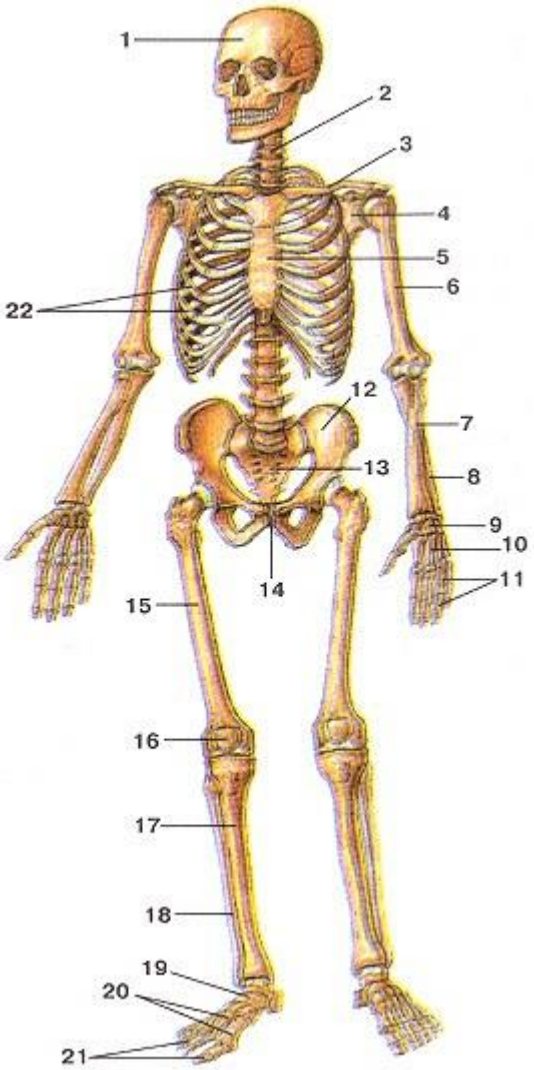
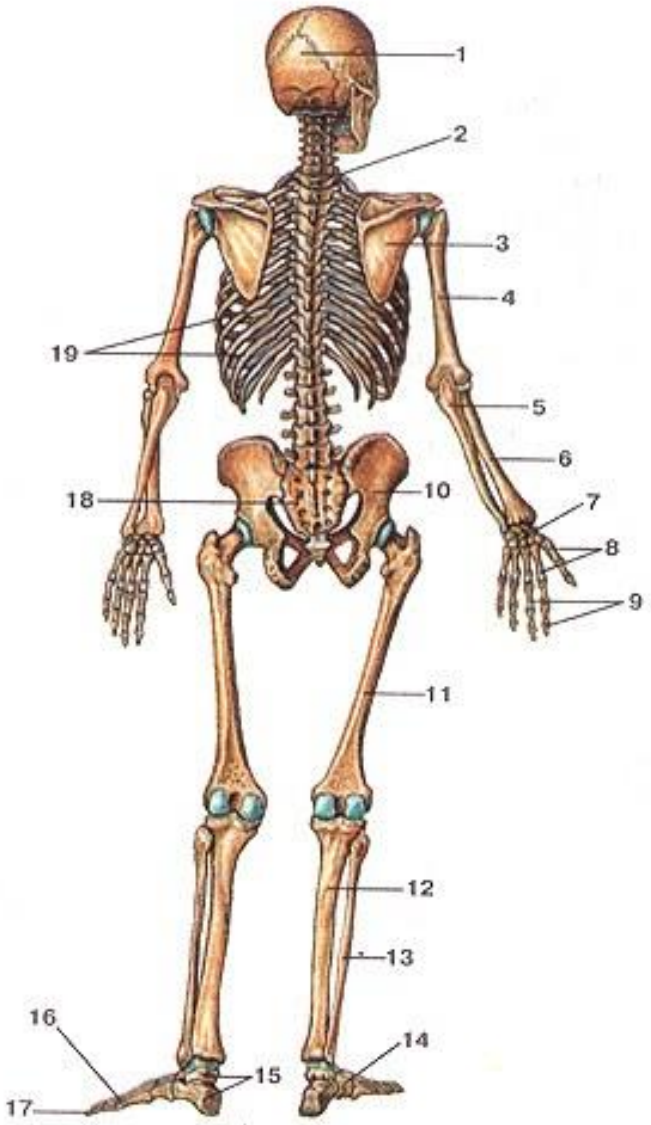
GAVDA SKELETI

Dars rejasi

- **Gavda skeleti**
- **Umurtqa pog‘onasi**
- Ko‘krak qafasi suyaklari
- **Qovurg‘alar**
- Qo‘l suyaklari
- **Oyoq suyaklari**



1-cranium; 2-columna vertebralis; 3-clavicula; 4-scapula; 5-sternum; 6-humerus; 7-radius; 8-ulna; 9-ossa carpi; 10-ossa metacarpi; 11-pha-langes digitorum manus; 12-os coxae; 13-os sacrum; 14-symphisis pubica; 15-osfemoris; 16-patella; 17-tibia; 18-fibula; 19-ossa metatarsi; 20-ossa tarsi; 21-phalanges digitorum pedis; 22-cosiae (compages thoracis)



-CRANIUM; 2-COLUMNA VERTEBRALIS; 3-SCAPULA; 4-HUMERUS; 5-ULNA; 6-RADIUS; 7-OSSA CARPI; 8-OSSA METACARPI; 9-PHALANGES DIGITORUM MANUS; 10-OS COXAE; 11-OS FEMORIS; I2-TIBIA; I3-FIBULA; 14-OSSA PEDIS; 15-OSSA TARSI; 16-OSSA METATARSI; 17-PHALANGES DIGITORUM PEDIS; I8-OS SACRUM; I9-COSTAE (COMPAGES THORACIS).

Orqa ustun mustaqil oson harakatlanadigan segmentlardan tashkil topgan bo’lib ularning har biri oson harakatlanadigan va qimirlamaydigan bo’g’imlar orqali birlashgan. Mustaqil harakatlanadigan segmentlar funksional qizm hisoblanadi. U ikki qo’shni umurtqa suyagi biriktirilgan diskdan iborat. O’rta umurtqa diski mustaqil harakatlanadigan segmentda muhim ahamiyat kasb etadi. U tashqi zich tolalik to’qima doirasidan iborat. Qo’shimcha sifatida shuni aytishismiz mumkin-ki, usmurtqa, ko’ndalang jarayon va umurtqa ustuni bir biri bilan kuchli paylar sistemasi orqali bog’langan. Ularning jahatlarining yo’nalishlardagi o’zgarishlari har bir umurtqa segmentini harakatlanlanishini belgilaydi.

Adolf Faller., Michael Schuenke-The Human Body - “An Introduction to Structure and Function” ThiemeStuttgart · New Yorkhttp: //www.bestmedbook.com/ 47-48

The vertebral columnis a flexuous and flexible column, formed of a series of bones called vertebræ. The vertebræ are thirty-three in number, and are grouped under the names cervical, thoracic, lumbar, sacral,and coccygeal,according to the regions they occupy; there are seven in the cervical region, twelve in the thoracic, five in the lumbar, five in the sacral, and four in the coccygeal.This number is sometimes increased by an additional vertebra in one region, or it may be diminished in one region, the deficiency often being supplied by an additional vertebra in another. The number of cervical vertebræ is, however, very rarely increased or diminished.The vertebræ in the upper three regions of the column remain distinct throughout life, and are known as trueor movablevertebræ; those of the sacral and coccygeal regions, on the other hand, are termed falseor fixedvertebræ, because they are united with one another in the adult to form two bones—five forming the upper bone or sacrum,and four the terminal bone or coccyx. With the exception of the first and second cervical, the true or movable vertebræ present certain common characteristics which are best studied by examining one from the middle of the thoracic region.

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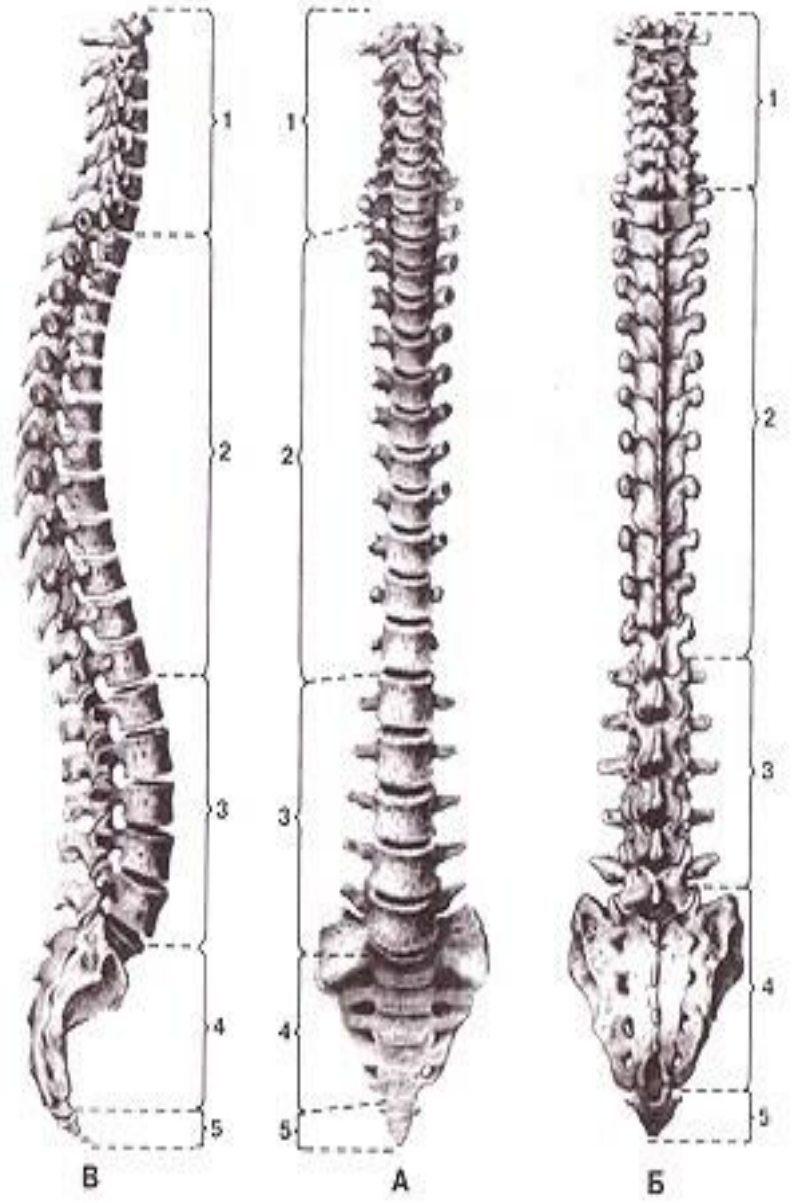
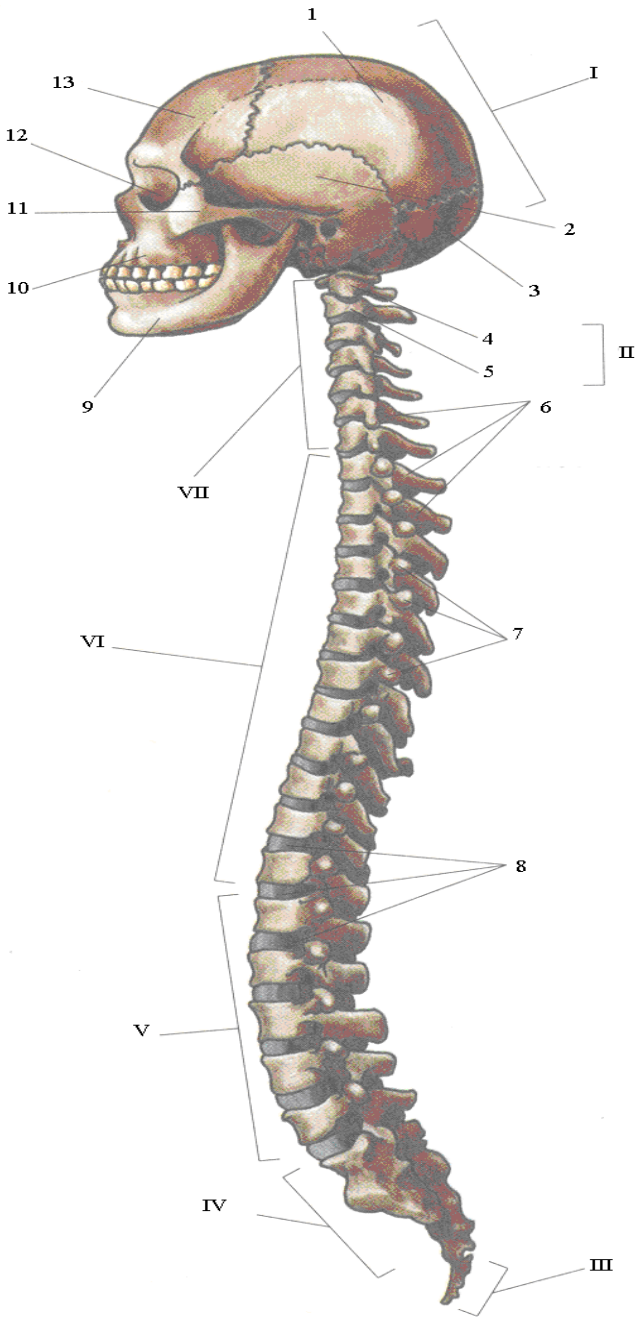


Umurtqa teshiklari birlashib, umurtqa pog‘onasi kanalini hosil qiladi, uning ichida orqa miya joylashadi.

Umurtqa pog‘onasining bo‘yin, bel kismlari oldinga bir oz bo‘rtib chiqqan bo‘lib, *lordoz* deyiladi.

Ko‘krak va dumg‘aza qismlari orqaga bo‘rtgan bo‘lib, kifoz deyiladi.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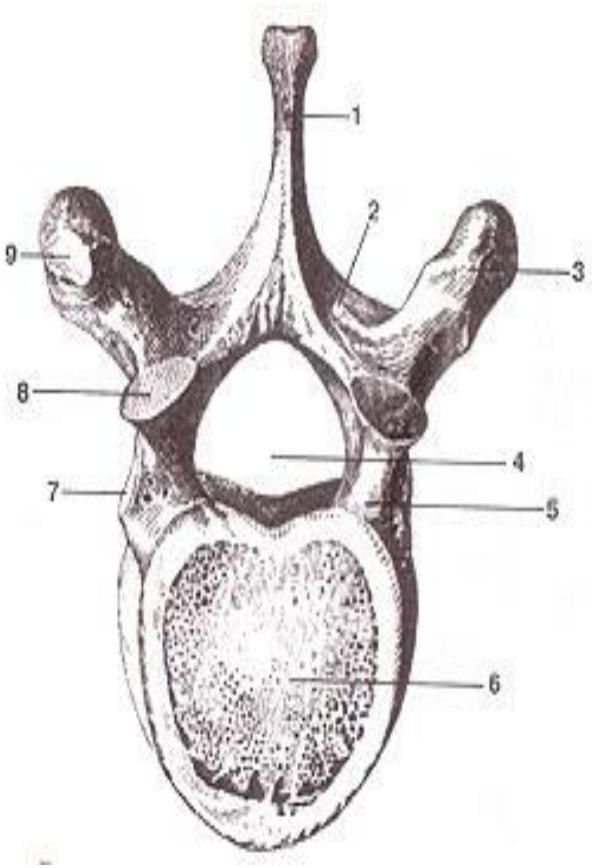
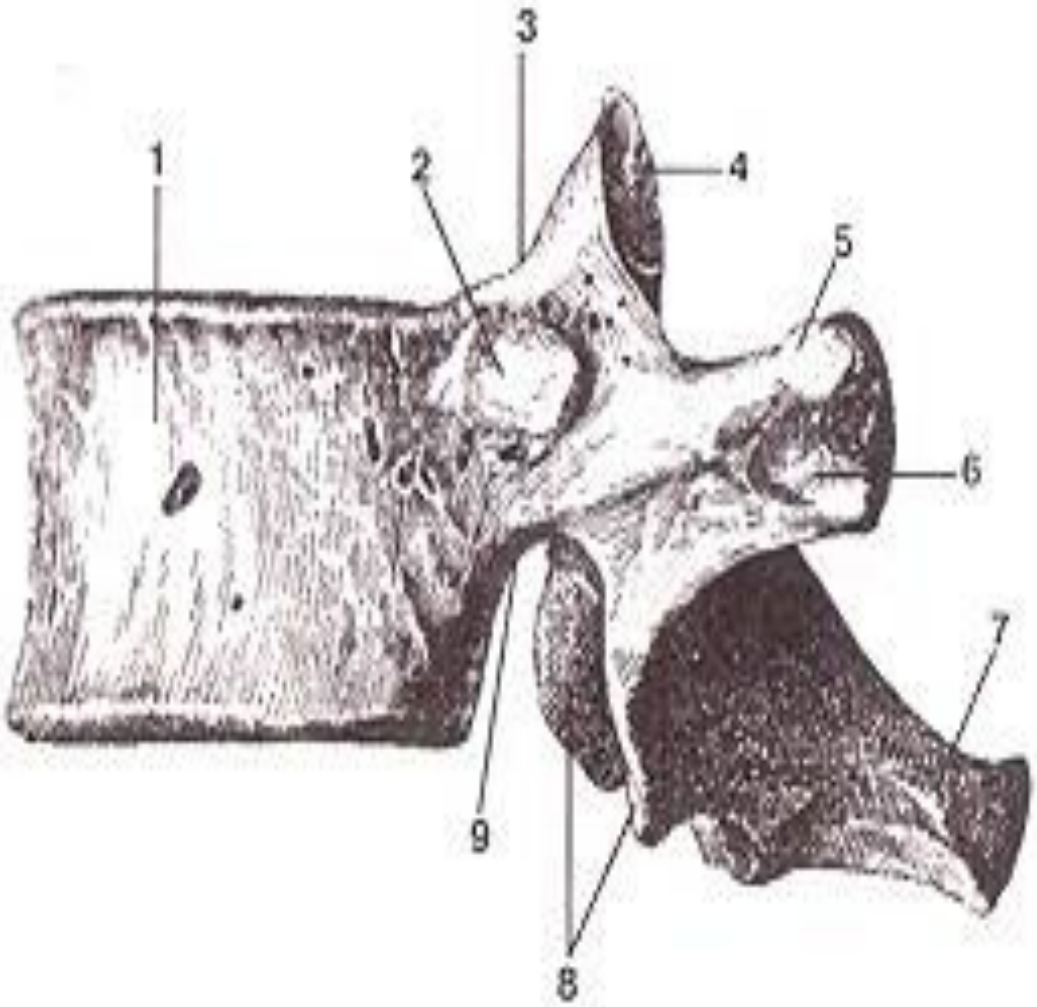


Ko‘krak umurtqalari (vertebrae thoracales) 12 ta bo‘lib, 1-dan 12-gacha bir oz yiriklashib boradi. Umurtqa teshigi yumaloq bo‘ladi. Ko‘krak umurtqalari tanasida qovurg‘aning boshi kelib birikishi uchun va yon o‘simtasida qovurg‘a dumbogi birikishi uchun bo‘g‘im yuzalari bo‘ladi. Orqa o‘simtasi uzun, uchi qirrali bo‘lib, pastga bir-birining ustiga mingashib turadi.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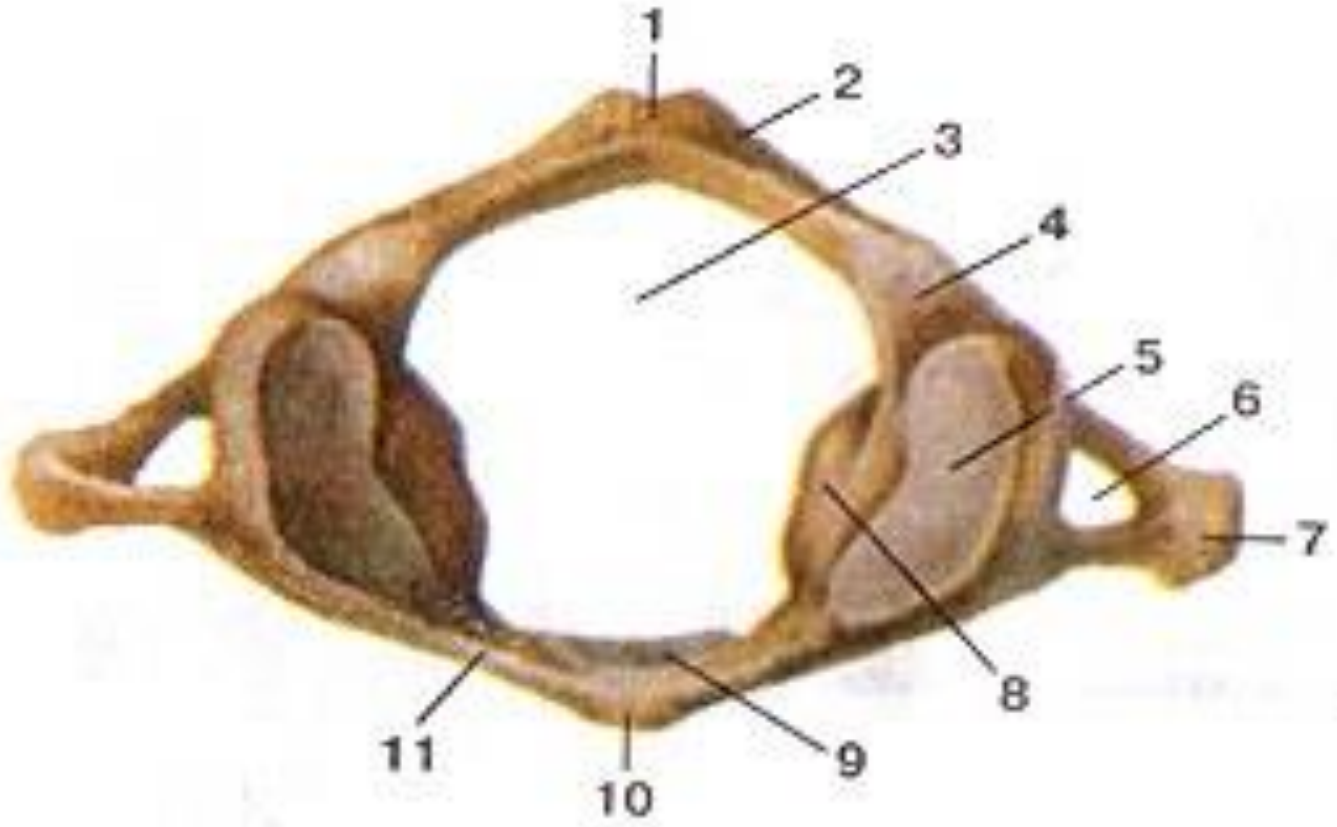
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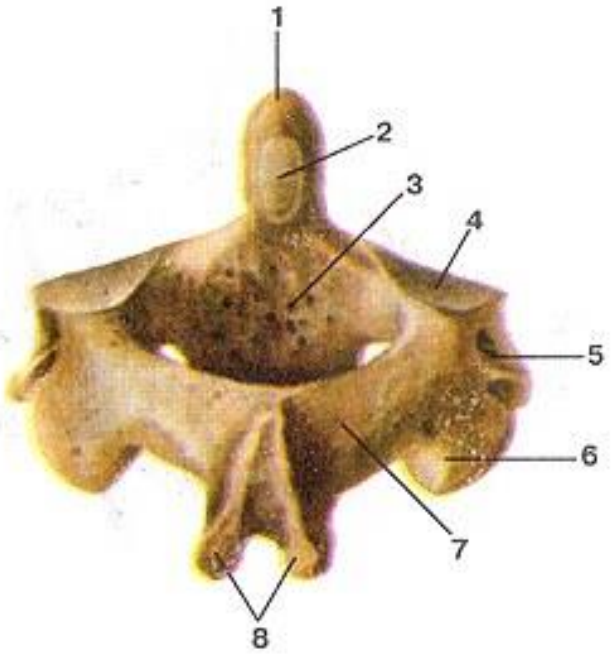
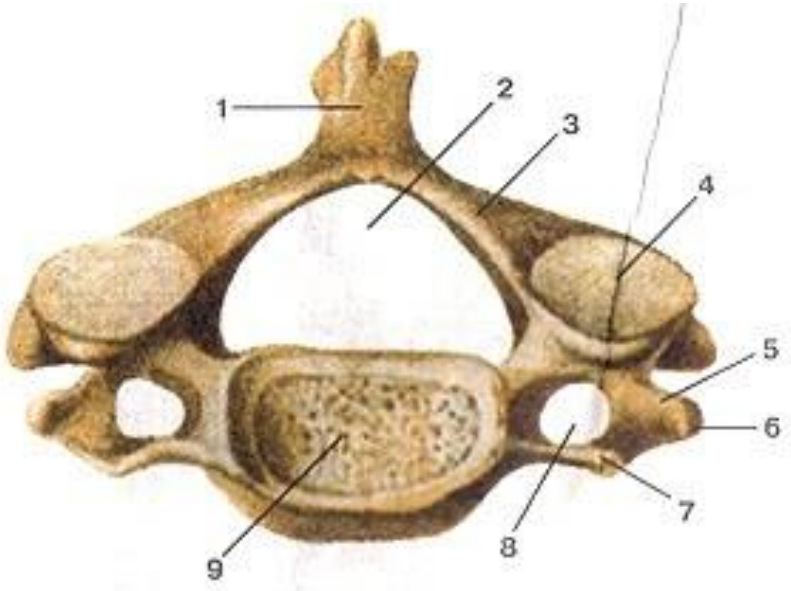
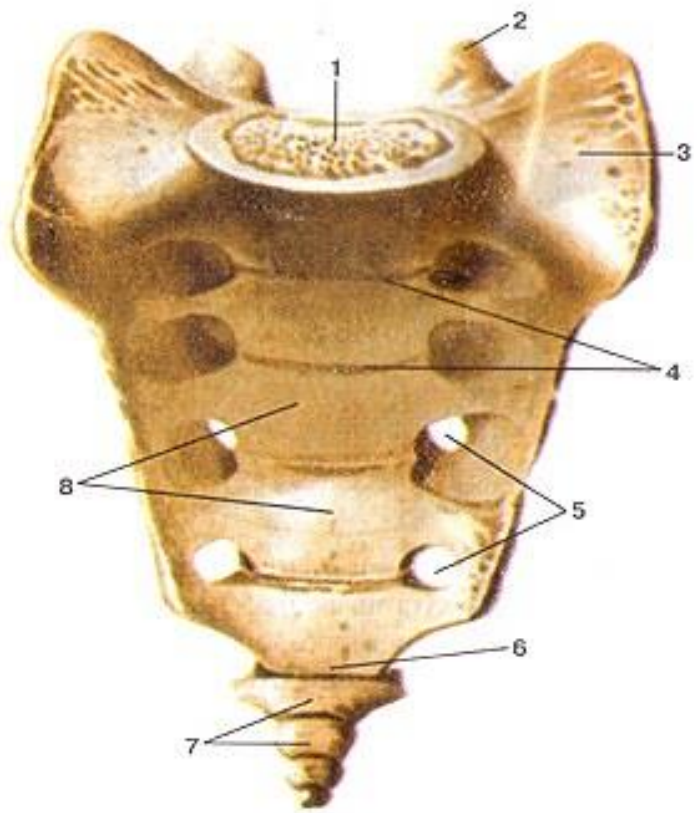
Buyin umurtqalari (vertebrae carvicales) bo‘g‘im o‘simtalari qiyshiq, orqa o‘simtalari ayri shaklda, umurtqa teshigi uchburchak, mayda va yon o‘simtasida yon teshik bo‘ulishi bilan boshqa umurtqalardan farq qiladi. Bo‘yinning birinchi umurtqasi *atlant*, ikkinchisi *aksis* deyiladi. Atlant halqa shaklida bo‘lib, tanasi va o‘tkir o‘simtasi bo‘lmasligi bilan bo‘yinning boshqa umurtqalaridan farq qiladi. Atlantda orqa va oldingi yoylar bo‘lib, ularda oldingi va orqa do‘mboqlar bor. Umurtqa teshigi boshqa umurtqalarnikidan kattaroq. Aksis yoki ikkinchi bo‘yin umurtqasi tishsimon o‘simtasi bo‘lishi, yuqorigi bo‘gim o‘simtalari bo‘lmasligi bilan bo‘yinning boshqa umurtqalaridan farq qiladi. U bo‘yin umurtqasining orqa o‘simtasi uzun, yo‘g‘on va ikkiga ayrilmagan bo‘lib, tirik odamda teri ostida bilinib turadi.



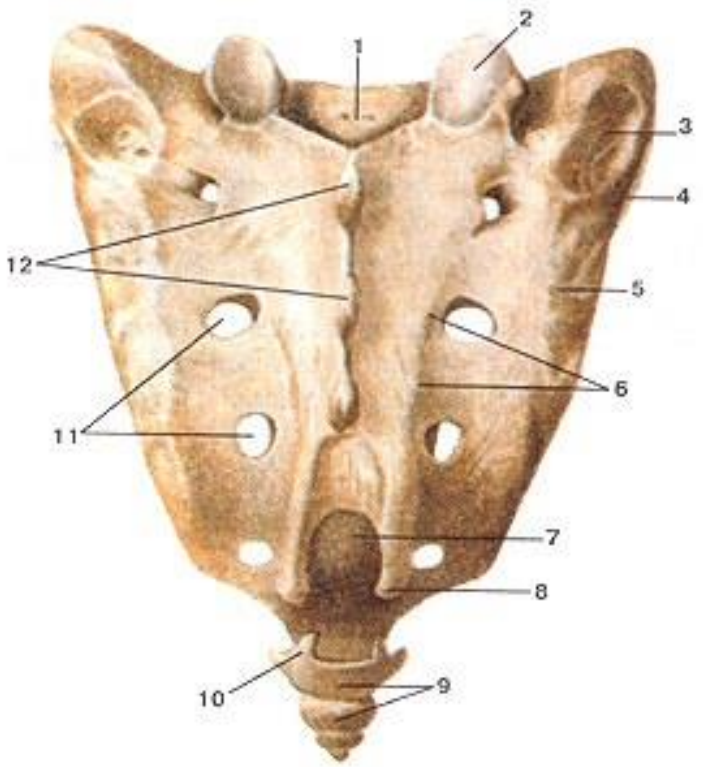
Vertebra cervicalis secunda
I - dens; 2- facies articularis posterior; 3- corpus vertebrae; 4- facie articularis superior; 5 - processus transversus; 6- processus articular! inferior; 7 - arcus vertebrae; 8 - processus spinosus.
Fig. 7. The second cervical vertebra (axis).



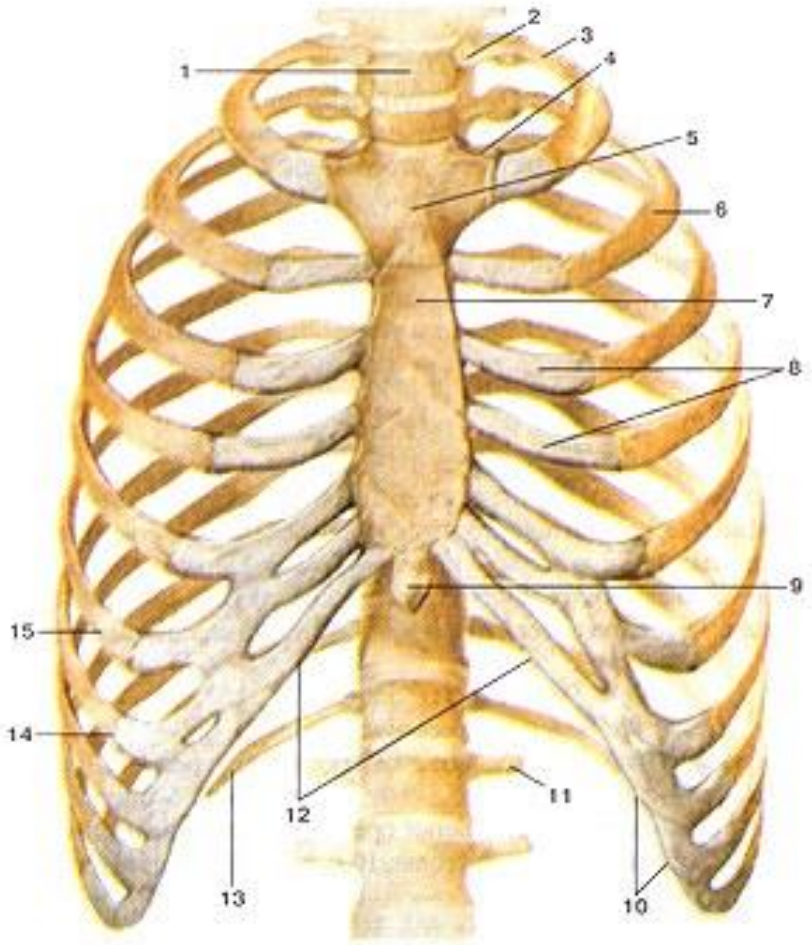
Vertebra cervicalis
1-processus spinosus; 2-foramen vertebrale; 3-arcus vertebrae; 4-processus articularis superior; 5-processus transversus; 6-tuberculum posterius processus transversus; 7-tuberculum caroticum; 8-foramen transversarium; 9-corpus vertebrae



Dumg‘aza suyagi (os sacrum) uchburchak shaklda, odam yoshligida ayrim umurtqalardan iborat bo‘ladi, keyinchalik ular birlashib, yaxlit dumg‘aza umurtqasini hosil qiladi. Dumg‘aza suyagining yuqorigi tomoni keng bo‘lib *asosi*, pastki tomoni tor bo‘lib *uchi* deyiladi. Yon tomonida quloqsimon bo‘g‘im yuzasi joylashgan. Shu yuza bilan u nomsiz suyakka birlashadi.



Dumg‘aza suyagining oldingi tomonida ko‘ndalang chiziqlar bo‘lib, ular har qaysi umurtqaning birikish chegarasini ifodalaydi. Suyakning oldingi va orqa tomonida dumg‘aza teshiklari bo‘ladi. By teshiklar umurtqa o‘ymalarining qo‘shilishidan hosil bo‘ladi. Umurtkalar orqa o‘simtalarining birlashib ketishidan dumg‘azaning o‘rta qirrasi, yon o‘simtalarining birlashib ketishidan tashqi qirrasi, bo‘g‘im o‘simtalarining birlashib ketishidan bo‘g‘im qirrasi hosil bo‘ladi. Umurtqa teshiklari birlashib, dumg‘aza kanalini hosil qiladi. Suyakning yuqori orqa tomonida bir juft bo‘g‘im o‘simtasi joylashgan. Shu o‘simta bilan u V bel umurtqasiga birikadi.



Thorax

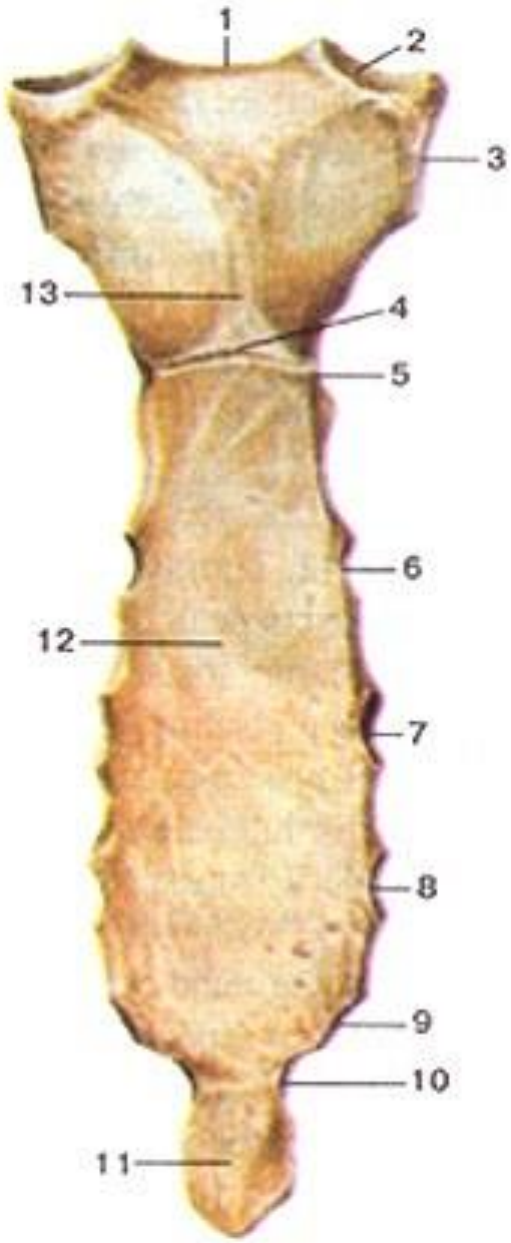
1-vertebra thoracica (Thl); 2-caput costae primae; 3-costa prima; 4-incisura clavicularis sterni; 5-manubrium sterni; 6-costa II; 7-corpus sterni; 8-cartilagines costales; 9-processus xiphoideus; 10-arcus costal-is; 11-processuscostalis vertebrae lumbalis (LI); 12-angulus infraster-nalis; 13-costa XI I; 14-costaVII; 15-costa VIII.

Ko’krak qafasi suyaklari ko’krak qafasining ichidagi bo’shliqga devor vazifasini o’taydi, kirish va chiqish tuynuklariga ega. Ko’krak qafasi ko’krak, qovurg’a, ustundan iborat. Odatda ko’krak qafasi 12juft qovurg’lardan tashkil topgan bo’lib, ulardan birinchi yettitasi orqaga(sternum) yetadi. Qolgan beshta juftdan sakkizinchi, to’qqizinchi, o’ninchilari costal chegaraning qismi. Qovurg’alarning qolgan ikki jufti odatda yon tomondagi qorin muskulida tugaydi.

Har bir qovurg’a bosh, bo’yin va tanaga bo’lingan. Qovurg’aning tana va bo’ynida kichik jarayon kechib, u yerda qovg’a keskin oldinga mo’ljallanadi. Qovurg’alar ichki va tashqi o’rtada joylashgan muskullar orqali harakatlanadi. Ular ko’krak qafasini kenaytirib va qisqartirib nafas olish uchun sharoit yaratib beradi. Qo’shimcha muskullar, qo’shimcha nafas olish muskullari ko’krak qafasining harakatlanishini ta’minlab beradi.

Adolf Faller., Michael Schuenke-The Human Body - “An Introduction to Structure and Function” ThiemeStuttgart · New Yorkhttp: //www.bestmedbook.com/ 63-65-бет

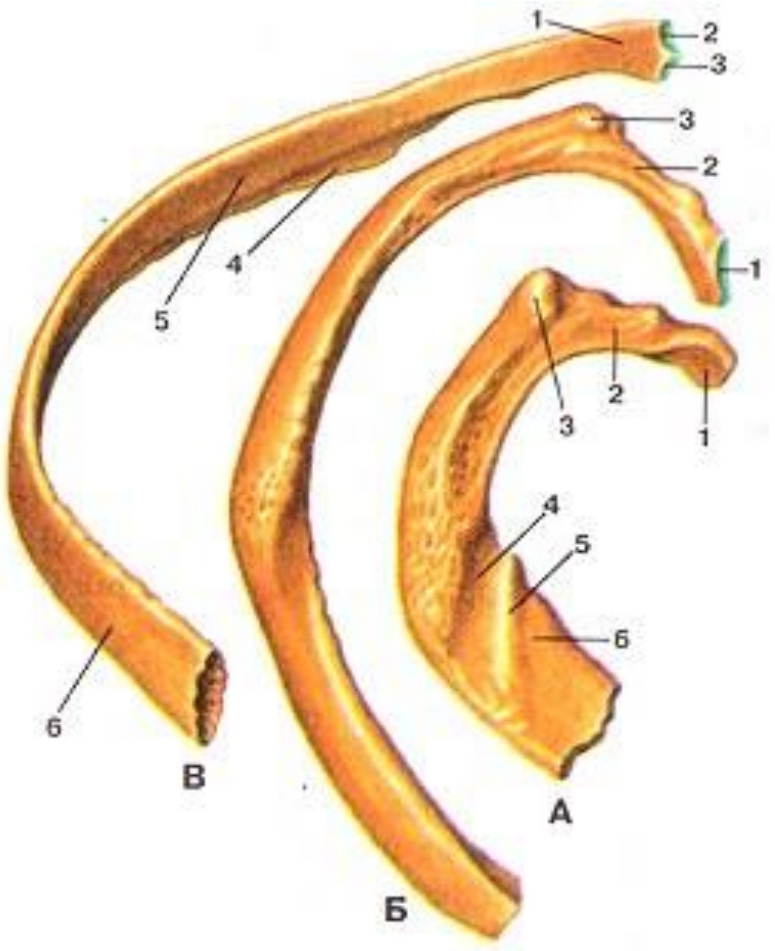
Boundaries.—The posterior surfaceis formed by the twelve thoracic vertebræ and the posterior parts of the ribs. It is convex from above downward, and presents on either side of the middle line a deep groove, in consequence of the lateral and backward direction which the ribs take from their vertebral extremities to their angles. The anterior surface,formed by the sternum and costal cartilages, is flattened or slightly convex, and inclined from above downward and forward. The lateral surfacesare convex; they are formed by the ribs, separated from each other by the intercostal spaces, eleven in number, which are occupied by the Intercostal muscles and membranes.The upper openingof the thorax is reniform in shape, being broader from side to side than from before backward. It is formed by the first thoracic vertebra behind, the upper margin of the sternum in front, and the first rib on either side. It slopes downward and forward, so that the anterior part of the opening is on a lower level than the posterior



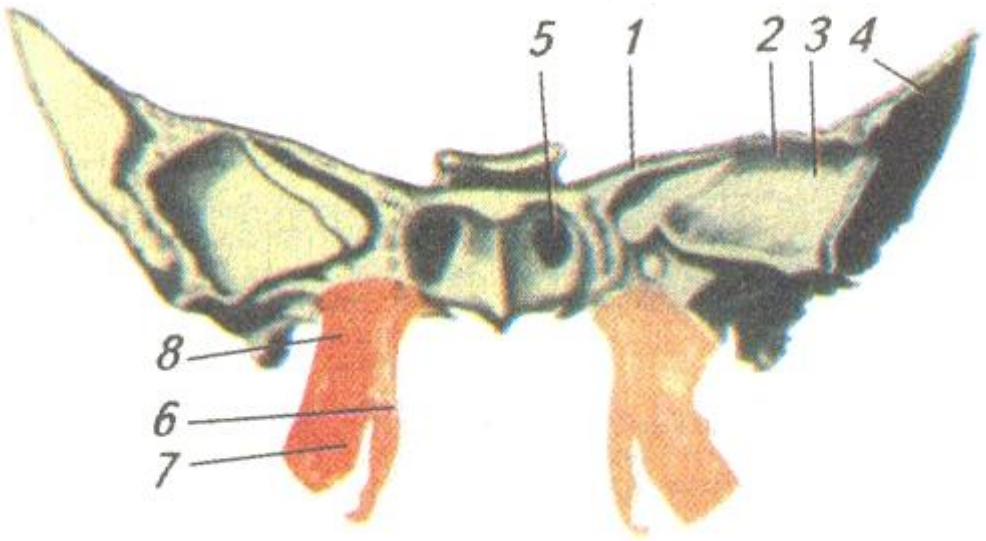
Sternum

1-incisura jugularis; 2-incisura clavicularis; 3-incisura costalis I; 4-angulus sterni; 5-incisura costalis II; 6-incisura costalis III; 7-incisura costalis IV; 8-incisura costalis V; 9-incisura costalis VI; 10-incisura costalis VII; 11 -processus xiphoideus; 12-софи5 sterni; 13-manubrium sterni.

Costae



Qovurg‘alar orqa suyakli qismidagi boshi va do‘mboqlari bilan umurtqalar tanasiga va ko‘ndalang o‘sig‘iga birikadi. Boshi bilan ikki umurtqa tanasi o‘rtasidagi bo‘g‘ini yuzasiga bosh bo‘g‘in hosil qilib birikadi. Ikkinchi bo‘g‘im esa qovurg‘a do‘mbog‘i ko‘ndalang o‘sig‘ining o‘rtasidagi bo‘g‘im sathiga birikadi. XI va XP qovurg‘alar ko‘ndalang o‘simtalar bilan bo‘g‘im xosil qilmaydi. I, XI va XII qovurg‘alarning boshi ikkita umurtqa orasiga kirmasdan, o‘ziga qarashli umurtqa tanasi bilan birikadi.



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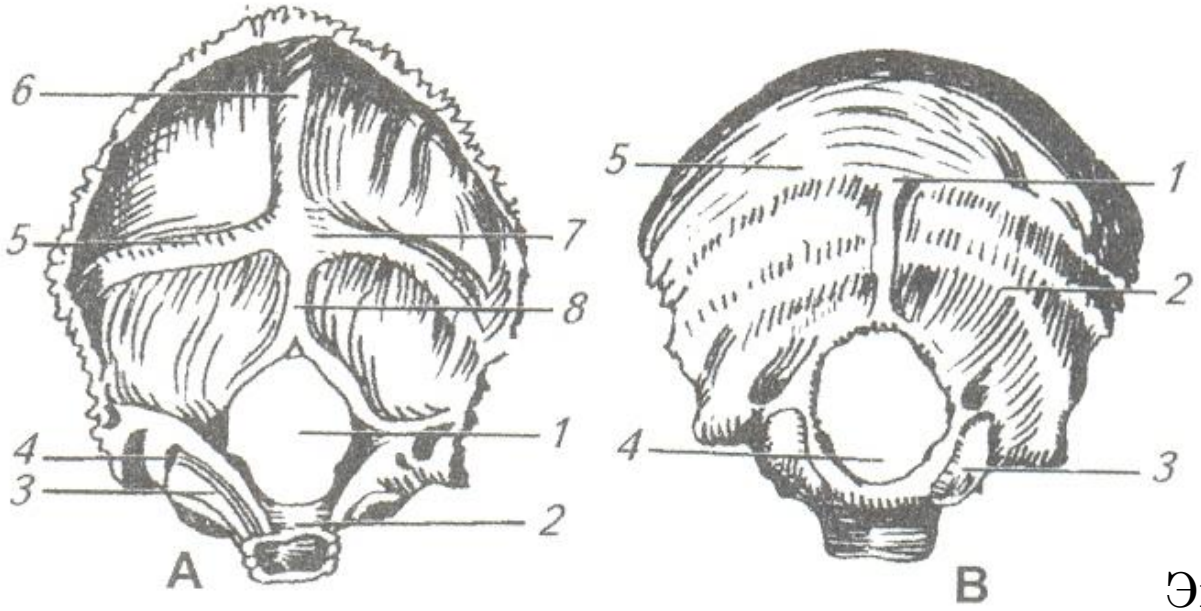
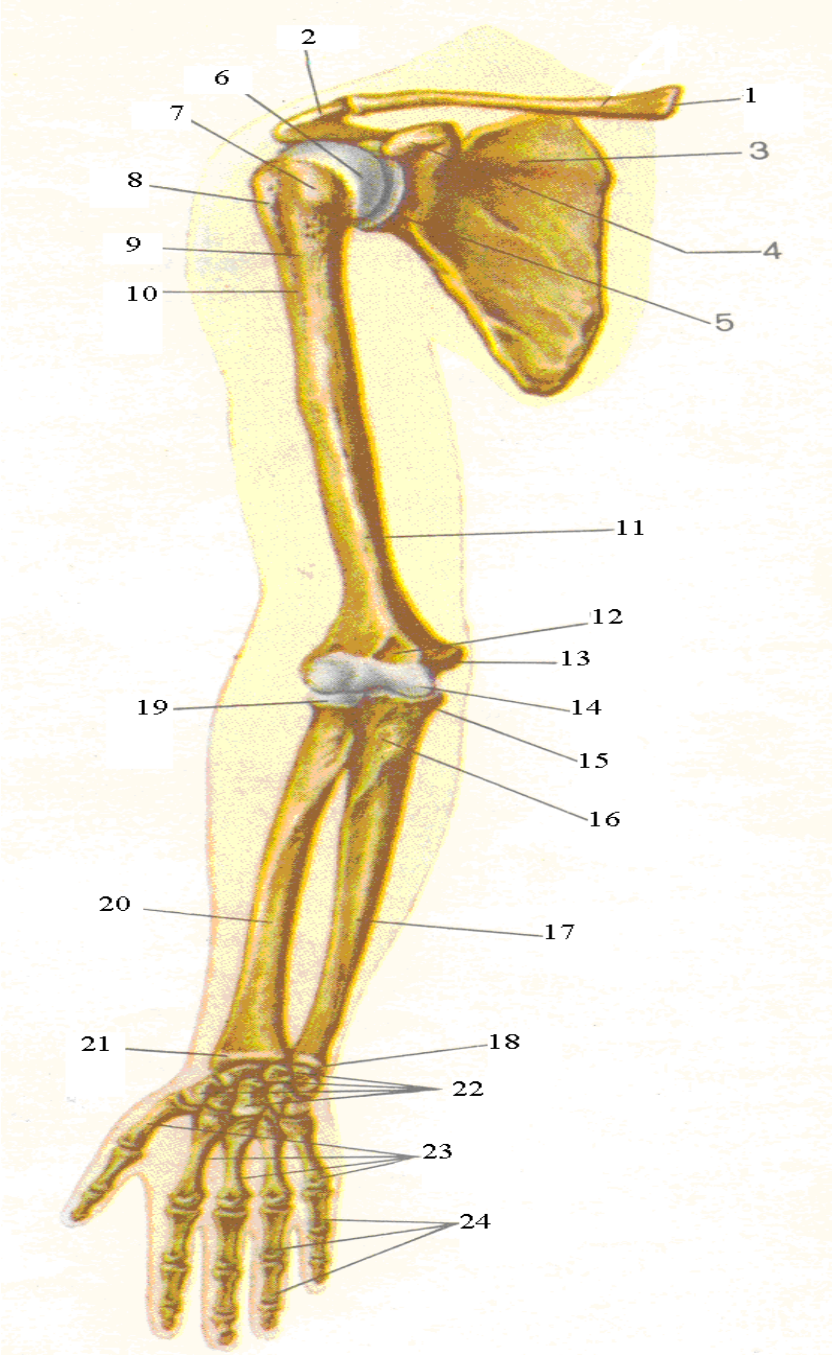


Энса суяги.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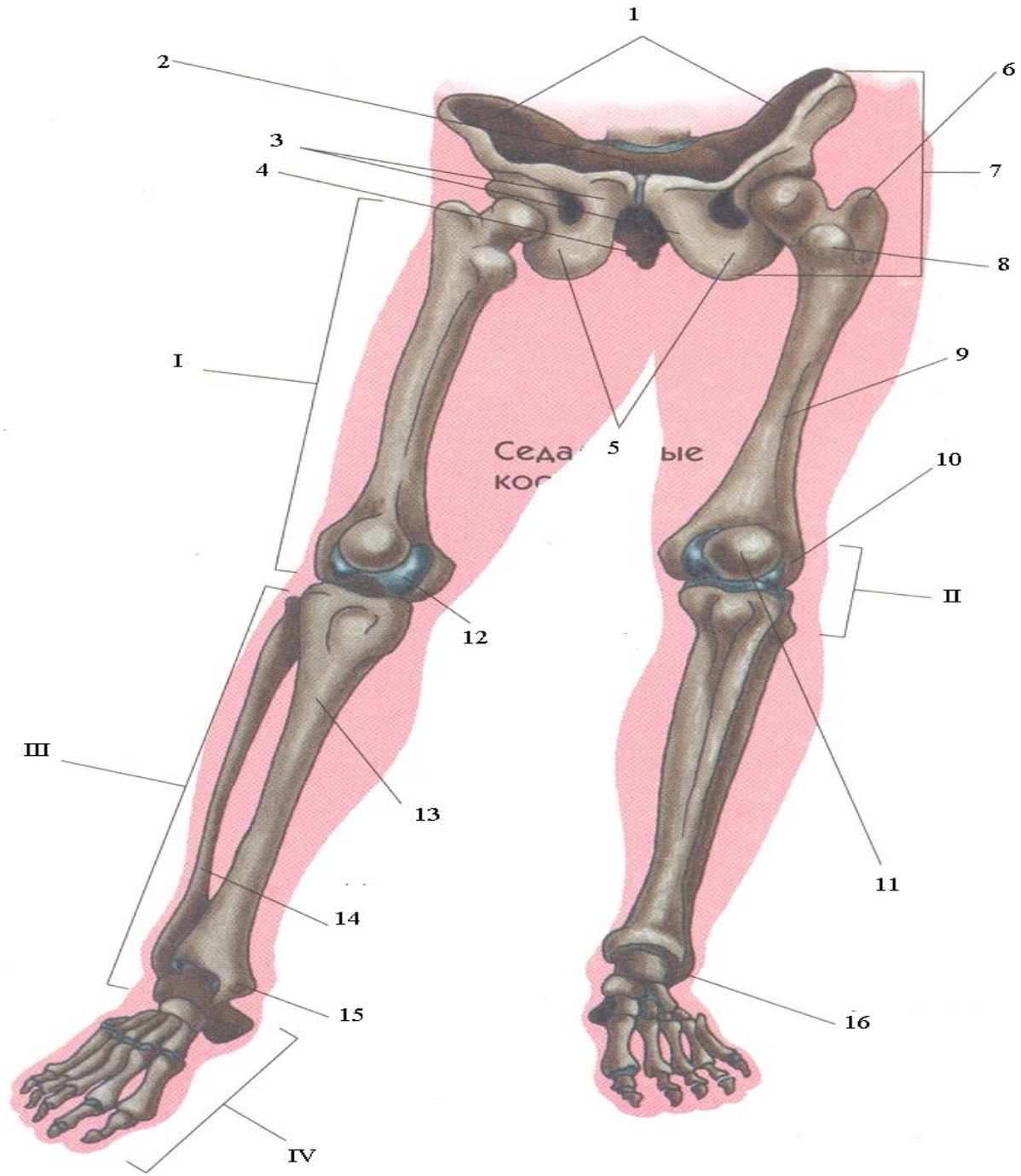
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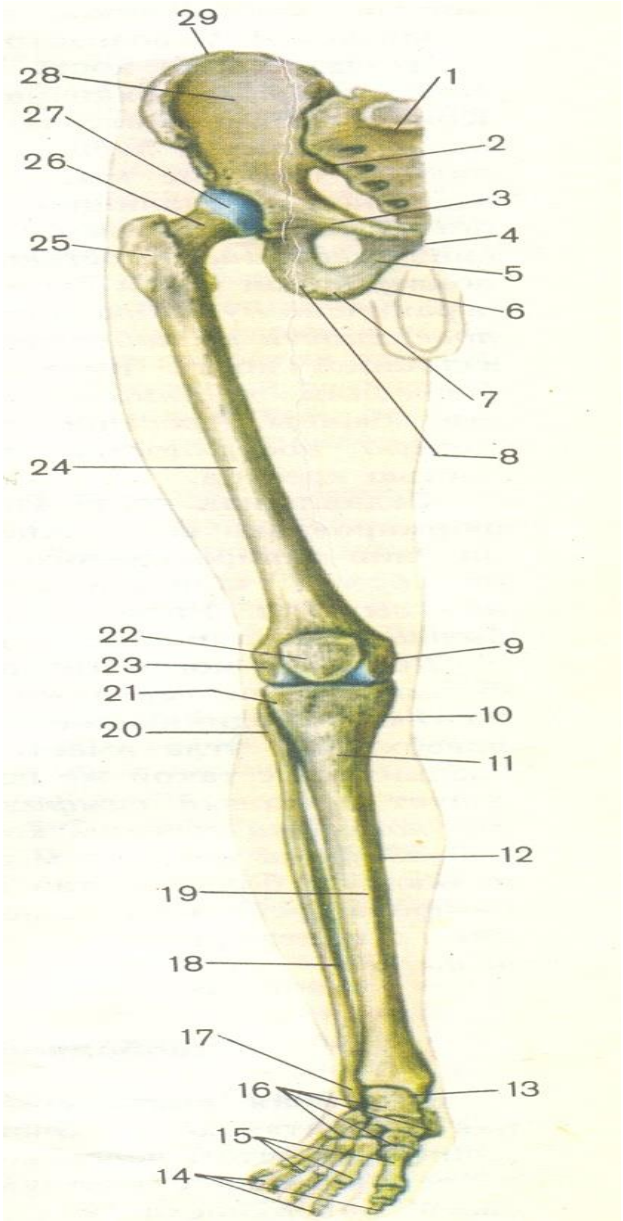
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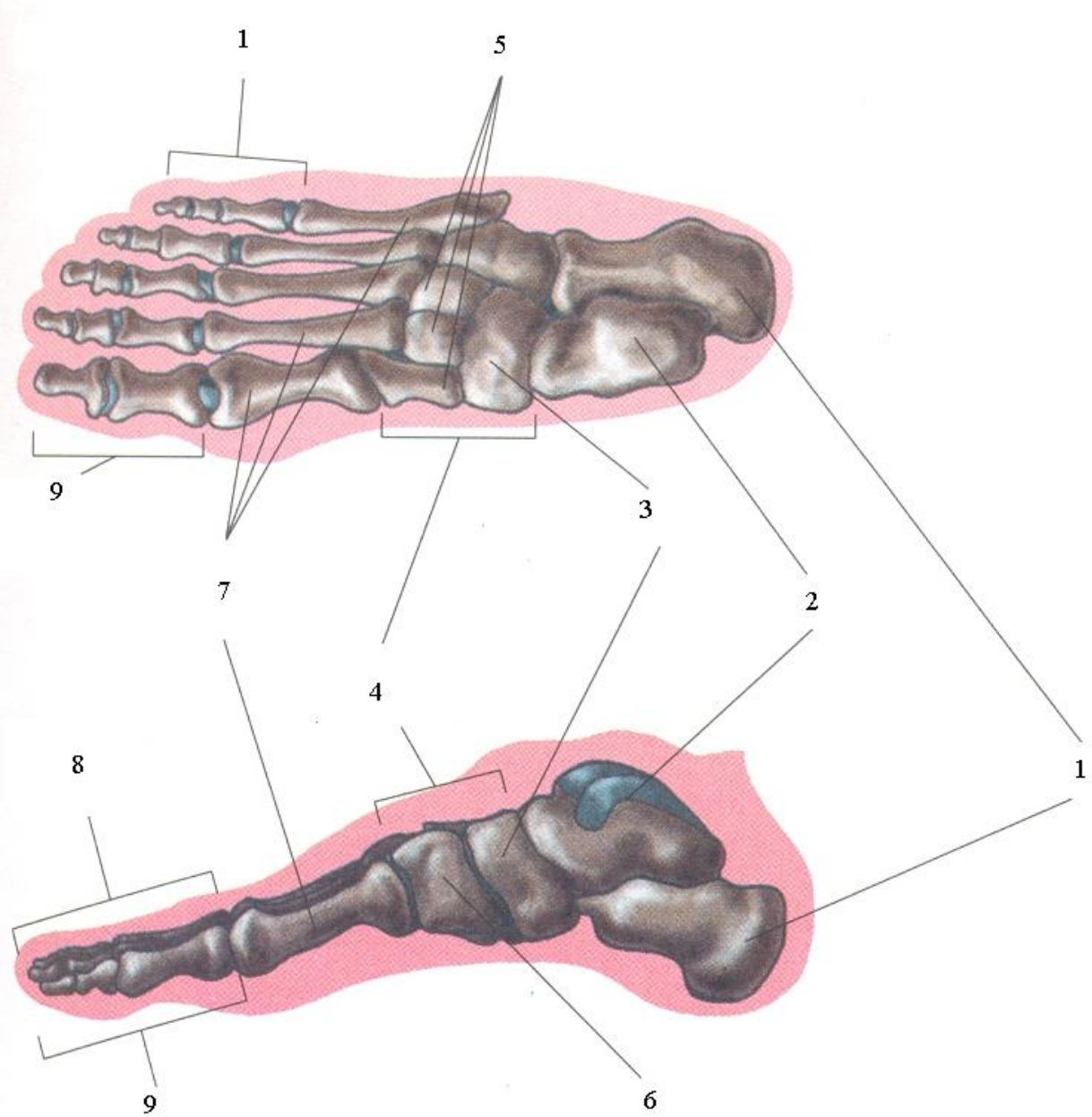
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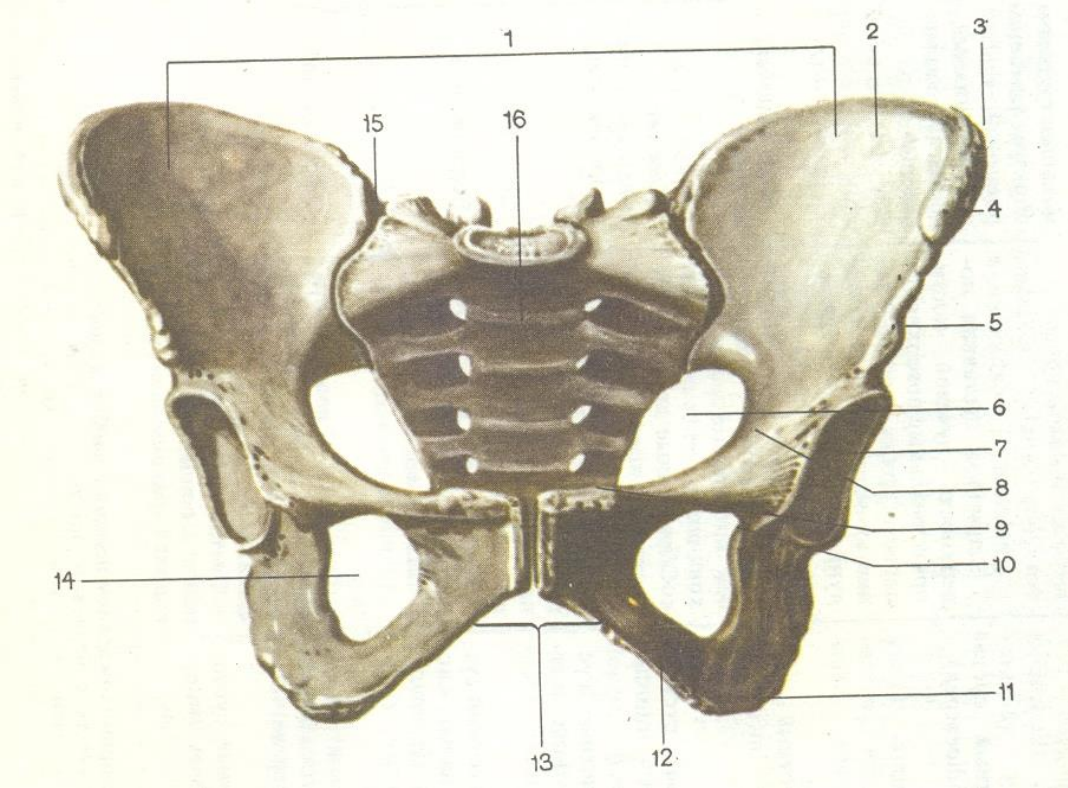
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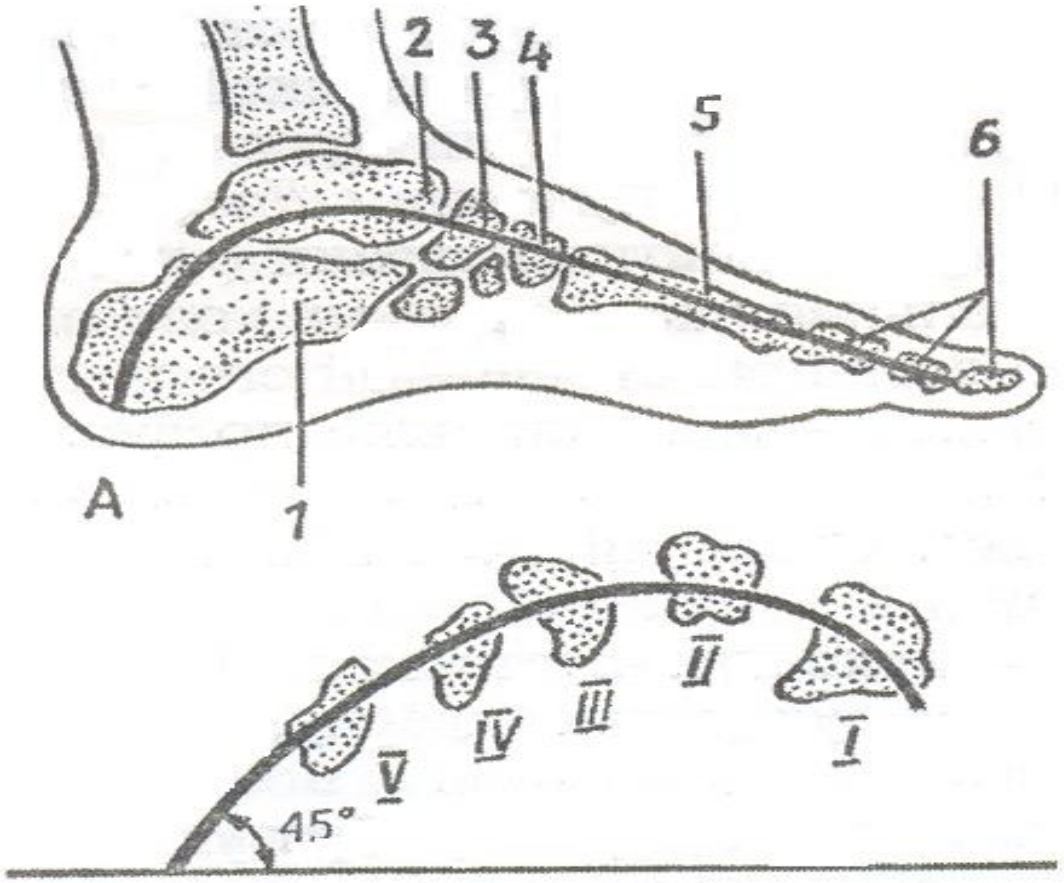

Товон гумбази схемаси.

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