein) Lingual artery Facial artery Hypoglossal nerve (XII) Submandibular salivary gland Submandibular lymph node Mylohyoid muscle Facial vein Intermediate digastric tendon Hyoid bone	
	<b>Coronal section posterior to 1st molar tooth (anterior view) demonstrating beds of sublingual and submandibular glands</b>	

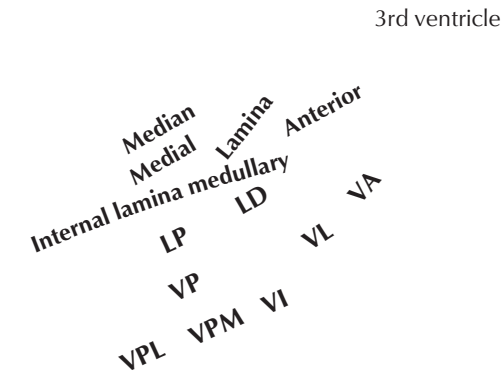
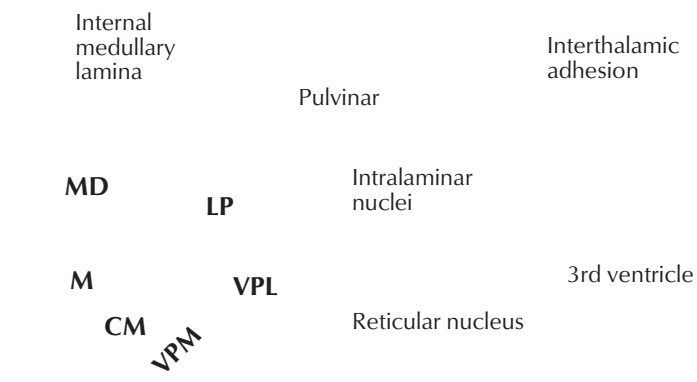
# Pharynx: Median Section



# Thalamus

Interventricular foramen (of Monro)  
 Tela choroidea (*cut edge*)  
 of 3rd ventricle  
 3rd ventricle  
 Choroid plexus  
 Superior thalamostriate vein  
 Pes hippocampi  
 Temporal (inferior) horn  
 of lateral ventricle  
 Internal cerebral vein  
 Dentate gyrus  
 Collateral eminence  
 Hippocampus  
 Fimbria of hippocampus  
 Posterior commissure  
 Habenular commissure  
 Pineal body  
 Collateral trigone  
 Calcar avis  
 Occipital (posterior) horn  
 of lateral ventricle  
 Calcarine sulcus

Corpus callosum (*cut*)  
 Head of caudate nucleus  
 Septum pellucidum  
 Columns of fornix  
 Anterior tubercle  
 Stria terminalis  
 Interthalamic adhesion  
 Lamina affixa  
 Stria medullaris  
 Habenular trigone  
 Pulvinar (*retracted*)  
 Lateral geniculate body  
 Medial geniculate body  
 Brachium of superior colliculus  
 Brachium of inferior colliculus  
 Superior colliculus  
 Inferior colliculus  
 Cerebellum



### Thalamic nuclei

- CM** Centromedian
- LD** Lateral dorsal
- LP** Lateral posterior
- M** Medial
- MD** Medial dorsal
- VA** Ventral anterior
- VI** Ventral intermedial
- VL** Ventral lateral
- VP** Ventral posterior
- VPL** Ventral posterolateral
- VPM** Ventral posteromedial

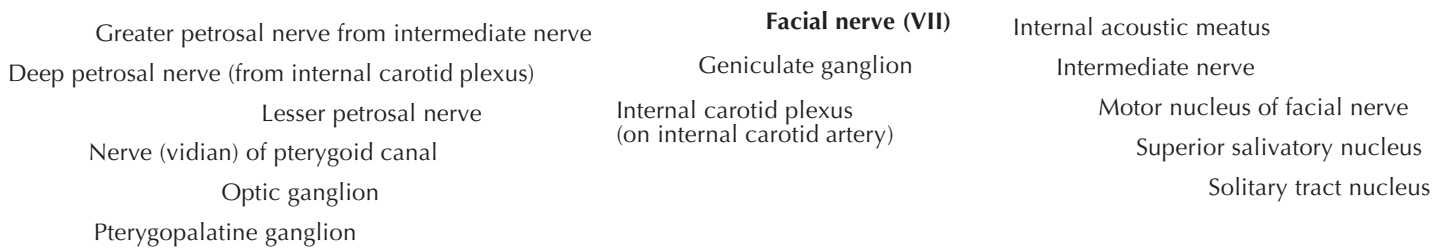
**Schematic section through thalamus**  
 (at level of broken line shown in figure at right)

**Schematic representation of thalamus**  
 (external medullary lamina and reticular nuclei removed)

- Lateral nuclei**
- Medial nuclei**
- Anterior nuclei**

# Facial Nerve (VII): Schema

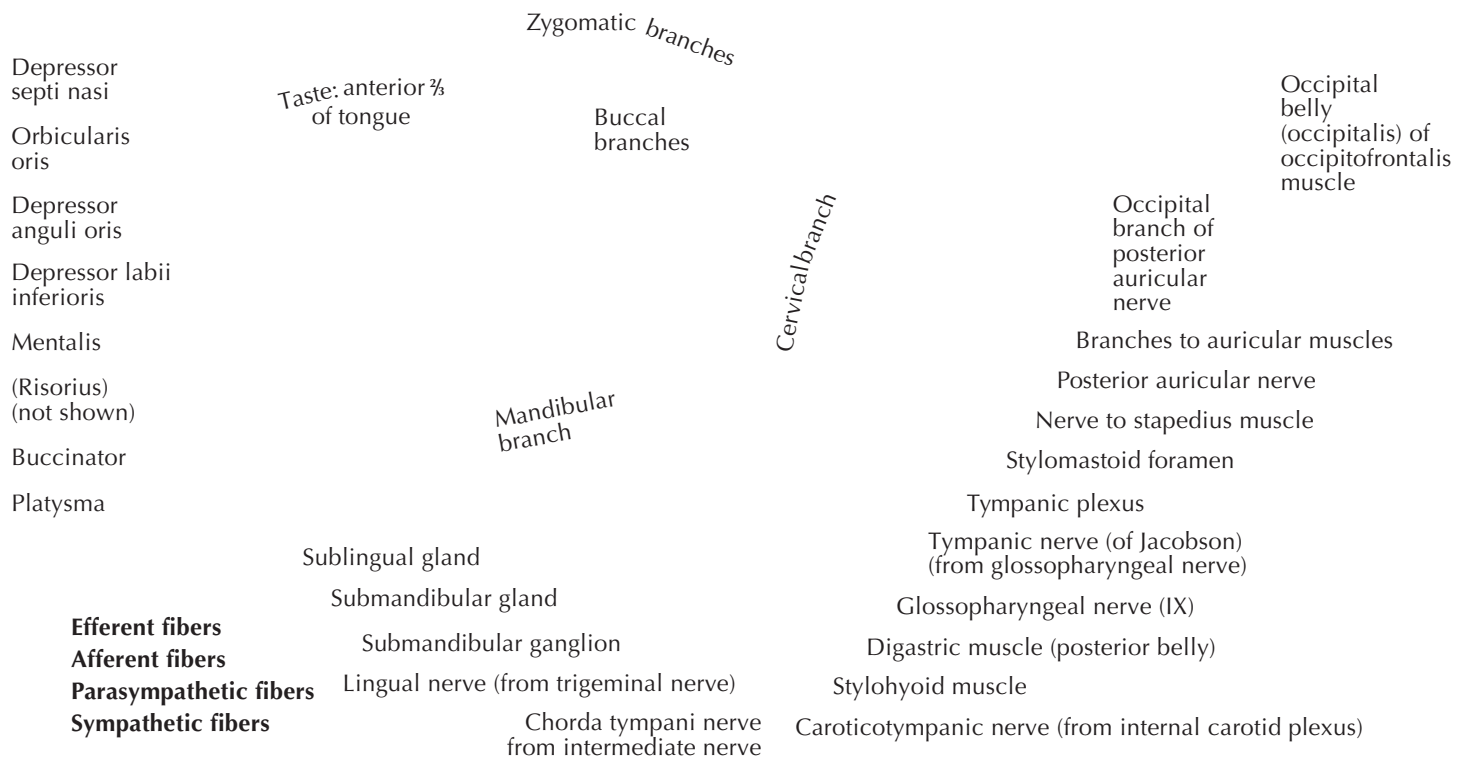
## Plate 24



### Facial muscles

- Frontal belly (frontalis) of occipitofrontalis
- Orbicularis oculi
- Corrugator supercilii
- Zygomaticus major
- Zygomaticus minor
- Procerus
- Levator labii superioris
- Levator labii superioris alaeque nasi
- Levator anguli oris
- Nasalis

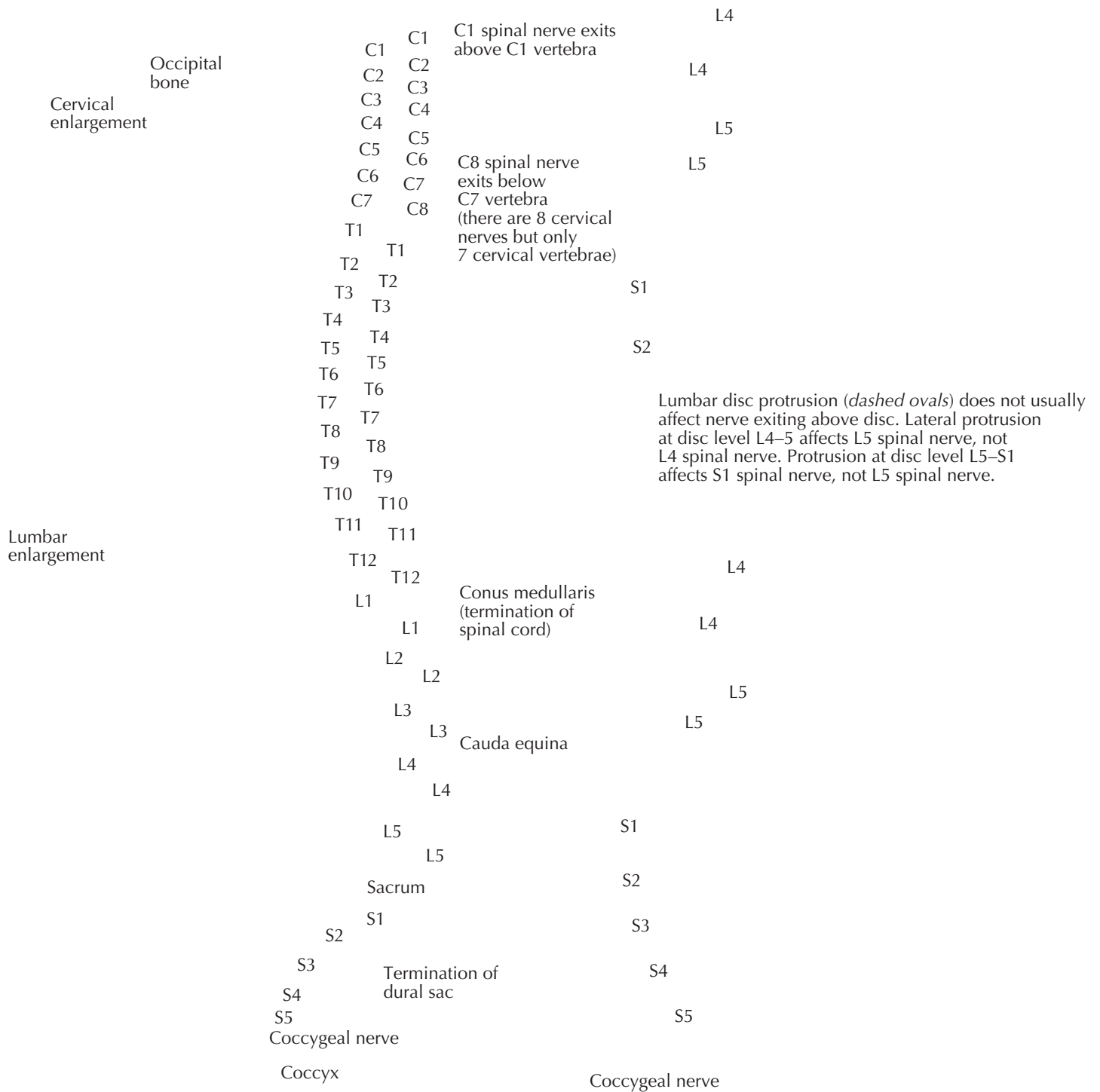
Temporal branches



## Vagus Nerve (X): Schema

<p>Glossopharyngeal nerve (IX)</p> <p>    Meningeal branch of vagus nerve</p> <p>    Auricular branch of vagus nerve</p> <p>Pharyngotympanic (auditory, eustachian) tube</p> <p>    Levator veli palatini muscle</p> <p>Salpingopharyngeus muscle</p> <p>Palatoglossus muscle</p> <p>    Palatopharyngeus muscle</p> <p>Superior pharyngeal constrictor muscle</p> <p>    Stylopharyngeus muscle</p> <p>Middle pharyngeal constrictor muscle</p> <p>Inferior pharyngeal constrictor muscle</p> <p>    Cricothyroid muscle</p> <p>        Trachea</p> <p>        Esophagus</p> <p>    Right subclavian artery</p> <p>    Right recurrent laryngeal nerve</p> <p>        Heart</p> <p>Hepatic branch of anterior vagal trunk (in lesser omentum)</p> <p>Celiac branches from anterior and posterior vagal trunks to celiac plexus</p> <p>Celiac and superior mesenteric ganglia and celiac plexus</p> <p>    Hepatic plexus</p> <p>    Gallbladder and bile ducts</p> <p>        Liver</p> <p>    Pyloric branch from hepatic plexus</p> <p>        Pancreas</p> <p>        Duodenum</p> <p>    Ascending colon</p> <p>        Cecum</p> <p>        Appendix</p>	<p>Dorsal nucleus of vagus nerve (parasympathetic and visceral afferent)</p> <p>Solitary tract nucleus (visceral afferents including taste)</p> <p>Spinal tract and spinal nucleus of trigeminal nerve (somatic afferent)</p> <p>Nucleus ambiguus (motor to pharyngeal and laryngeal muscles)</p> <p>Cranial root</p> <p><b>Vagus nerve (X)</b></p> <p>Jugular foramen</p> <p>Superior ganglion of vagus nerve</p> <p>Inferior ganglion of vagus nerve</p> <p>Pharyngeal branch of vagus nerve (motor to muscles of palate and pharynx; sensory to lower pharynx)</p> <p>Communicating branch of vagus nerve to carotid branch of glossopharyngeal nerve</p> <p>Pharyngeal plexus</p> <p>    Superior laryngeal nerve:         Internal branch (sensory and parasympathetic)         External branch (motor to cricothyroid muscle)</p> <p>Superior cervical cardiac branch of vagus nerve</p> <p>Inferior cervical cardiac branch of vagus nerve</p> <p>Thoracic cardiac branch of vagus nerve</p> <p>Left recurrent laryngeal nerve (motor to muscles of larynx except cricothyroid; sensory and parasympathetic to larynx below vocal folds; parasympathetic, efferent, and afferent to upper esophagus and trachea)</p> <p>    Pulmonary plexus</p> <p>    Cardiac plexus</p> <p>    Esophageal plexus</p> <p>    Anterior vagal trunk</p> <p>    Gastric branches of anterior vagal trunk (branches from posterior trunk behind stomach)</p> <p>    Vagal fibers (parasympathetic motor, secretomotor, and afferent fibers) accompany superior mesenteric artery and its branches usually as far as left colic (splenic) flexure</p> <p>    Small intestine</p> <p><b>Efferent fibers</b></p> <p><b>Afferent fibers</b></p> <p><b>Parasympathetic fibers</b></p>
--	---

# Relation of Spinal Nerve Roots to Vertebrae



**Cervical nerves**  
**Thoracic nerves**  
**Lumbar nerves**  
**Sacral and coccygeal nerves**

# Nomenclature of Bronchi: Schema



Nomenclature in common usage for bronchopulmonary segments (Plates 197 and 198) is that of Jackson and Huber, and segmental bronchi are named accordingly. Ikeda proposed nomenclature (as demonstrated here) for bronchial subdivisions as far as the 6th generation. For simplification on this illustration, only some bronchial subdivisions are labeled as far as the 5th or 6th generation. Segmental bronchi (B) are numbered from 1 to 10 in each lung, corresponding to pulmonary segments. In the left lung,

B1 and B2 are combined as are B7 and B8. Subsegmental, or 4th order, bronchi are indicated by the addition of lower-case letters a, b, or c when an additional branch is present. Fifth order bronchi are designated by Roman numerals i (anterior) or ii (posterior) and 6th order bronchi by Greek letters alpha or beta. Several texts use alternate numbers (as proposed by Boyden) for segmental bronchi.

Variations of the standard bronchial pattern shown here are common, especially in peripheral airways.

# Scapulothoracic and Scapulohumeral Dissection

Plates 415 465

## Lateral view

Phrenic nerve  
Anterior  
Middle  
Posterior  
Scalene muscles  
Brachial plexus  
Subclavian artery and vein  
Superior thoracic artery  
External intercostal membrane  
anterior to internal intercostal muscle  
Perforating branch of internal  
thoracic artery and anterior  
cutaneous branch of intercostal nerve  
Intercostobrachial nerve  
External intercostal muscle  
Lateral thoracic artery  
Lateral cutaneous branches  
of intercostal nerves and  
posterior intercostal arteries  
Serratus anterior muscle

## Anterior view

Acromion  
Supraspinatus tendon  
Greater tubercle of humerus  
Subscapularis tendon  
Intertubercular tendon sheath  
Anterior circumflex humeral artery  
Biceps brachii tendon (long head) (*cut*)  
Axillary nerve and posterior  
circumflex humeral artery  
**Quadrangular space**  
Radial nerve  
Biceps brachii muscle Long head  
Short head  
Coracobrachialis muscle  
**Triangular space**  
Latissimus dorsi muscle

## Posterior view

Superior transverse scapular  
ligament and suprascapular notch  
Supraspinatus muscle (*cut*)  
Spine of scapula  
Infraspinatus muscle (*cut*)  
**Triangular space** with circumflex  
scapular artery deep to space  
Teres major muscle

Levator scapulae muscle  
Accessory nerve (XI)

Scapula (*retracted*)

Subscapularis  
muscle

Teres major muscle  
Long thoracic nerve

Coraco-acromial ligament  
Coracoid process

Suprascapular artery and nerve

Superior transverse scapular  
ligament and suprascapular foramen

Pectoralis minor tendon (*cut*)

Biceps brachii tendon  
(short head) (*cut*) and  
coracobrachialis tendon (*cut*)

Subscapularis muscle

Subscapular artery

Lower subscapular nerve  
(to teres major muscle)

Circumflex scapular artery

Thoracodorsal artery and  
nerve (to latissimus dorsi muscle)

Subscapularis muscle

Teres major muscle

Suprascapular artery and nerve

Acromion

Infraspinatus tendon (*reflected*)

Joint capsule of shoulder

Deltoid muscle (*reflected*)

Teres minor muscle

**Quadrangular space**  
transmitting axillary  
nerve and posterior  
circumflex humeral artery

Superior lateral brachial cutaneous nerve

Profunda brachii  
(deep brachial) artery

Radial nerve

Lateral head and

Long head of triceps brachii muscle

**In triangular  
interval**



# Axilla (Dissection): Anterior View

Plates 410 413

Pectoralis minor tendon (*cut*)  
 Coracoid process  
 Acromion  
 Cephalic vein  
 Muscularocutaneous nerve  
 Anterior circumflex humeral artery  
 Axillary nerve and posterior circumflex humeral artery  
 Pectoralis major muscle (*cut*)  
 Coracobrachialis muscle  
 Deltoid muscle  
 Biceps brachii muscle  
 Muscularocutaneous nerve  
 Brachialis muscle  
 Thoraco-acromial artery  
 Acromial branch  
 Deltoid branch  
 Clavicular branch  
 Pectoral branch  
 Axillary artery  
 Clavicle and subclavius muscle (*cut*)  
 Trapezius muscle  
 Suprascapular artery and nerve  
 Dorsal scapular artery and nerve  
 Transverse cervical artery  
 Anterior scalene muscle  
 Sternocleidomastoid muscle  
 Phrenic nerve  
 Omo-hyoid muscle  
 Profunda brachii (deep brachial) artery  
 Radial nerve  
 Triceps brachii muscle  
 Brachial veins  
 Ulnar nerve  
 Median nerve  
 Brachial artery  
 Medial antebrachial cutaneous nerve  
 Basilic vein  
 Ulnar nerve  
 Medial brachial cutaneous nerve  
 Intercostobrachial nerve  
 Circumflex scapular artery  
 Lower sub-scapular nerve  
 Teres major muscle  
 Subscapular artery  
 Latissimus dorsi muscle  
 Thoracodorsal artery and nerve  
 Upper subscapular nerve  
 Serratus anterior muscle  
 Lateral thoracic artery and long thoracic nerve  
 Ansa pectoralis  
 Pectoralis minor (*cut*)  
 Subclavian artery and vein  
 1st rib  
 Brachial plexus  
 Superior thoracic artery  
 Lateral pectoral nerve  
 Medial pectoral nerve

# Muscle Tables

MUSCLE	PROXIMAL ATTACHMENT (ORIGIN)	DISTAL ATTACHMENT (INSERTION)	INNERVATION	MAIN ACTIONS	BLOOD SUPPLY	MUSCLE GROUP
Abductor digiti minimi	Pisiform bone and tendon of flexor carpi ulnaris	Medial side of base of proximal phalanx of little finger (5th digit)	Ulnar nerve (deep branch)	Abducts little finger	Deep palmar branch of ulnar artery	Hand
Abductor pollicis brevis	Flexor retinaculum, tubercles of scaphoid and trapezium	Lateral side of base of proximal phalanx of thumb	Median nerve (recurrent branch)	Abducts thumb	Superficial palmar branch of radial artery	Hand
Abductor pollicis longus	Posterior surface of ulna, radius, and interosseous membrane	Base of 1st metacarpal	Radial nerve (posterior interosseous)	Abducts and extends thumb at carpometacarpal joint	Posterior interosseous artery	Posterior forearm
Adductor pollicis	<i>Oblique head:</i> bases of 2nd and 3rd metacarpals and capitate and adjacent bones <i>Transverse head:</i> anterior surface of 3rd metacarpal	Medial side of base of proximal phalanx of thumb	Ulnar nerve (deep branch)	Adducts thumb	Deep palmar arch	Hand
Anconeus	Posterior surface of lateral epicondyle of humerus	Lateral surface of olecranon and posterior proximal ulna	Radial nerve (C5–T1)	Assists triceps in extending elbow, abducts ulna in pronation	Deep brachial artery	Arm
Biceps brachii	<i>Long head:</i> supraglenoid tubercle of scapula <i>Short head:</i> tip of coracoid process of scapula	Radial tuberosity, fascia of forearm via bicipital aponeurosis	Musculocutaneous nerve (C5, C6)	Flexes and supinates forearm at elbow	Muscular branches of brachial artery	Arm
Brachialis	Distal half of anterior surface of humerus	Coronoid process and tuberosity of ulna	Musculocutaneous nerve and radial nerve (C7)	Flexes forearm at elbow	Radial recurrent artery, muscular branches of brachial artery	Arm
Brachioradialis	Proximal 2/3 of lateral supracondylar ridge of humerus	Lateral side of distal end of radius	Radial nerve	Weak flexion of forearm when forearm is midpronated	Radial recurrent artery	Posterior forearm
Coracobrachialis	Tip of coracoid process of scapula	Middle third of medial surface of humerus	Musculocutaneous nerve	Flexes and adducts arm at shoulder	Muscular branches of brachial artery	Arm
Deltoid	Lateral third of anterior clavicle, lateral acromion, inferior edge of spine of scapula	Deltoid tuberosity of humerus	Axillary nerve	<i>Acromial part:</i> abducts arm beyond initial 15 degrees done by supraspinatus <i>Spinal part:</i> extends and laterally rotates arm	Posterior circumflex humeral artery, deltoid branch of thoraco-acromial artery	Shoulder
Dorsal interosseous muscles	Adjacent sides of two metacarpal bones	Base of proximal phalanges, extensor expansion of digits 2–4	Ulnar nerve (deep branch)	Abduct digits from axial line of hand (3rd digit); flex digits at metacarpophalangeal joint and extend interphalangeal joints	Deep palmar arch	Hand
Extensor carpi radialis brevis	Lateral epicondyle of humerus	Dorsal base of 3rd metacarpal and slip to 2nd metacarpal	Radial nerve (deep branch)	Extends and abducts hand at wrist	Radial artery, radial recurrent artery	Posterior forearm
Extensor carpi radialis longus	Distal third of lateral supracondylar ridge of humerus	Dorsal base of 2nd metacarpal and slip to 3rd metacarpal	Radial nerve	Extends and abducts hand at wrist	Radial artery, radial recurrent artery	Posterior forearm

Variations in spinal nerve contributions to the innervation of muscles, their arterial supply, their attachments, and their actions are common themes in human anatomy. Therefore, expect differences between texts and realize that anatomical variation is normal.



# Knee: Interior

## Plate 501

### Inferior view

Iliotibial tract blended into lateral patellar retinaculum and capsule  
Bursa  
Subpopliteal recess  
Popliteus tendon  
Fibular collateral ligament  
Bursa  
Lateral condyle of femur  
Anterior cruciate ligament  
Arcuate popliteal ligament

Patellar ligament  
Medial patellar retinaculum blended into joint capsule  
Suprapatellar synovial bursa  
Synovial membrane (*cut edge*)  
Infrapatellar synovial fold  
Posterior cruciate ligament  
Tibial collateral ligament (superficial and deep fibers)  
Medial condyle of femur  
Oblique popliteal ligament  
Semimembranosus tendon

### Posterior aspect

### Superior view

Posterior meniscofemoral ligament  
Arcuate popliteal ligament  
Fibular collateral ligament  
Bursa  
Popliteus tendon  
Subpopliteal recess  
Lateral meniscus  
Superior articular surface of tibia (lateral facet)  
Iliotibial tract blended into capsule  
Infrapatellar fat pad

Semimembranosus tendon  
Oblique popliteal ligament  
Posterior cruciate ligament  
Tibial collateral ligament (deep fibers bound to medial meniscus)  
Medial meniscus  
Synovial membrane  
Superior articular surface of tibia (medial facet)  
Joint capsule  
Anterior cruciate ligament  
Patellar ligament

### Anterior aspect

### Superior view: ligaments and cartilage removed

Attachment of posterior cruciate ligament  
Attachment of synovial membrane  
Superior articular surface of tibia (lateral facet)  
Attachments of horns of lateral meniscus  
Attachments of horns of medial meniscus

Intercondylar eminence  
Attachment of synovial membrane  
Superior articular surface of tibia (medial facet)  
Attachment of anterior cruciate ligament

Tibial tuberosity

### Anterior aspect

# Knee: Posterior and Sagittal Views

## Right knee: posterior view



## Sagittal section (lateral to midline of knee)

# Tibia and Fibula (continued)

Plate 495

Anterior view with ligament attachments		Superior view	
Iliotibial tract	Posterior	Cruciate ligaments	Posterior ligament of fibular head
Fibular collateral ligament	Anterior	Tibial collateral ligament	Apex
Biceps femoris tendon			Head
Head of fibula		<b>Fibula</b>	<b>Posterior</b>
Anterior ligament of fibular head		Anterior ligament of fibular head	
Gerdy's tubercle		Lateral condyle	
Anterior border		Superior articular surface (lateral facet)	
Interosseous border	Patellar ligament	Anterior intercondylar area (origin of anterior cruciate ligament)	<b>Anterior</b>
Lateral surface	Tibial tuberosity		Medial Lateral Intercondylar tubercles
	Anterior border		Tibial tuberosity
	Interosseous border		
	Interosseous membrane		
	Lateral surface		
<b>Fibula</b>	<b>Tibia</b>		
		<b>Fibula</b>	
		Posterior border	
			<b>Cross section</b>
			Interosseous border Lateral surface
			Anterior border
			Medial surface
			<b>Tibia</b>
			Medial border
			Posterior surface
			Medial surface
			Medial crest
			Posterior surface
			<b>Inferior view</b>
			Anterior tibiofibular ligament
			<b>Anterior</b>
			Articular facet of lateral malleolus
			Articular facet of medial malleolus
			Medial malleolus
			<b>Fibula</b>
			Malleolar fossa of lateral malleolus
			<b>Posterior</b>
			Posterior tibiofibular ligament
			Inferior articular surface of tibia
			Medial malleolus
			<b>Tibia</b>
			Inferior articular surface of tibia

# Muscles of Leg (Deep Dissection): Posterior View

## Plate 528

### Right leg

Superior medial genicular artery

Gastrocnemius muscle (medial head) (*cut*)

Sural (muscular) branches

Popliteal artery and tibial nerve

Tibial collateral ligament

Semimembranosus tendon (*cut*)

Inferior medial genicular artery

Popliteus muscle

Posterior tibial recurrent artery

Tendinous arch of soleus muscle

Posterior tibial artery

Flexor digitorum longus muscle

Tibial nerve

Tibialis posterior muscle

Calcaneal (Achilles) tendon (*cut*)

Flexor digitorum longus tendon

Tibialis posterior tendon

Medial malleolus and posterior medial malleolar branch of posterior tibial artery

Flexor retinaculum

Medial calcaneal branches of posterior tibial artery and tibial nerve

Tibialis posterior tendon

Medial plantar artery and nerve

Lateral plantar artery and nerve

Flexor hallucis longus tendon

1st metatarsal bone

Superior lateral genicular artery

Plantaris muscle (*cut*)

Gastrocnemius muscle (lateral head) (*cut*)

Fibular collateral ligament

Biceps femoris tendon (*cut*)

Inferior lateral genicular artery

Head of fibula

Common fibular (peroneal) nerve

Soleus muscle (*cut and reflected*)

Anterior tibial artery

Fibular (peroneal) artery

Flexor hallucis longus muscle (*retracted*)

Fibular (peroneal) artery

Interosseous membrane

Perforating branch of fibular  
Communicating branch (peroneal) artery

Fibularis (peroneus) longus tendon

Fibularis (peroneus) brevis tendon

Lateral malleolus and posterior lateral malleolar branch of fibular (peroneal) artery

Superior fibular (peroneal) retinaculum

Lateral calcaneal branch of fibular (peroneal) artery

Lateral calcaneal branch of sural nerve

Inferior fibular (peroneal) retinaculum

Fibularis (peroneus) brevis tendon

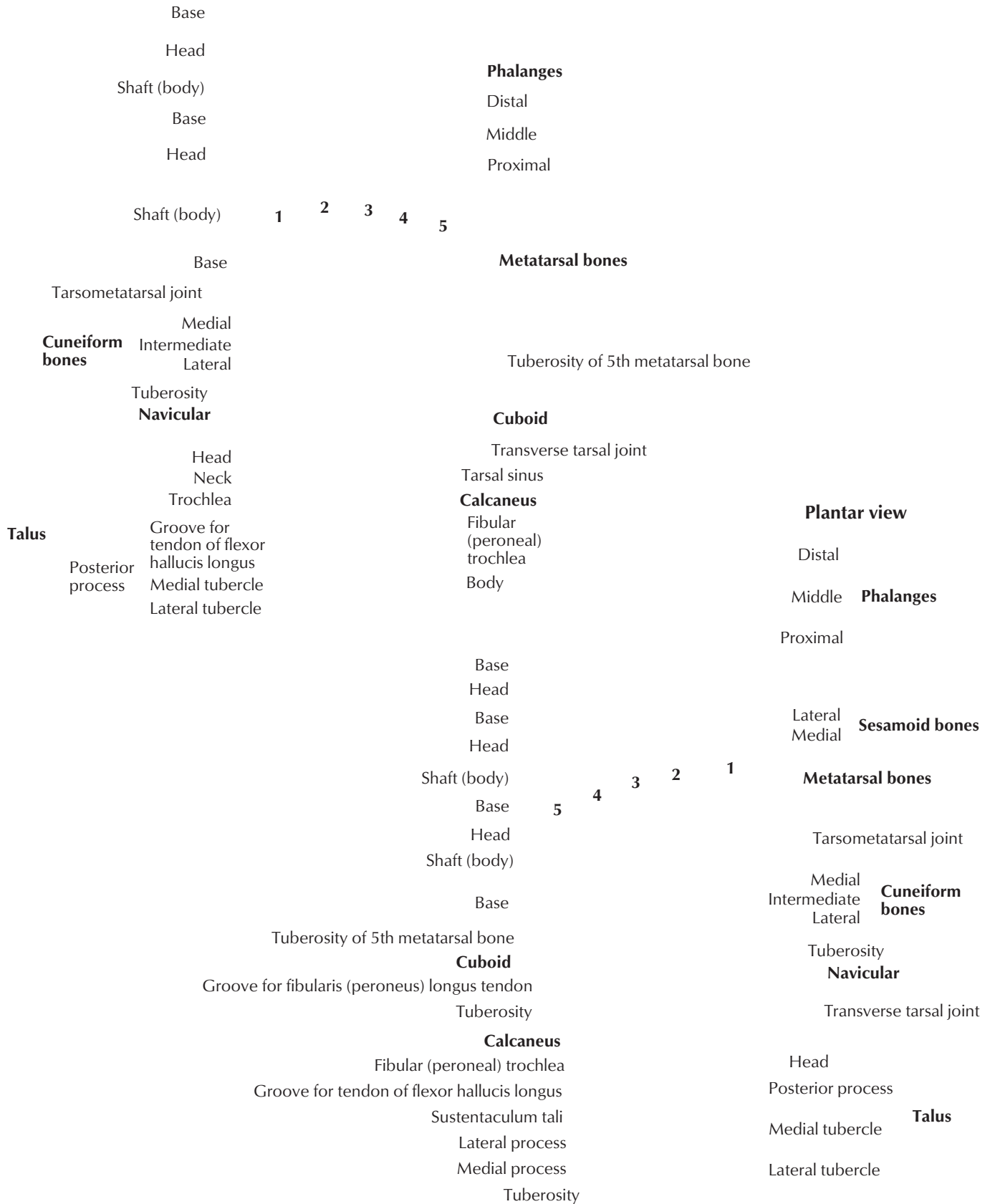
Fibularis (peroneus) longus tendon

Flexor digitorum longus tendon

5th metatarsal bone

# Bones of Foot

## Dorsal view





# Interosseous Muscles and Deep Arteries of Foot

Plates 508 518

## Dorsal view

Fibularis (peroneus) longus tendon (*cut*)  
Fibularis (peroneus) brevis tendon (*cut*)  
Cuboid bone  
Lateral tarsal artery  
Tuberosity of 5th metatarsal bone  
Fibularis (peroneus) tertius tendon (*cut*)  
Posterior perforating branches (from deep plantar arterial arch)  
Dorsal metatarsal arteries  
Extensor digitorum longus tendons (*cut*)  
Extensor expansions  
Anterior perforating branches (from plantar metatarsal arteries)  
Dorsal digital arteries

Navicular bone  
Dorsalis pedis artery  
Medial tarsal artery

Lateral  
Intermediate    Cuneiform bones  
Medial

Dorsal tarsometatarsal ligaments

Dorsal metatarsal ligaments

Arcuate artery

Deep plantar artery passes to contribute to deep plantar arch

## Dorsal interossei muscles

Metatarsal bones

Extensor hallucis longus tendon (*cut*)

Extensor digitorum brevis and extensor hallucis brevis tendons (*cut*)

## Plantar view

Plantar digital arteries proper  
Common plantar digital arteries  
Lumbrical muscles (*cut*)  
Deep transverse metatarsal ligament and plantar ligaments (plates)  
**Interossei muscles    Plantar Dorsal**  
Abductor digiti minimi muscles (*cut*)  
Plantar metatarsal arteries  
Flexor digiti minimi brevis muscle  
Deep plantar arch  
Lateral plantar artery (*cut*)  
Tuberosity of 5th metatarsal bone  
Fibularis (peroneus) longus tendon  
Fibularis (peroneus) brevis tendon (*cut*)  
Tuberosity of cuboid bone  
Long plantar ligament  
Calcaneocuboid (short plantar) ligament

Flexor hallucis longus tendon (*cut*)

Anterior perforating branches (to dorsal metatarsal arteries)

Sesamoid bones

Insertion of adductor hallucis and lateral head of flexor hallucis brevis muscles (*cut*)

Insertion of abductor hallucis and medial head of flexor hallucis brevis muscles (*cut*)

Medial origin of flexor hallucis brevis muscle (*cut*)

Deep plantar artery (from dorsalis pedis artery)

Posterior perforating branches (to dorsal metatarsal arteries)

Plantar metatarsal ligaments (between bases of metatarsal bones)

Medial cuneiform bone

Tibialis anterior tendon (*cut*)

Lateral origin of flexor hallucis brevis tendon (*cut*)

Tuberosity of navicular bone

Tibialis posterior tendon (*cut*)

Plantar calcaneonavicular (spring) ligament

**Fourth layer muscles in bold**

- Postcentral sulcal arteries**, 142  
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