

KATTA VA KICHIK QON AYLANISH DOIRALARI

Dars rejasi

**Kichik qon aylanish doirasining
tomirlari**

**Katta qon aylanish doirasining
arteriya tomirlari**

**Aorta yoyidan chiqqan arteriyalar
Gavda qo'llar arteriyasi**

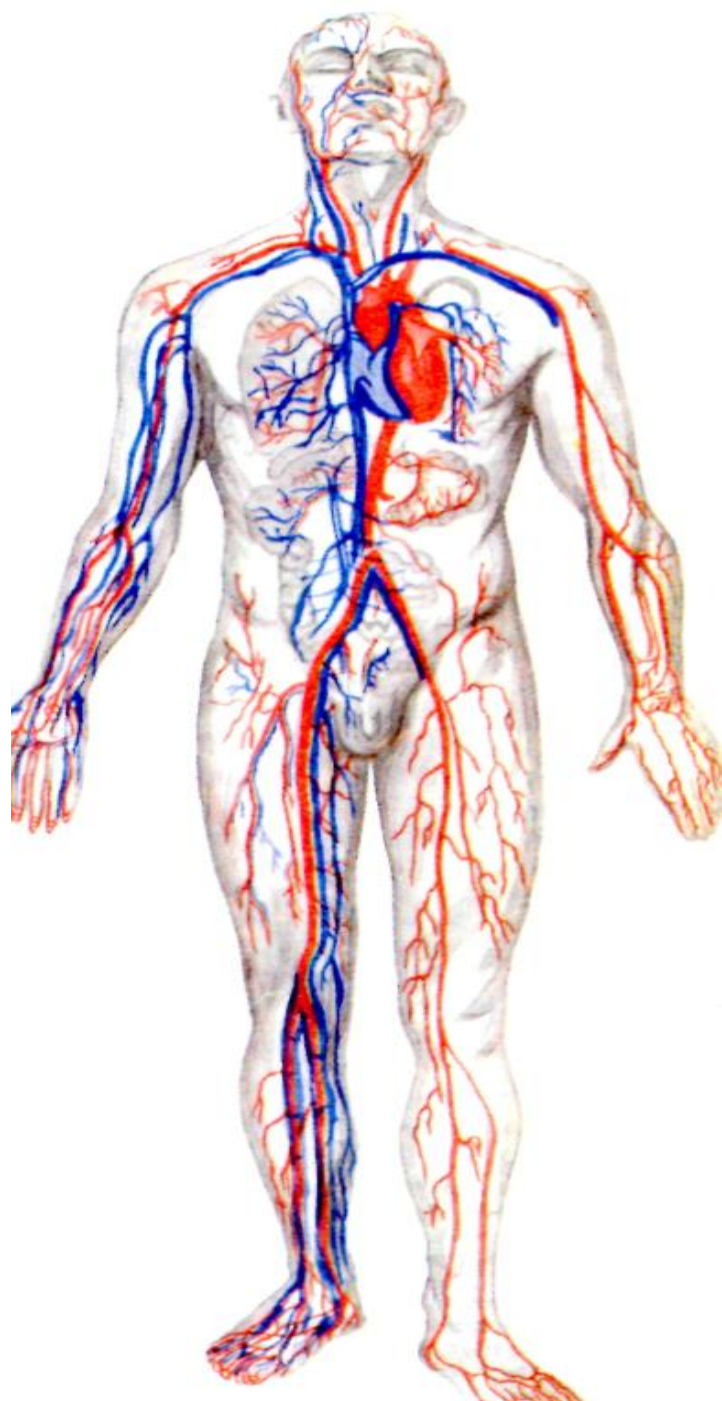
Tayanch iboralar:Aorta, arteriya, venayuqorigikovakvena,
kattavakichikqonaylanishdoirasi, Kapillyarlar, venulalar ,funksional
kichik doira,aorta ravog'i.

The aorta is the main trunk of a series of vessels which convey the oxygenated blood to the tissues of the body for their nutrition. It commences at the upper part of the left ventricle, where it is about 3 cm. in diameter, and after ascending for a short distance, arches backward and to the left side, over the root of the left lung; it then descends within the thorax on the left side of the vertebral column, passes into the abdominal cavity through the aortic hiatus in the diaphragm, and ends, considerably diminished in size (about 1.75 cm. in diameter), opposite the lower border of the fourth lumbar vertebra, by dividing into the right and left common iliac arteries. Hence it is described in several portions, viz., the ascending aorta, the arch of the aorta, and the descending aorta, which last is again divided into the thoracic and abdominal aortæ.

Adolf Faller., Michael Schuenke-The Human Body - “An Introduction to Structure and Function” ThiemeStuttgart · New York
<http://www.bestmedbook.com/366-3676>

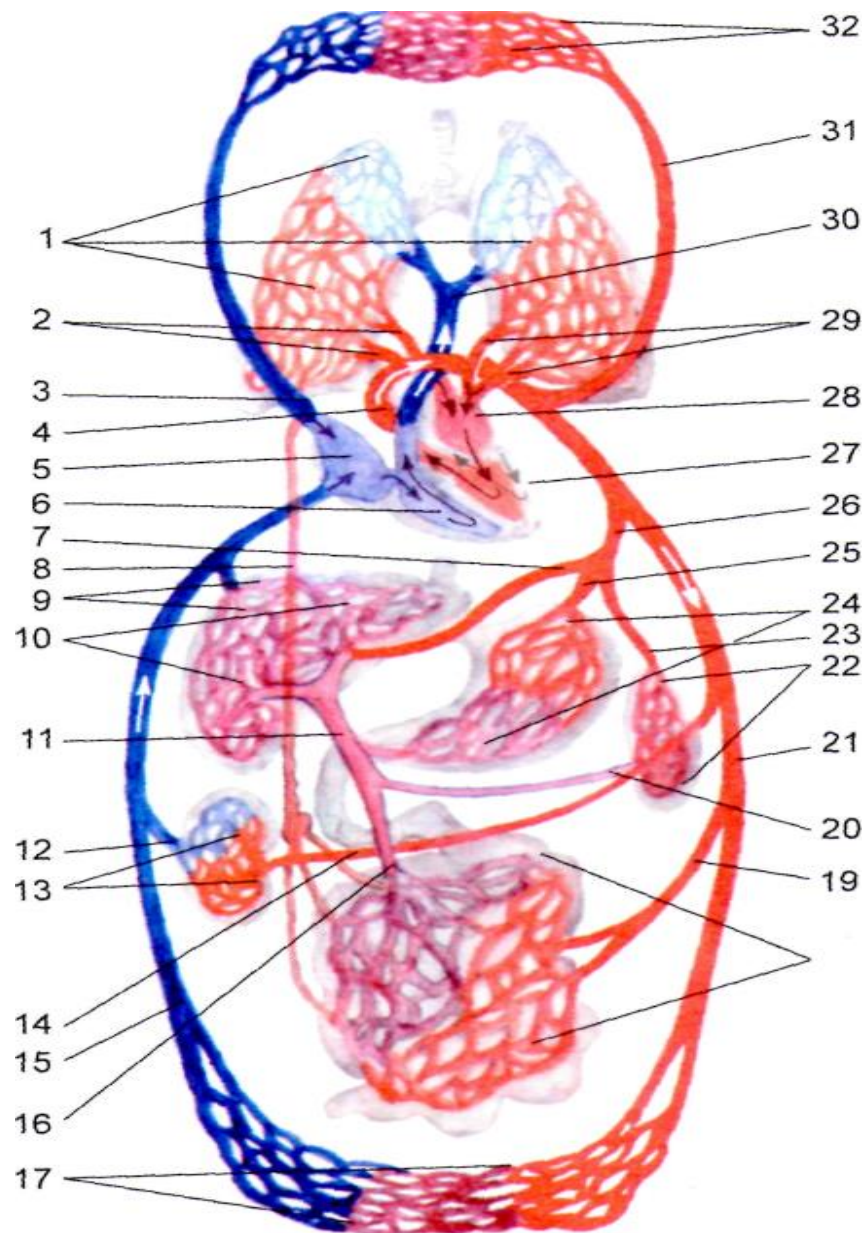
Katta qon aylanish doirasining arteriya tomirlari. Aorta va uning tarmoqlari. Aorta (aorta) organizmdagi yirik arteriya bo'lib, yurakning chap qorinchasidan boshlanadi va uch qismga: *ko'tariluvchi aorta*, *aorta yoyi* va *tushuvchi aortaga* bo'linadi. Aortaning yurakdan chiqish joyi bir oz kengaygan bo'lib, *aorta piyozchasi* deyiladi. Bu yerdan yurakning o'ng va chap tojsimon arteriyasi chiqadi. So'ngra aorta o'ngga va bir oz yuqoriga qarab yo'nalib, aorta yoyi hosil qiladi. Aorta yoyi orqaga va pastga, chapga – umurtqa pog'onasi tomonga qarab yo'naladi va aortaning tushuvchi qismini hosil qiladi. Bu qism ko'krak va qorin aortasiga bo'linadi. Aortaning ko'krak qafasida joylashgan qismi *ko'krak aortasi* deb ataladi.

Aorta katta qon aylanish doirasining eng katta toq arteriya tomiridir. Unda uch: aortaning yuqoriga ko'tariluvchi qismi, aorta ravog'i va pastga tushuvchi qismi tafovut qilinadi. Aortaning ko'tariluvchi qismi chap qorinchadan to'sh suyagining chap chekkasida uchinchi qovurg'a oralig'ida chiqadi. Boshlangan yerda u piyozga o'xshab kengayib 25-30 mm kenglikdagi aorta piyozchasini hosil qiladi. Bu sohada aorta devori bilan yarimoysimon qopqoqlar o'rtasida aortaning uchta sinusi bo'ladi. Aortaning ko'tariluvchi qismining boshlanish joyidan yurakning o'ng va chap tojsimon arteriyalari boshlanadi. Aortaning ko'tariluvchi qismi o'pka poyasining orqa qismidan ko'tarilib II o'ng qovurg'a tog'ayini to'sh suyagiga qo'shilgan joyda aorta ravog'iga o'tib ketadi. Bu sohada uning kengligi 21-22 mm gacha kamayadi.



Aorta ravog'i (**arcus aortae**) II qovurg'a tog'ayi orqa yuzasidan chapga va orqa tomonga yo'nalib, IV ko'krak umurtqasi sohasida pastga tushuvchi aortaga o'tib ketadi. Shu yerda biroz toraygan qism aorta bo'yinchasi (**isthmus aortae**) bor. Aorta ravog'ining ko'tarilgan yuzasidan uchta yirik arteriya: yelka-bosh poyasi, chap umumiy uyqu va chap o'mrov osti arteriyalari boshlanadi. Uning botiq yuzasidan kekirdak, bronx va qalqonsimon bezga bir nechta mayda arteriyalar chiqadi.

the Ascending Aorta (Aorta Ascendens)—The ascending aorta is about 5 cm. in length. It commences at the upper part of the base of the left ventricle, on a level with the lower border of the third costal cartilage behind the left half of the sternum; it passes obliquely upward, forward, and to the right, in the direction of the heart's axis, as high as the upper border of the second right costal cartilage, describing a slight curve in its course, and being situated, about 6 cm. behind the posterior surface of the sternum. At its origin it presents, opposite the segments of the aortic valve, three small dilatations called the aortic sinuses. At the union of the ascending aorta with the aortic arch the caliber of the vessel is increased, owing to a bulging of its right wall. This dilatation is termed the bulb of the aorta, and on transverse section presents a somewhat oval figure.



Ko'krak aortasining visseral tarmoqlar

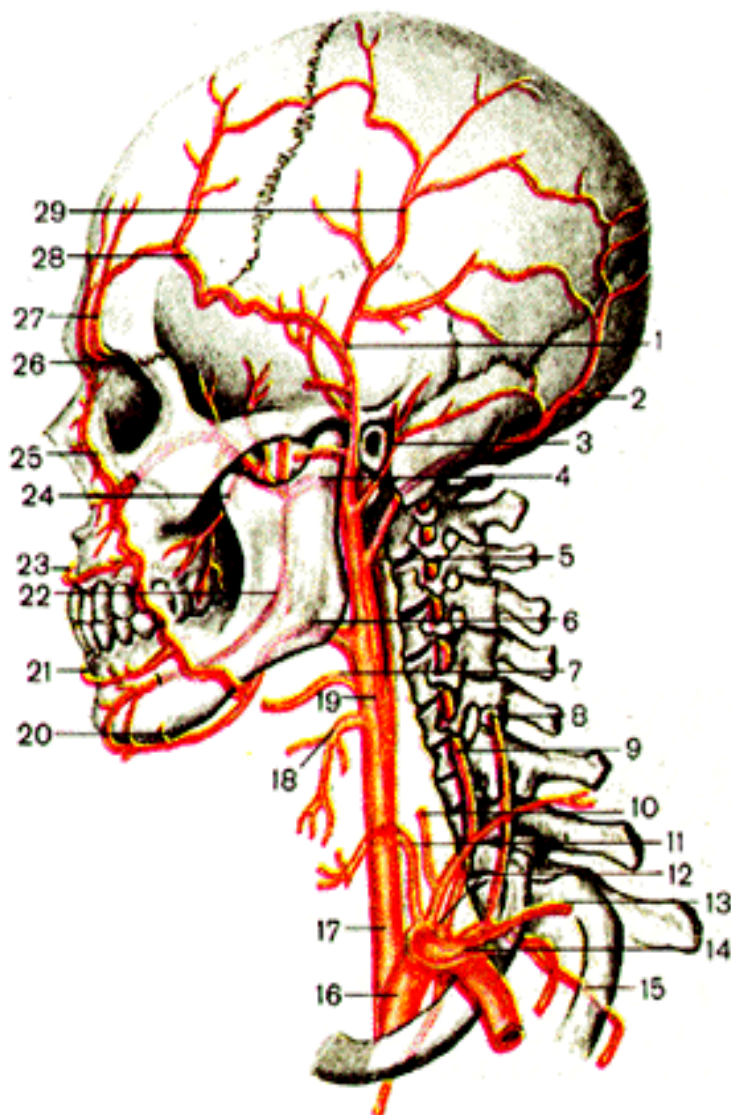
1.Bronx tarmoqlari (rr. bronchiales) 2-3 ta bo'lib, bronxlar devorini va o'pka to'qimasini qon bilan ta'minlaydi.

2.Qizilo'ngach tarmoqlari (rr. esophageales) 1-5 ta bo'lib, aortaning turli sohalaridan boshlanib, qizilo'ngach devorini qon bilan ta'minlaydi.

3.Perikard tarmoqlari (rr. pericardiaci) perikardni qon bilan ta'minlaydi.

4.Ko'ks oralig'i tarmoqlari (rr. mediastinales) orqa ko'ks oralig'i biriktiruvchi to'qimasini, limfa tugunlarini qon bilan ta'minlaydi.

Бош ва бўйин артериялари

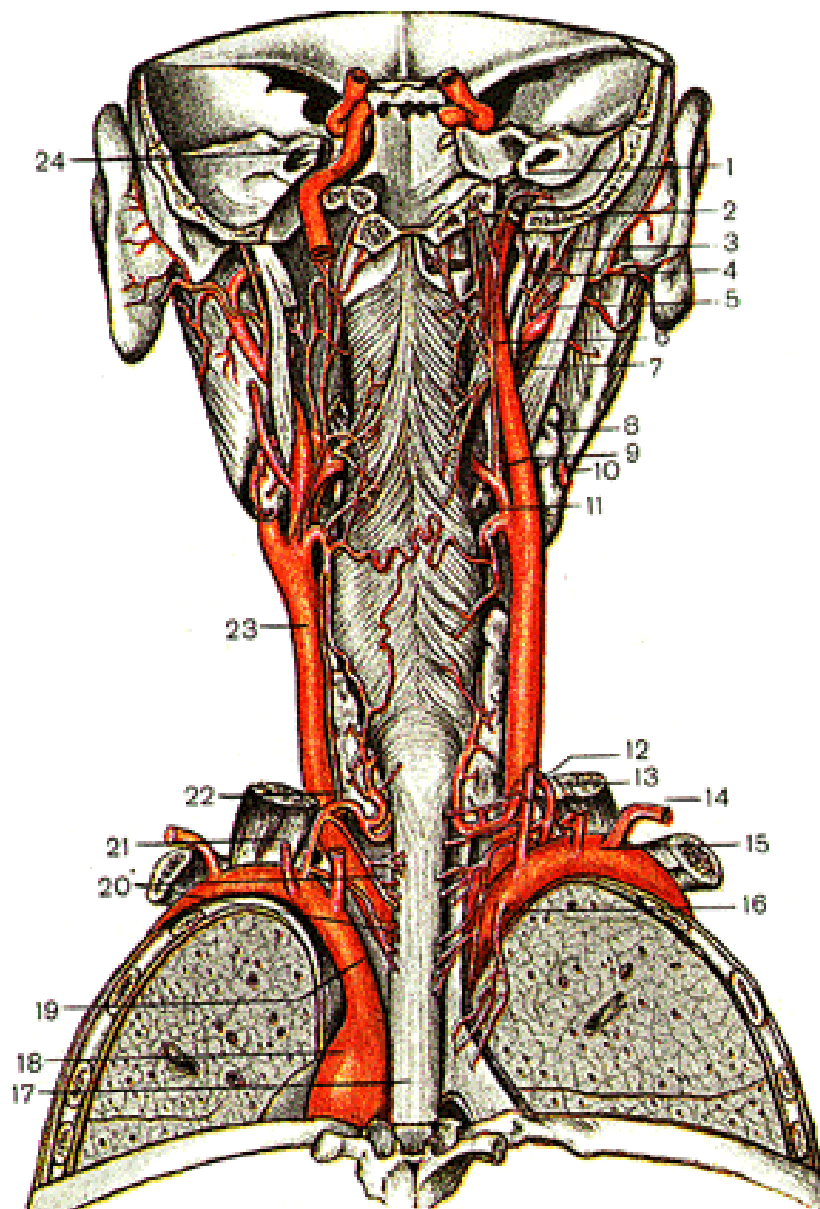


- 1 - a. temporalis superficialis;
- 2 - a. occipitalis;
- 3 - a. auricularis posterior;
- 4 - a. maxillaris;
- 5 - a. carotis interna;
- 6 - a. facialis;
- 7 - a. lingualis;
- 8 - a. cervicalis profunda;
- 9 - a. vertebralis;
- 10 - a. cervicalis ascendens;
- 11 - a. thyroidea inferior;
- 12 - truncus thyrocervicalis;
- 13 - a. transversa colli [cervicis colli];
- 14 - a. suprascapularis;
- 15 - a. intercostalis suprema;
- 16 - a. subclavia;
- 17 - a. carotis communis;
- 18 - a. thyroidea superior;
- 19 - a. carotis externa;
- 20 - a. submentalis;
- 21 - a. labialis inferior;
- 22 - a. alveolaris inferior;
- 23 - a. labialis superior;
- 24 - a. buccalis;
- 25 - a. angularis;
- 26 - a. supratrochlearis;
- 27 - a. supraorbitalis;
- 28 - r. frontalis a. temporalis superficialis;
- 29 - r. parietalis a. temporalis superficialis.

Kichik qon aylanish doirasi tomirlari o'pka arteriyasi va o'pka venalari sistemasidan iborat. o'pka arteriyasi (a.pulmonalis) yirik arteriya bo'lib, uzunligi 6 sm, diametri 3sm keladi. U yurakning o'ng qorinchasidan boshlanib, *o'ng* va *chap* tarmoqqa bo'linib, so'ng o'pkaga boradi. o'ng tarmog'i uchga, chap tarmog'i ikkiga bo'linadi. o'pka arteriyasining tarmoqlari bronxlar bilan birga o'pka alveolalarigacha boradi. Alveolalar devorida qalin kapillyarlar to'rini hosil qiladi. Shu yerda qon bilan alveolalar o'rtasida gazlar almashinadi. Alveolalarda kapillyarlar vena kapillyarlari hosil qiladi. Kapillyarlar venulalar, ular birlashib venalar so'ng to'rtta yirik o'pka venasi hosil bo'ladi.

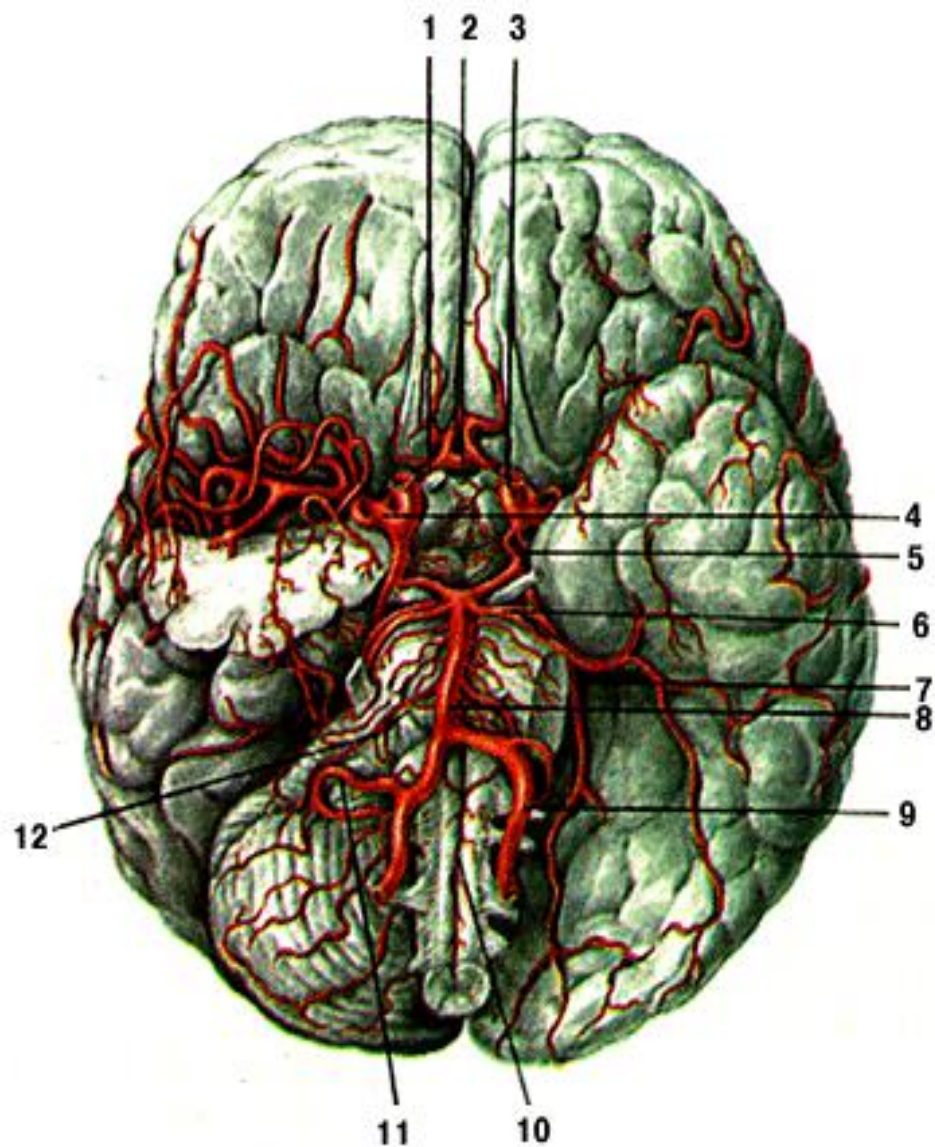
Halqumning yuqoriga ko'tariluvchi arteriyasi (a. pharyngea ascendens) tashqi uyqu arteriyasi poyasining boshlanish qismidan chiqib, halqum devori bo'ylab yuqoriga ko'tariladi va halqum muskullarini, miya qattiq pardasining ensa bo'lagini, nog'ora bo'shlig'ining shilliq pardasini, yumshoq tanglayni, eshituv nayi va murtaklarni qon bilan ta'minlaydi.

Артерии шеи и головы. Схема, вид сзади. Позвоночник удалён



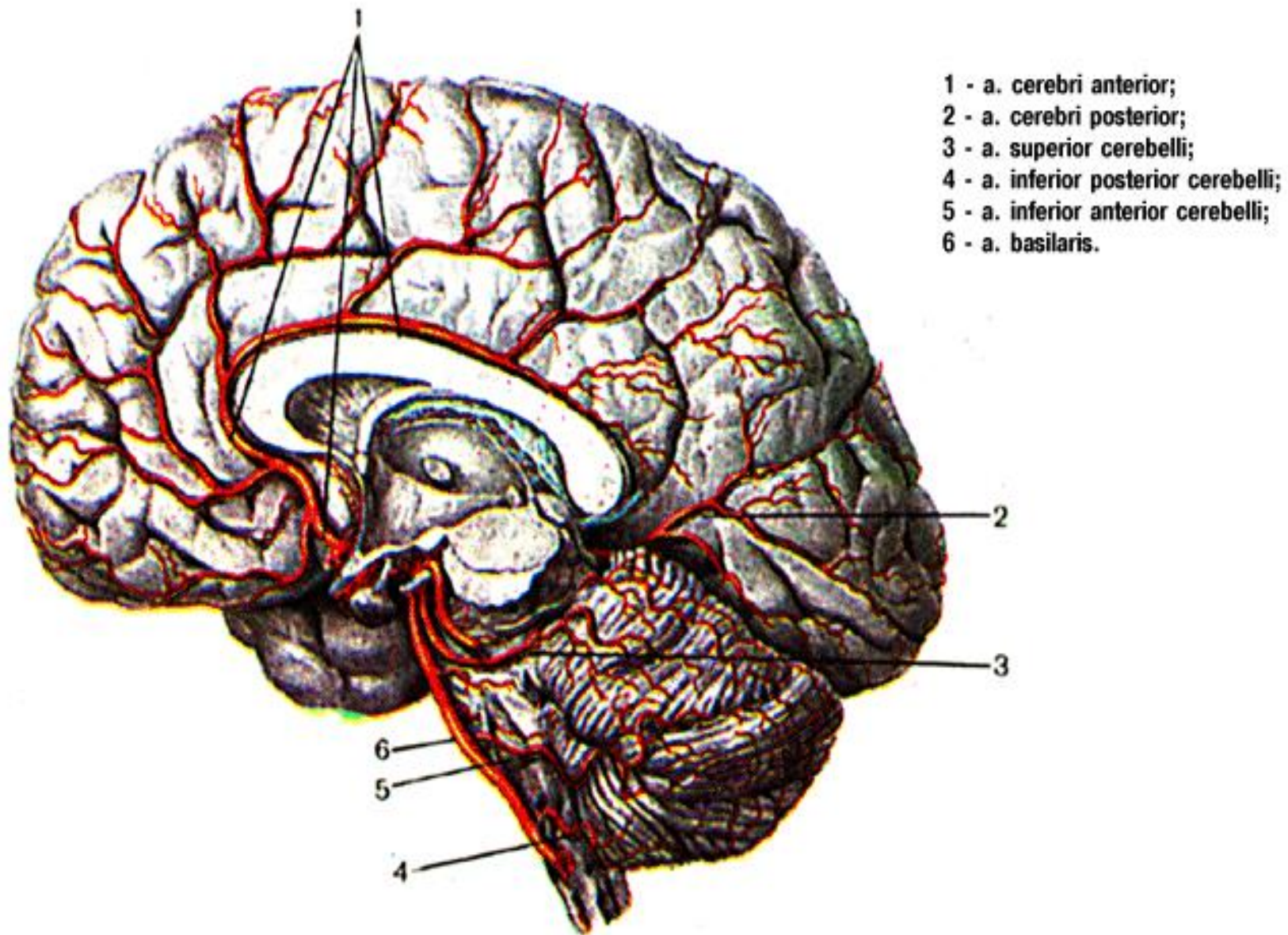
- 1 - a. meningea posterior;
- 2 - a. occipitalis;
- 3 - a. stylomastoidea;
- 4 - a. auricularis posterior;
- 5 - a. carotis externa;
- 6 - a. pharyngea ascendens;
- 7 - a. carotis internal;
- 8 - gl. submandibularis;
- 9 - a. lingualis;
- 10 - a. facialis;
- 11 - a. thyroidea superior;
- 12 - a. vertebralis;
- 13 - truncus thyrocervicalis;
- 14 - a. transversa colli [cervicis];
- 15 - a. subclavia dextra;
- 16 - truncus brachiocephalicus;
- 17 - oesophagus;
- 18 - pars descendens aortae;
- 19 - a. subclavia sinistra;
- 20 - rr. oesophageales et tracheales;
- 21 - truncus costocervicalis;
- 22 - a. thyroidea inferior;
- 23 - a. carotis communis;
- 24 - a. carotis interna.

Бош мия артериялари

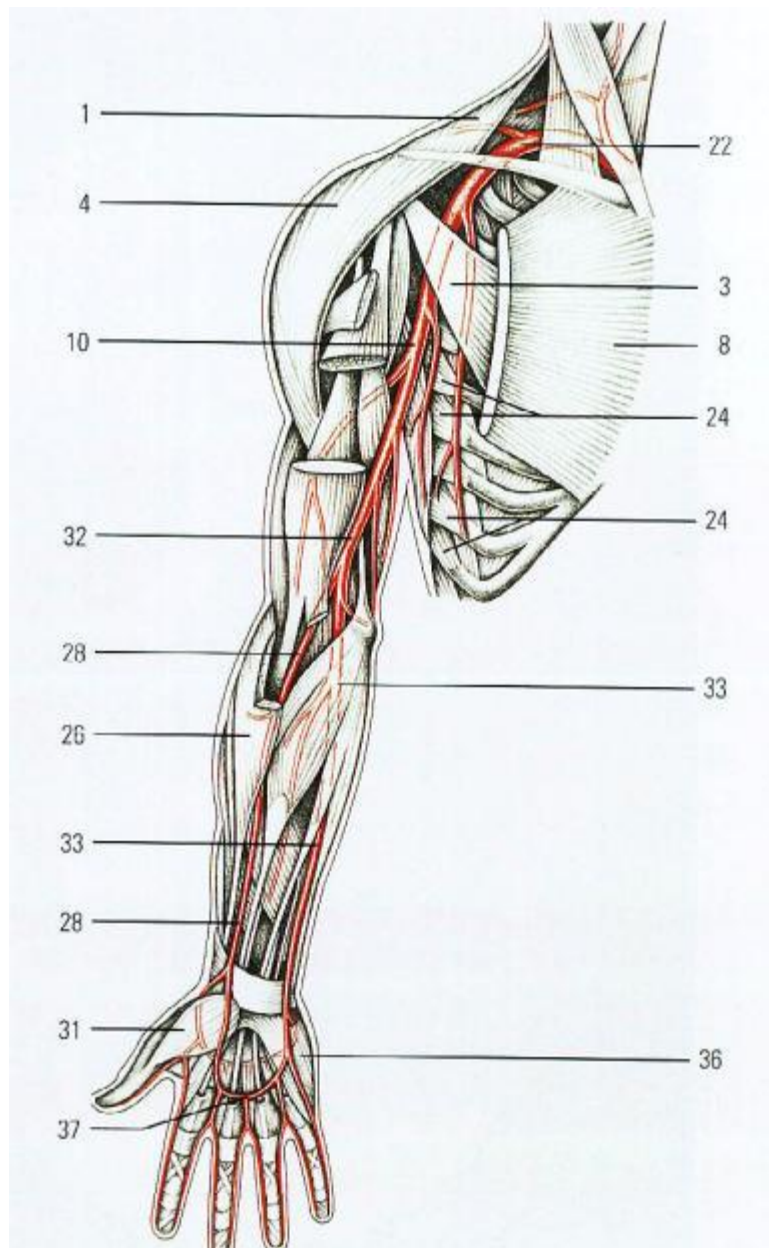


- 1 - a. cerebri anterior;
- 2 - a. communicans anterior;
- 3 - a. carotis interna;
- 4 - a. cerebri media;
- 5 - a. communicans posterior;
- 6 - a. superior cerebelli;
- 7 - a. cerebri posterior;
- 8 - a. basilaris;
- 9 - a. vertebralis;
- 10 - a. spinalis anterior;
- 11 - a. inferior posterior cerebelli;
- 12 - a. inferior anterior cerebelli.

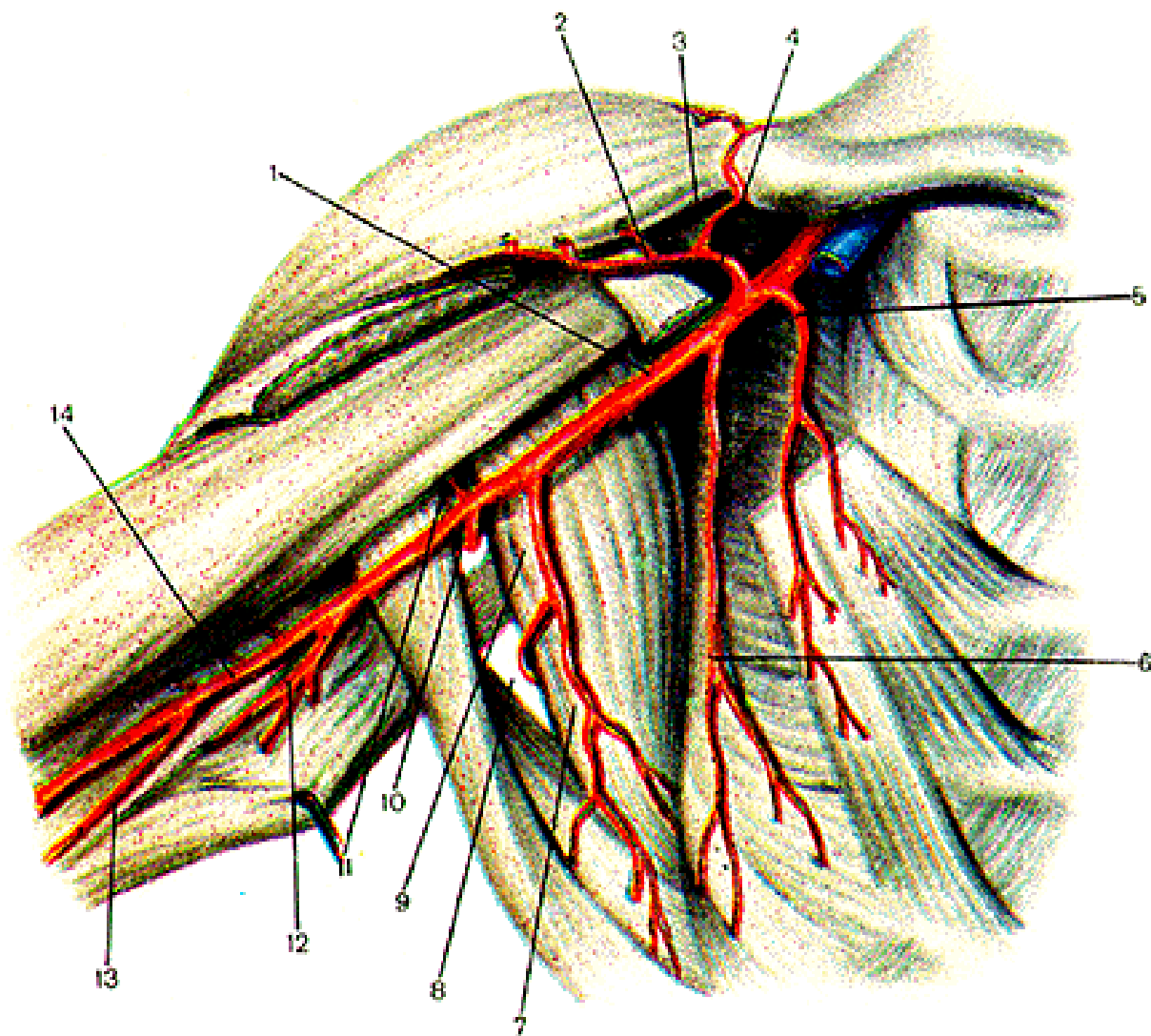
Катта ярим шарлари ва миёча артериялари



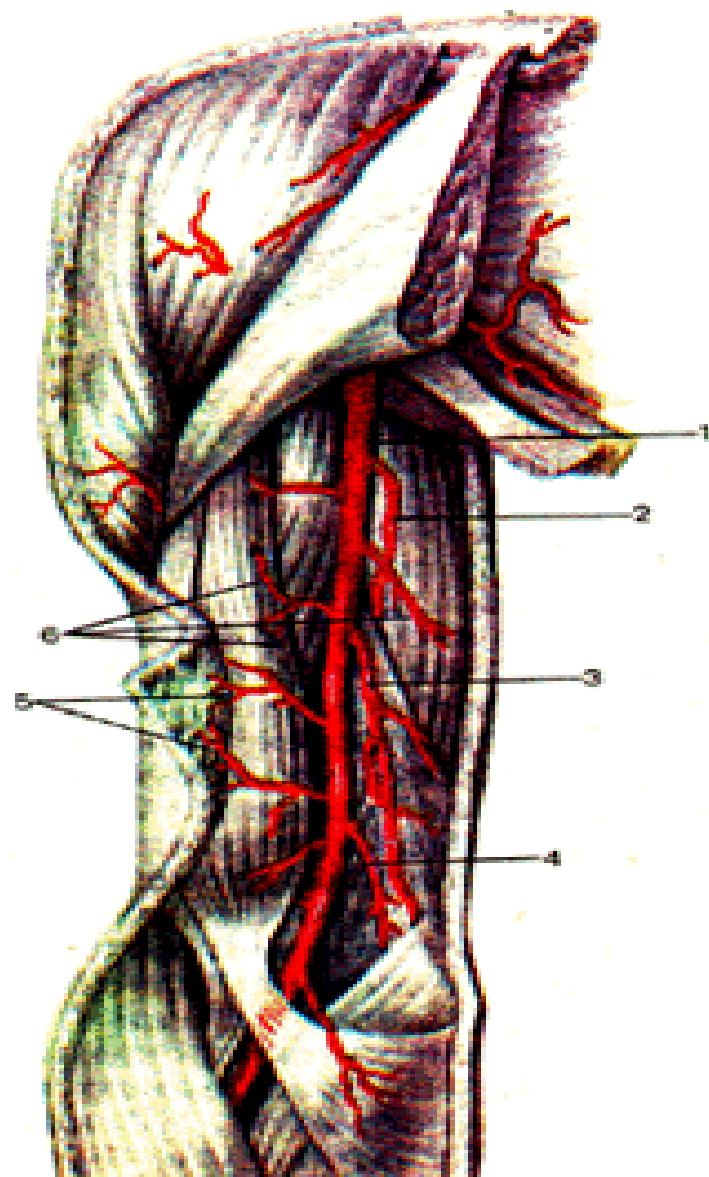
Юқори камар артериялари..



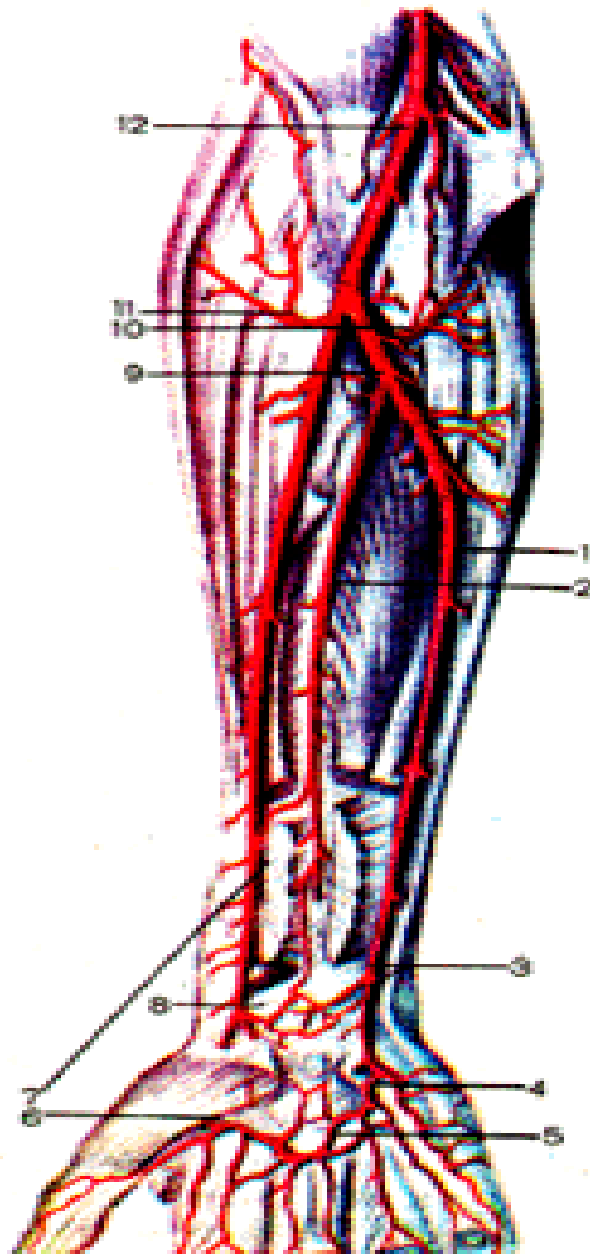
Qo'ltiq osti va elka arteriyasi



- 1 - a. axillaris;
- 2 - r. deltoideus;
- 3 - r. acromialis;
- 4 - a. thoracoacromialis;
- 5 - r. pectoralis;
- 6 - a. thoracica lateralis;
- 7 - a. thoracodorsalis;
- 8 - a. circumflexa scapulae;
- 9 - a. subscapularis;
- 10 - a. circumflexa posterior humeri;
- 11 - a. circumflexa anterior humeri;
- 12 - a. profunda brachii;
- 13 - a. collateralis ulnaris superior;
- 14 - a. brachialis.

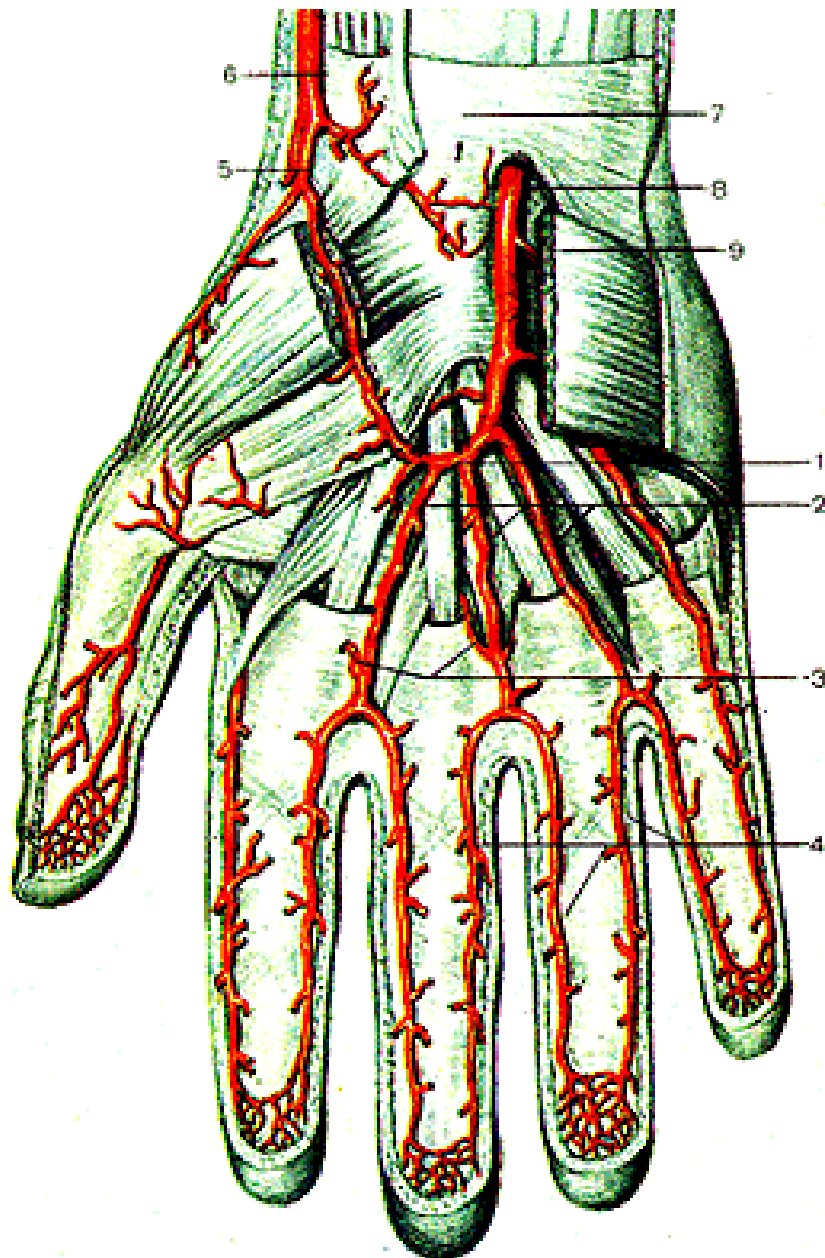


- 1 - a. brachialis;
- 2 - a. profunda brachii;
- 3 - a. collateralis ulnaris superior;
- 4 - a. collateralis ulnaris inferior;
- 5,6 - ветви к коже и мышцам.



- 1 - a. ulnaris;
- 2 - a. interossea anterior;
- 3 - rr. carpeus [carpales] palmares;
- 4 - r. palmaris profundus;
- 5 - arcus palmaris profundus;
- 6 - a. princeps pollicis;
- 7 - a. radialis;
- 8 - r. palmaris superficialis;
- 9 - a. interossea posterior;
- 10 - a. recurrens ulnaris;
- 11 - a. recurrens radialis;
- 12 - a. brachialis.

O'mrov osti arteriyasi (a. subclavia) bir juft bo'lib, chap tomondagi arteriya to'g'ridan-to'g'ri arcus aortae dan chiqadi, a. subclavia dextra esa truncus brachiocephalicus dan boshlanadi. Shuning uchun chap tomondagi o'mrov osti arteriyasi bir oz uzunroq bo'ladi.



- 1 - **archa palmaris superficialis;**
- 2 - **aa. digitales palmares communes;**
- 3 - **aa. metacarpeae [metacarpales] palmares;**
- 4 - **aa. digitales palmares propriae;**
- 5 - **r. palmaris superficialis;**
- 6 - **a. radialis;**
- 7 - **retinaculum flexorum [flexiorum];**
- 8 - **a. ulnaris;**
- 9 - **r. palmaris profundus.**

Asosiy adabiyotlar ro'yxati

1. Rajamurodov Z.T., Rajabov A.L. “Odam va hayvonlar fiziologiyasi” T.: Tib. Kitob. 2010 y.
 2. Nuriddinov.E.N. “Odam fiziologiyasi” T.: “A’loqachi” 2005 y.
 3. Almatov K.T., Allamuratov.Sh.I. “Odam va hayvonlar fiziologiyasi” T.: Universitet. 2004 y.
 4. Xudoyberdiev.R.E.,I.K.Axmedov. “Odam anatomiyasi” T.: “Ibn Sino” 1993 y.
 5. Ahmedov.A. “Odam Anatomiyasi” T.: “Iqtisod moliya” 2007 y.
 6. R.Boxodirov “Odam anatomiyasi” T.: “O‘zbekiston”, 2006 y.
- I.K.Axmedov “Atlas odam anatomiyasi”T.: “Uzb. Milliy ensiklopediyasi”1998y.
 - Anatomy of the Human Body.Henry Gray.Nega Assefa Alemaya University
Yosief Tsige Jimma University.In collaboration with the Ethiopia Public Health
Training Initiative, The Carter Center, the Ethiopia Ministry of Health, and the
Ethiopia Ministry of Education 2003. 267**
 - Adolf Faller., Michael Schuenke-The Human Body - “An Introduction to
Structure and Function” ThiemeStuttgart · New Yorkhttp:
//www.bestmedbook.com /364-372bet**