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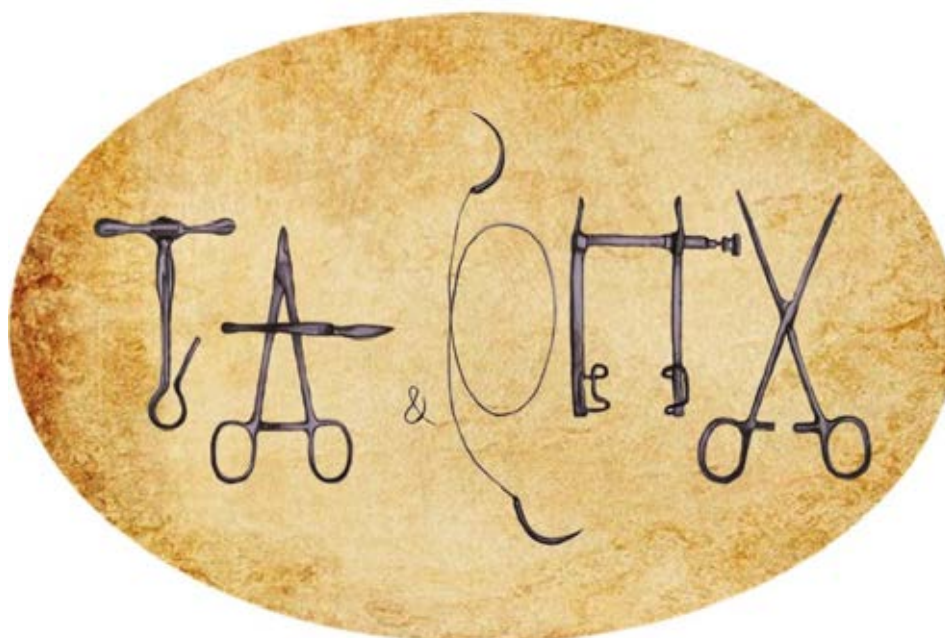
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**Электронная версия учебно-методического пособия
для студентов международного
факультета**

Colloquium on topographic anatomy and operative surgery of the extremities

Tests for the Colloquium



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1. The stages of the operation, as a technological process, are:

- 1) ☐ Dissection of the serous membrane
- 2) ☒ Operative access
- 3) ☐ Hemostasis in the wound
- 4) ☒ Operative technique
- 5) ☒ Completion of the operation - closure of the surgical wound

2. In open operations (with the formation of a surgical wound), the following types of surgical approaches are used:

- 1) ☒ Straight line (through the projection of the body)
- 2) ☒ Extra-sectional
- 3) ☐ Oblique
- 4) ☒ Projective
- 5) ☒ Indirect (away from the projection lines of authority)

3. Performing endosurgical operations is possible by:

- 1) ☐ Craniotomy (craniotomy)
- 2) ☒ Thoraco - and laparoscopy
- 3) ☒ Hysteroscopies
- 4) ☐ Exposures of muscles, tendons, arteries, veins, nerves
- 5) ☒ Intravascular access

4. The basic rules of surgical incision are:

- 1) ☐ Ensuring straightness of the cut
- 2) ☒ The strict layer separation region
- 3) ☒ Each layer of the region is separated perpendicular to its plane
- 4) ☒ Preliminary determination of the projection of the neurovascular bundle
- 5) ☐ Simultaneous dissection of the layers of the anterior area of the shoulder when accessing a.brachialis

5. The main (typical) operational techniques that make up the stages of an open operation are:

- 1) ☒ Separation of layers of the area (organ)
- 2) ☐ Wound drainage
- 3) ☒ Hemostasis in the wound
- 4) ☒ Connection (joint) of the layers pane (on) and tying a knot (knots)
- 5) ☒ Removing the skin seam

6. The conditions that determine the basic equipment (typical) operational acceptance (by N.I. Pirogov):

- 1) ☐ Sufficient illumination of the operating field
- 2) ☒ Type of pathological process
- 3) ☒ Anatomical structure of the organ (region)
- 4) ☒ Physiological characteristics of the organ (region)
- 5) ☐ The state of the cardiovascular system of the patient

7. Operation technique is:

- 1) ☒ The essence of surgery

- 2) ☐ Sufficient exposure of the target organ of the operation
- 3) ☒ The set of actions of the surgeon on the object of the operation, aimed at the elimination of the pathological focus and recovery of the patient (or relief of his suffering and prolongation of life)
- 4) ☐ The provision of the rules of asepsis
- 5) ☒ The main, decisive stage of the operation

8. Requirements for surgical incision:

- 1) ☐ The shortest approach to the object of operational reception
- 2) ☒ Incision taking into account the position of the neurovascular bundle, the direction of muscle bundles and fibers of aponeurosis
- 3) ☒ Cosmetic postoperative scar
- 4) ☒ To ensure complete visualization of the wound
- 5) ☒ Minimal trauma of organs during operative access

9. In the process of surgery, the following groups of surgical instruments are used:

- 1) ☒ For separation of layers of area and organs
- 2) ☒ To stop bleeding (hemostasis)
- 3) ☒ Fixing tools and special tools
- 4) ☒ To connect the layers of the region and on
- 5) ☐ Tools to limit the operational field

10. Rules of use of surgical instruments:

- 1) ☒ The tool is used only for its intended purpose and in good condition
- 2) ☒ The operating hand should feel the working part of the tool

- 3) ☐ The surgical instrument must have sufficient strength
- 4) ☒ All actions are performed by instruments smooth rhythmic movements based on the historical experience of handling techniques with each of them
- 5) ☒ Take care of organs and tissues at all stages of surgery

11. Layers, areas and organs are separated in the following ways:

- 1) ☒ Cut with cutting tools
- 2) ☒ Disconnect in the stupid way
- 3) ☒ Cut sawing tools and apparatus
- 4) ☐ By hydraulic dissection
- 5) ☒ Using physical methods (ultrasonic cutting, cryodestruction, laser and plasma "scalpels»)

12. When performing the cut, the scalpel in the hand is fixed in the position:

- 1) ☒ "Writing pen»
- 2) ☒ «Table knife»
- 3) ☐ The position of the scalpel in the brush does not matter
- 4) ☒ «Linkage»
- 5) ☒ "In the fist" (for amputation knife)

13. According to the time of application, the following surgical sutures are distinguished:

- 1) ☒ Primary
- 2) ☒ Primary deferred
- 3) ☐ Suture time does not matter

4) ☒ Secondary early

5) ☒ Secondary late

14. The angle of the blade of the scalpel and the surface of the layer when applying the cut is:

1) ☐ It doesn't matter

2) ☒ At the beginning of the cut - 90°

3) ☒ In the process of cutting - 45°

4) ☒ At the end of the cut - 90°

5) ☐ During the incision - 180°

15. Electroscalpel, laser and plasma "scalpel" in addition to the separation of the parenchymal organ provide:

1) ☐ Smooth the edges of the wound body

2) ☒ Hemostasis

3) ☒ Asepsis

4) ☐ Elastic

5) ☐ Sufficient visualization of the wound

16. What should I make sure before suturing a surgical wound?

1) ☐ Is the view of the bottom and walls of the wound sufficient

2) ☐ In the degree of reduction of the ends of the muscles

3) ☒ In the thoroughness of hemostasis

4) ☐ Is it possible to bring together the edges of your own fascia?

5) ☒ In the absence of accidentally left foreign bodies (gauze balls, napkins, surgical instruments)

17. The cutting (triangular) needle is used for a seam:

- 1) ☒ The periosteum (perichondrium)
- 2) ☒ Muscles
- 3) ☐ Livers
- 4) ☒ Own fascia (aponeurosis)
- 5) ☒ Skin with subcutaneous base

18. Round atraumatic needles are used for the seam:

- 1) ☒ Arteries and veins
- 2) ☒ Parenchymal organ
- 3) ☐ Periosteum
- 4) ☒ Hollow organs of the digestive system and genitourinary apparatus
- 5) ☒ Nerves

19. The objectives of the primary surgical treatment of the wound are:

- 1) ☒ Providing hemostasis
- 2) ☐ Intra-arterial antibiotic therapy
- 3) ☒ Prevention of wound infection
- 4) ☐ The formation of contraperture
- 5) ☒ Drainage of the wound by suturing it to the drainage

20. As external reference points for the construction of the boundaries of regio axillaris, the lower edges of the muscles are used:

- 1) ☐ m. teres minor
 - 2) ☐ subclavian
 - 3) ☒ m. pectoralis major
 - 4) ☐ the spinous part of the deltoid
 - 5) ☒ m. latissimus dorsi
-

21. Fat of the fossa axillaris, contains:

- 1) ☒ a. et V. axillaris with their branches
 - 2) ☐ n. phrenicus (CIII-CIV (CV)
 - 3) ☒ the ultimate branches of the II-III intercostal nerves
 - 4) ☒ pl. brachialis with nerves departing from it (CV-CVIII)
 - 5) ☒ axillary lymph nodes
-

22. Through the holes in the posterior wall of the axillary fossa, the subfascial cellular space is communicated with:

- 1) ☐ spatium subpectorale
 - 2) ☒ subdeltoid space
 - 3) ☐ anterior muscular-fascial shoulder bed
 - 4) ☒ scapular space
 - 5) ☐ posterior muscular-fascial shoulder bed
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23. The walls of spatium subpectoralis superficialis are formed:

- 1) ☐ clavícula
-

- 2) ☒ clavicular-pectoral fascia on the anterior surface of the pectoralis minor
 - 3) ☐ coracobrachialis muscle
 - 4) ☒ a deep plate of thoracic fascia along the posterior surface of m. pectoralis major
 - 5) ☐ the spine of the scapula
-

24. The deep subpectoral space at the front and rear is limited:

- 1) ☐ the pectoralis major muscle
 - 2) ☒ small pectoral muscle
 - 3) ☐ fascia of the coracobrachialis muscle
 - 4) ☒ a deep leaf of the fascia clavipectoralis covering the thoracic wall
 - 5) ☐ the deltoid fascia
-

25. The cellular space of the neurovascular bundle of the axillary fossa has features:

- 1) ☒ located inside the vagina bundle
 - 2) ☒ top limited by the clavicle
 - 3) ☒ formed by splitting of the posterior wall of the fascial sheath of the coracobrachialis muscle
 - 4) ☐ fixed to the small pectoral muscle fascia
 - 5) ☒ axillary vein is separated by a septum from the same artery and nerves (branches of the brachial plexus)
-

26. The foramine quadrilaterum of the posterior wall of the axillary fossa is limited:

- 1) ☒ surgical neck of the humerus
- 2) ☒ long head triceps brachii
- 3) ☐ m. brachialis

- 4) ☒ Big round and m. latissimus dorsi
- 5) ☒ small round and subscapularis muscles
-

27. In the Delta region through foramen quadrilaterum pass:

- 1) ☐ axillary artery
- 2) ☒ a. circumflexa humeri posterior, the artery and two accompanying veins
- 3) ☐ subscapular artery and vein
- 4) ☒ axillary nerve (CV - CVIII)
- 5) ☐ lateral thoracic artery and two veins accompanying it
-

28. Benchmarks against which for neurovascular bundle axillary region are distinguished triangles are:

- 1) ☐ the head of the humerus
- 2) ☒ clavicle
- 3) ☐ the coracoid process of the scapula
- 4) ☒ the pectoralis major muscle
- 5) ☒ small pectoral muscle
-

29. Selection of the clavipectoralis, pectoralis and subpectoralis triangles throughout the neurovascular bundle regio axillaris is associated with the difference:

- 1) ☐ anatomic relationship of the v. cephalica with the pectoralis major and deltoid muscles
- 2) ☒ the composition of the neurovascular bundle
- 3) ☒ syntopia of the circulatory, lymphatic and nervous systems of the region
- 4) ☒ the separation of the branches
-

- 5) ☒ anatomical relationship with the muscles of the anterior wall fossa axillaris
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30. B trigonum pectorale to a. axillaris adjacent:

- 1) ☒ front - small pectoral muscle
- 2) ☒ lateral-lateral bundle of plexus brachialis
- 3) ☐ medial-medial subcutaneous vein of the arm
- 4) ☒ behind - the posterior bundle of the brachial plexus and m. subscapularis
- 5) ☒ medial-medial bundle of the brachial plexus and V. axillaris
-

31. In trigonum subpectorale, in relation to the axillary artery, the branches of the brachial plexus are arranged as follows:

- 1) ☐ medial and radial nerve
- 2) ☒ lateral-muscular-cutaneous nerve
- 3) ☒ anterior - n. medianus formed by the lateral and medial roots
- 4) ☒ medial - ulnar nerve and medial cutaneous nerves of the shoulder and forearm
- 5) ☒ back - axillary nerve
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32. Name nerves that are not related to the lower fixed portion of the shoulder joint capsule (between m. subscapularis on top and tendon m. triceps brachii medially):

- 1) ☒ radial
- 2) ☒ ulnar
- 3) ☐ axillary
- 4) ☒ musculocutaneus
- 5) ☒ medianus
-

33. To the lateral wall of the foramen quadrilaterum (collum chirurgicum humerus) adjacent:

- 1) ☐ a. subscapular
- 2) ☐ n. radialis
- 3) ☒ n. axillaris
- 4) ☒ a. circumflexa humeri posterior
- 5) ☐ a. circumflexa scapulae

34. The purulent process (or hematoma) of regio axillaris can spread to the area:

- 1) ☒ deltoid
- 2) ☒ scapular
- 3) ☒ front area of the shoulder
- 4) ☒ lateral neck area
- 5) ☐ anterior region of forearm

35. The projection line of the axillary artery corresponds to the following external landmarks:

- 1) ☒ anterior border of hair growth of the axillary region (N.I. Pirogov)
- 2) ☐ the lower edge of the pectoralis major muscle
- 3) ☐ medial edge of the coracoid brachial muscle
- 4) ☒ the upward continuation of the sulcus bicipitalis medialis
- 5) ☒ the border of the anterior and middle thirds of the width of the axillary fossa

36. The supraspinatus bone-fibrous bed of the scapula is limited:

- 1) ☒ fossa supraspinata rear surface of the scapula

- 2) ☐ acromion
-
- 3) ☒ the spine of the scapula
-
- 4) ☒ supraspinatus fascia
-
- 5) ☐ the neck of the scapula
-

37. The supraspinatus bone-fibrous bed of the scapula contains:

- 1) ☐ trapezius muscle
-
- 2) ☒ the supraspinatus muscle
-
- 3) ☒ supraspinatus cellular spaces space (between the scapula and the supraspinatus muscle)
-
- 4) ☒ suprascapular artery with its accompanying veins
-
- 5) ☒ the supraspinatus nerve (CV-CVI)
-

38. In formation infraspinatus bone-fibrous of scapula involved:

- 1) ☐ deltoid
-
- 2) ☒ subacute fascia
-
- 3) ☒ spina scapulae
-
- 4) ☒ infraspinatus fossa of the posterior surface of the scapula
-
- 5) ☐ the fascia of the deltoid muscle
-

39. Infraspinatus bone-fibrous of the scapula includes:

- 1) ☒ a. circumflexa scapulae
-
- 2) ☒ infraspinatus cellular spaces space (between the scapula and infraspinatus muscle)
-
- 3) ☐ axillary nerve
-

- 4) ☒ teres minor and infraspinatus muscles
- 5) ☒ the continuation of the suprascapular artery (truncus thyrocervicalis)
-

40. The radial nerve channel (shoulder-muscle channel) is formed:

- 1) ☐ shoulder muscle
- 2) ☐ deltoid tuberosity of humerus
- 3) ☒ triceps muscle
- 4) ☐ interstitial sulcus
- 5) ☒ sulcus n. radialis of the humerus
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41. The projection of the radial nerve in the posterior area of the shoulder corresponds to the line connecting the landmarks:

- 1) ☒ the middle of the rear edge m. deltoideus
- 2) ☐ interarticular sulcus of the humerus
- 3) ☐ medial sulcus of the biceps
- 4) ☐ sulcus of the radial nerve of the humerus
- 5) ☒ the lower end of the sulcus bicipitalis lateralis
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42. The projection line of the brachial artery corresponds to:

- 1) ☐ humerus
- 2) ☒ the medial edge of m. biceps brachii
- 3) ☒ sulcus bicipitalis medialis
- 4) ☒ a line connecting the top of the armpit to the middle of the distance between the medial epicondyle of the humerus and the tendon of the biceps
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5) ☐ sulcus bicipitalis lateralis

43. "Arch" ("roof") of the shoulder joint form:

1) ☐ conical ligament

2) ☒ lig. coracoacromiale

3) ☒ acromion

4) ☒ processus coracoideus

5) ☐ the upper transverse ligament of the scapula

44. The synovial membrane of the shoulder joint forms depressions:

1) ☐ recessus sacciformis

2) ☒ interstitial vagina

3) ☒ subtendiniis bursa subscapularis muscle

4) ☒ in the lower part (axillary inversion - isolated from clinical positions)

5) ☐ the recesses are of no practical importance

45. The boundaries of the lower aperture of the axillary cavity correspond to:

1) ☐ anatomical neck of the humerus

2) ☒ the lower edge of the pectoralis major muscle

3) ☒ the lower edge of the m. latissimus dorsi m et. teres major

4) ☐ the spine of the scapula

5) ☒ lines connecting the lower edge of the pectoralis major muscle and the latissimus dorsi muscle on the chest wall and shoulder

46. The upper aperture of the axillary cavity is limited:

- 1) ☐ back - spina scapulae
- 2) ☒ front - clavicle
- 3) ☒ medial - I rib
- 4) ☐ on top of the acromion
- 5) ☒ rear - upper edge of scapula

47. The exit (lower) opening of the radial nerve channel (between the middle and lower thirds of the humerus) is limited:

- 1) ☐ lateral intermuscular fascial septum of the shoulder
- 2) ☒ brachial muscle
- 3) ☒ coracobrachial muscle
- 4) ☐ lateral epicondyle of the humerus
- 5) ☐ short head of the biceps

48. External reference points for determining the upper and lower boundaries of regio cubiti are:

- 1) ☐ Olecranon
- 2) ☒ The medial epicondyle humeri
- 3) ☐ The head of the radius bone
- 4) ☒ Epicondylus lateralis of the humerus
- 5) ☐ Coronoid process of ulna

49. Vertical lines drawn through the condyles of the humerus, the elbow area is divided into:

1) ☒ The anterior elbow region

2) ☐ Ulnar fossa.

3) ☒ Elbow joint

4) ☒ Posterior ulnar region

5) ☐ Sulcus lateralis ulnaris

50. External landmarks of the fossa, where with a slightly bent forearm probes the head of the radius, correspond:

1) ☐ Epicondylus medialis of the humerus

2) ☒ Olecranon

3) ☒ Lateral condyle of humerus

4) ☒ Pit 1 cm down from epicondylus lateralis

5) ☐ The coronoid process of the ulna

51. In the posterior ulnar region n.ulnaris is located in the furrow ("channel"), the walls of which are formed:

1) ☐ Medial crista of the condyle

2) ☒ The medial edge of the olecranon

3) ☐ The corocoid process of the ulna

4) ☒ Sulcus nervi ulnaris medial epicondyle of the humerus

5) ☒ Own fascia of the posterior ulnar region

52. Syndrome "channel" of the ulnar nerve is a complication:

1) ☒ Arthrosis of the elbow joint

- 2) ☒ Fracture of the medial condyle of the humerus
 - 3) ☐ Tourniquet in the upper third of the shoulder
 - 4) ☒ Habits to put elbows on the table
 - 5) ☒ Frequent flexion and extension of the forearm
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53. The pulse on the brachial artery in the anterior ulnar region is determined, focusing on:

- 1) ☐ The head of the radius
 - 2) ☒ The tendon of the biceps
 - 3) ☐ The coronoid fossa of the humerus
 - 4) ☐ The middle of the line between epicondyles of humerus
 - 5) ☒ The medial edge of the aponeurosis of the biceps (lacertus fibrosus; fascia Pirogovi)
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54. Subcutaneous veins of the anterior ulnar region that are used for intravenous injections:

- 1) ☐ Medial subcutaneous vein of the forearm
 - 2) ☒ Lateral saphenous vein of the arm
 - 3) ☒ Median elbow vein
 - 4) ☐ Median vein of forearm
 - 5) ☒ Medial subcutaneous vein of the arm
-

55. V. basilica et V. cephalica in the anterior ulnar region form anastomoses, which are indicated by letters:

- 1) ☐ «A»
- 2) ☒ «M»
- 3) ☐ «Y»

4) ☒ «И»

5) ☐ «Z»

56. The neurovascular bundle of the ulnar fossa between the brachial (medial) and brachial (lateral) muscles is:

1) ☐ n. ulnaris et a. collateralis ulnaris superior

2) ☐ Median nerve

3) ☒ Radial nerve

4) ☐ Lateral subcutaneous vein of the arm and lateral cutaneous nerve of the forearm

5) ☒ Radial collateral artery

57. On the capsule of the elbow joint between the shoulder muscle and m. supinator radial nerve gives branches:

1) ☐ Posterior cutaneous nerve of the forearm

2) ☒ Superficial branch

3) ☐ Posterior ulnar nerve of the shoulder

4) ☒ n. interosseus posterior

5) ☒ r. profundus

58. The brachial artery in relation to the aponeurosis of the biceps muscle of the shoulder is as follows:

1) ☐ Upwards

2) ☐ Medially

3) ☒ Lateral

4) ☒ Posterior

5) ☐ To front

59. Nerves are adjacent to the capsule of the elbow joint:

- 1) ☐ Medial cutaneous nerve of the forearm
- 2) ☒ Deep branch of the radial
- 3) ☐ Medianus
- 4) ☒ Ulnar
- 5) ☐ The surface branch of the radial

60. The insufficient development of the fibrous membrane explains the localization of the "weak" places of the capsule of the elbow joint:

- 1) ☐ At the level of the radius of the ulna
- 2) ☒ In the posterior-upper part from the sides of olecranon et m. triceps brachii, where the joint is not covered by muscles
- 3) ☐ At the head of the condyle of the humerus
- 4) ☒ Use deepening (recessus sacciformis) medial to the radius of the neck directed downwards
- 5) ☐ In the front-top section

61. The skin of the front area of the forearm can be used for plastic surgery on the face, because it:

- 1) ☒ Easily detaches from its own fascia
- 2) ☒ Thin
- 3) ☒ Mobile
- 4) ☒ The properties close to the skin of the face
- 5) ☐ Contains a large amount of sebaceous glands

62. To determine the projection of the median nerve in the anterior region of the forearm, the following external

landmarks are used:

- 1) ☒ The middle of the distance between epicondyles of humerus
- 2) ☐ The medial edge of the ulnar flexor of the wrist
- 3) ☒ Proximal end of thenar skin fold (when bringing the thumb)
- 4) ☒ The middle of the line between the styloid processes of the ulna and radius
- 5) ☐ The medial edge of the brachioradialis muscle

63. The projection line of the ulnar neurovascular bundle corresponds to the following external reference points:

- 1) ☐ The lateral edge of pronator teres
- 2) ☒ Medial epicondyle of humerus
- 3) ☐ Medial edge of the long flexor of the thumb
- 4) ☒ Pisiform bone
- 5) ☐ Ulna

64. External benchmarks of the projection of the radial artery:

- 1) ☐ Radius
- 2) ☐ The medial edge of the brachioradialis muscle
- 3) ☒ The middle of the line between epicondyles of humerus
- 4) ☐ The medial edge of the round pronator
- 5) ☒ Radial artery pulse point

65. Canalis supinatorius walls:

- 1) ☒ Anterior-medial - neck of the radius (at the level of the inlet)

- 2) ☐ Medial - brachial muscle
 - 3) ☐ Lateral - m. brachioradialis
 - 4) ☐ Anterior - aponeurosis of the biceps muscle of the shoulder
 - 5) ☒ Lateral - m. supinator
-

66. The walls of the canalis carpi are formed:

- 1) ☒ Pisiform bone, os hamatum (medial)
 - 2) ☐ Retinaculum musculorum extensorum (rear)
 - 3) ☒ The navicular and the bone-trapezoid (lateral)
 - 4) ☒ The retinaculum of the flexors (front)
 - 5) ☒ The bones of the wrist and deep ligaments of the wrist
-

67. In canalis carpi radialis are located:

- 1) ☐ Radial artery with accompanying veins
 - 2) ☐ Superficial branches of the radial nerve
 - 3) ☒ Vagina tendinis musculi flexoris carpi radialis
 - 4) ☐ Radial nerve
 - 5) ☒ The tendon of the radial flexor of the wrist
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68. The canalis ulnaris of the wrist contains:

- 1) ☐ The tendon of the ulnar flexor of the wrist, with its synovial sheath
- 2) ☒ Ulnar nerve
- 3) ☐ The deep branch of n. ulnaris

4) ☒ The ulnar artery with its accompanying veins

5) ☐ The superficial branch of the ulnar nerve

69. A gap in the articular disc reports (in 40%) joints:

1) ☐ Intercarpal joint

2) ☒ Wrist joint

3) ☐ The joint of the pisiform bone

4) ☐ Middle joint

5) ☒ Distal radioulnar joint

70. Palmar aponeurosis is characterized by the fact that it:

1) ☒ Triangular shape with the base of the fingers

2) ☒ Durable, thick

3) ☐ It is a continuation of the tendon of the radial flexor of the wrist

4) ☒ Formed of the lateral (superficial) fibers of the tendon m. palmaris longus and transverse (deep) fibers of the fascia of the palm

5) ☒ In the distal part of the palm between the heads of the II-V metacarpal bones limits the commissural holes

71. The medial fascial bed of the palm is limited:

1) ☐ The I-th metacarpal bone (lateral)

2) ☒ Fascia (hypothenar) palms (front)

3) ☒ Deep fascia of the palm and V-th metacarpal bone (rear)

4) ☒ The medial intermuscular septum (lateral)

- 5) ☐ Palmar aponeurosis (front)
-

72. The walls of the lateral fascial bed of the palm are:

- 1) ☒ Fascia (thenar) palms (front)
- 2) ☒ The lateral intermuscular septum (lateral)
- 3) ☒ Deep lamina of the fascia of the palm and the I-th metacarpal bone (rear)
- 4) ☐ Palmar aponeurosis (front)
- 5) ☒ The connection of the fascia of the palm with the I-th metacarpal bone (lateral)
-

73. The middle fascial bed of the palm is limited:

- 1) ☒ Palmar aponeurosis (front)
- 2) ☒ Medial intermuscular septum (medial)
- 3) ☐ V-th metacarpal bone (medial)
- 4) ☒ The lateral intermuscular septum (lateral)
- 5) ☒ Deep lamina of the fascia of the palm (the back)
-

74. In the subaponeurotic (surface) slit of the middle fascial bed of the palm layer by layer are located:

- 1) ☒ Arcus palmaris superficialis with common Palmar finger arteries
- 2) ☒ Median nerve with common Palmar finger nerves I,II,III,IV (lateral side) and ulnar nerve with common Palmar finger nerves IV (medial side), V
- 3) ☐ Palmar aponeurosis
- 4) ☒ Tendons of the superficial and deep flexors of the fingers with a common synovial vagina
- 5) ☐ Lateral intermuscular septum
-

75. The surface Palmar arc, crossing the tendons of the flexors of the fingers, is located at the level of:

- 1) ☒ The middle third of the length of the metacarpal bones
- 2) ☐ The proximal transverse skin crease of the palm
- 3) ☐ The distal transverse skin crease of the palm
- 4) ☒ 2 cm down from the bottom of the retinaculum flexorum
- 5) ☐ Heads of Metacarpals

76. The lateral fascial bed of the palm (thenar box) contains:

- 1) ☒ m. abductor pollicis brevis and branches of r. profundus n. ulnaris
- 2) ☒ Superficial and deep head of the short flexor of the thumb and 2/3 arcus palmaris profundus
- 3) ☐ m. supinator
- 4) ☒ Oblique and transverse head of the muscle leading to the thumb and branches of the median nerve
- 5) ☒ Tendon of the long flexor of the thumb with its synovial vagina

77. Deep cellular spaces of the bed gap is located between the thenar:

- 1) ☐ Tendon of the long flexor of the thumb
- 2) ☒ The transverse head of the muscle leading to the thumb
- 3) ☒ The lateral part of the deep (interosseous) fascia thenar
- 4) ☐ Tendon m. palmaris longus
- 5) ☐ Elbow synovial SAC

78. The boundaries of the gluteal region correspond:

- 1) ☒ iliac crest (upper)

- 2) ☐ large sciatic notch (lateral)
 - 3) ☒ gluteal fold (bottom)
 - 4) ☒ rear median line deep in the buttock cords (medial)
 - 5) ☒ a vertical line drawn through the spina iliaca anterior superior trochanter major et (lateral)
-

79. Exit point a.glutea superior in the gluteal region is on the border of the upper and middle third line between:

- 1) ☐ the ischial tuberosity
 - 2) ☐ the upper rear iliac spines
 - 3) ☒ upper posterior iliac spine
 - 4) ☒ the tip of a large spit
 - 5) ☐ on the Roser-Nelaton line
-

80. Reference points of the projection of the exit of the lower gluteal artery in the gluteal region:

- 1) ☐ pubic tubercle
 - 2) ☒ upper posterior iliac spine
 - 3) ☐ the wing of the Ilium
 - 4) ☒ the medial edge of the tuber ischiadicum
 - 5) ☐ the tip of the coccyx
-

81. The gluteal fascia has a close anatomical relationship with the muscles:

- 1) ☐ erector spinea
- 2) ☐ internal locking
- 3) ☒ gluteus Maximus

4) ☒ gluteus Medius

5) ☐ the biceps femoris

82. Clinical significance of anatomical relationship between gluteal fascia and m. gluteus maximus:

1) ☐ passes into the lumbar-thoracic fascia (fascia thoracolumbalis)

2) ☒ fascia from muscle can be separated only by an acute way

3) ☒ suppuration in the thickness of the gluteus Maximus (complication of intramuscular injection) is limited

4) ☐ the gluteal fascia fascia lata passes in

5) ☒ inflammatory infiltrates are accompanied by a sharp increase in pressure with the development of severe pain syndrome

83. The cellular space of the gluteal region is under:

1) ☐ middle gluteus Medius

2) ☐ m. quadratus femoris

3) ☐ piriformis muscle

4) ☒ the gluteus Maximus

5) ☒ deep plate of gluteal fascia

84. A large sciatic foramen is limited:

1) ☐ the upper aperture of the pelvis

2) ☐ linea terminalis

3) ☒ the greater sciatic notch

4) ☐ the ischial tuberosity

- 5) ☒ the Sacro-spinous ligament
-

85. Purulent exudate from under the gluteus Maximus muscles (the desired length of space) may not be distributed in the lateral space podbryushinnye the pelvic cavity through the holes:

- 1) ☒ foramen obturatum
- 2) ☒ Foramen suprapiriforme
- 3) ☒ small sciatic
- 4) ☐ Foramen infrapiriforme
- 5) ☒ hiatus saphenus
-

86. In foramen suprapiriforme upper gluteal artery is fixed to:

- 1) ☐ the fascia of the internal obturator muscle
- 2) ☒ the periosteum of the greater sciatic foramen
- 3) ☐ the fascia of the piriformis
- 4) ☒ fascia of middle gluteus Medius
- 5) ☐ square fascia muscle of the thigh
-

87. In the gluteal region through foramen suprapiriforme out

- 1) ☐ nn. clunium superiores
- 2) ☐ lumbosacral trunk
- 3) ☒ upper gluteal nerve
- 4) ☒ upper gluteal artery
- 5) ☒ upper gluteal veins
-

88. Through foramen infrapiriforme in the gluteal region come the nerves:

- 1) ☐ upper gluteus
- 2) ☒ pudendal
- 3) ☒ the inferior gluteal
- 4) ☒ sciatic
- 5) ☒ posterior cutaneous nerve of the thigh

89. In the gluteal region through foramen infrapiriforme out arteries:

- 1) ☐ a. rectalis inferior
- 2) ☒ the inferior gluteal
- 3) ☒ a. pudenda interna
- 4) ☒ artery accompanying the sciatic nerve
- 5) ☐ internal iliac artery

90. In fossa ischiorectalis, a small sciatic hole from the gluteal region passes through the:

- 1) ☒ the internal pudendal artery
- 2) ☒ pudendal nerve
- 3) ☐ perineal nerves
- 4) ☐ femoral nerve
- 5) ☒ internal pudendal vein

91. Possible ways of spreading purulent flow from the gluteal region in the course of neurovascular bundles:

- 1) ☒ in the rear region of the hip (n.ischiadicus)

- 2) ☒ through the small sciatic foramen to the ischio-anal fossa (pudendal bundle)
 - 3) ☒ through foramen infrapiriforme in the lateral cellular spaces of the pelvis space (for the inferior gluteal and pudendal bundles)
 - 4) ☐ Through foramen suprapiriforme in the space lateral cellular spaces of the pelvis (at upper gluteal beam)
 - 5) ☐ in the medial muscular-fascial bed of the thigh (along the obturator bundle)
-

92. To construct a line Roser-Nelaton use guidelines:

- 1) ☐ iliac crest
 - 2) ☐ pubic tubercle
 - 3) ☒ anterior superior iliac spine
 - 4) ☐ trochanter minor
 - 5) ☒ trochanter major
-

93. Line Roser-Nelaton used in the diagnosis:

- 1) ☐ phlegmon of the gluteal region
 - 2) ☒ congenital hip dislocation
 - 3) ☐ coxarthrosis of the hip joint
 - 4) ☒ fracture of the femoral neck
 - 5) ☒ coxa vara
-

94. The ligament of the femoral head contains:

- 1) ☐ obturator nerve
 - 2) ☒ vertel branch (from r. posterior a. obturatoria)
-

- 3) ☐ femoral nerve
-
- 4) ☒ v. v. acetabularis (tributaries of the obturator vein)
-
- 5) ☐ v. v. gluteae inferiores
-

95. The hip joint strengthens the ligaments:

- 1) ☐ sacroiliac
-
- 2) ☒ Iliofemorale (transverse and descending parts)
-
- 3) ☒ lig. ischiofemorale
-
- 4) ☒ zona orbicularis
-
- 5) ☒ pubofemorale
-

96. Lacuna vasorum is limited:

- 1) ☒ the inguinal ligament
-
- 2) ☐ m. pectineus
-
- 3) ☒ lacunar ligament
-
- 4) ☒ pectineal ligament with the upper branch of the pubic bone
-
- 5) ☒ iliac comb arc
-

97. Lacuna vasorum contains:

- 1) ☐ external iliac artery
-
- 2) ☒ loose fibrous connective tissue
-
- 3) ☒ the femoral branch of the genitofemoral nerve
-
- 4) ☒ femoral vein
-

5) ☒ femoral artery

98. The walls of anulus femoralis (inner opening of the femoral canal) form:

1) ☒ inguinal ligament

2) ☒ pectineal ligament

3) ☐ ilio-pubic eminence

4) ☒ lacunar ligament

5) ☒ fascial vagina of the femoral vein

99. The projection line of the femoral artery (Ken line) corresponds to the reference points:

1) ☒ point midway between the anterior superior iliac spine and the pubic symphysis

2) ☒ the middle of the inguinal ligament

3) ☐ the pubic tubercle

4) ☒ the resulting tubercle of the medial epicondyle of the femur

5) ☐ tibial tuberosity

100. In the back bed of the thigh are located:

1) ☒ sciatic nerve

2) ☒ biceps femoris

3) ☐ m. vastus medialis

4) ☒ m. semitendinosus

5) ☒ m. semimembranous

101. The front bed of the thigh contains:

- 1) ☒ m. sartorius
- 2) ☒ the quadriceps (rectus, lateral, medial, intermediate and lateral muscles of the thigh)
- 3) ☒ femoral neurovascular bundle
- 4) ☐ m. pectineus
- 5) ☐ obturator neurovascular bundle

102. Canalis adductorius (s.canalis femoropopliteus) formed:

- 1) ☒ large adductor muscle (medial)
- 2) ☒ a broad medial thigh muscle (lateral)
- 3) ☒ lamina vastoadductoria (front)
- 4) ☐ m.sartorius (laterally)
- 5) ☐ m.pectineus (medial)

103. Through the upper hole in the channel adductorius enter:

- 1) ☐ obturator nerve
- 2) ☒ femoral artery
- 3) ☐ deep artery of the thigh
- 4) ☒ femoral vein
- 5) ☒ the saphenous nerve (branch of n. femoralis)

104. Through the front opening of the canalis adductorius out:

- 1) ☐ femoral nerve

- 2) ☒ saphenous nerve
 - 3) ☐ Vena saphena magna
 - 4) ☒ descending artery of knee
 - 5) ☐ deep thigh vein
-

105. Through the lower opening of the canalis adductorius, limited by the tendon of the large adductor muscle and the femur, fossa poplitea enter:

- 1) ☐ third perforating artery
 - 2) ☐ saphenous nerve
 - 3) ☒ femoral artery
 - 4) ☐ a. circumflexa femoris medialis
 - 5) ☒ femoral vein
-

106. In the medial bed of the thigh through the obturator canal enter:

- 1) ☐ n.genitofemoralis
 - 2) ☐ lower epigastric artery
 - 3) ☒ obturator artery
 - 4) ☒ obturator nerve
 - 5) ☒ obturator vein
-

107. Purulent streaks when phlegmons rear hip area distributed in:

- 1) ☒ popliteal fossa
 - 2) ☐ lumbar region
-

3) ☒ gluteal region

4) ☐ fossa ischiorectalis

5) ☐ groin

108. The walls of fossa poplitea are:

1) ☒ upper medial tendon m. semitendinosus and m. semimembranosus

2) ☒ upper lateral - tendon of m.biceps femoris

3) ☒ lower medial - medial head of m. gastrocnemius

4) ☐ lower medial - m. soleus

5) ☒ lower lateral - lateral head m. gastrocnemius

109. The bottom of the fossa poplitea are:

1) ☐ tuberositas glutea femur

2) ☒ facies poplitea of the femur

3) ☒ the posterior part of the capsule of the knee joint, reinforced with oblique and arcuate popliteal ligaments

4) ☒ m. popliteus

5) ☐ soleus muscle

110. Hematoma from the popliteal fossa in the course of the neurovascular bundles can spread to:

1) ☐ in channel N.I. Pirogov (for v.saphena parva)

2) ☒ rear thigh (for n.ischiadicus)

3) ☒ back area lower leg (canalis cruropopliteus n.tibialis a. v et.poplitea)

4) ☒ in the anterior region of the thigh (for a. v et.femoralis)

- 5) ☐ into the cavity of the knee joint (along the medial lower knee artery)
-

111. Guidelines for constructing pulse point a.tibialis posterior are:

- 1) ☐ lateral malleolus
- 2) ☒ Achilles tendon
- 3) ☐ navicular bone
- 4) ☐ calcaneal tuberosity
- 5) ☒ medial ankle
-

112. The canalis calcaneus is a slit-like gap between the:

- 1) ☐ the muscle adductor hallucis
- 2) ☐ square sole muscle
- 3) ☒ calcaneus bone
- 4) ☐ lumbricalis muscles
- 5) ☒ m. abductor hallucis
-

113. Canalis calcaneus goes into a deep division between the secondary fascial bed:

- 1) ☐ square sole muscle
- 2) ☒ tendons of the m. flexor hallucis longus
- 3) ☐ m. abductor hallucis
- 4) ☒ m. adductor hallucis
- 5) ☐ short flexor of the hallucis
-

114. Percutaneous puncture and catheterization of arteries and veins is used to:

- 1) ☒ angiography and venography
- 2) ☒ intensive infusion (catheter) therapy
- 3) ☒ performing endovascular operations
- 4) ☐ ligation of the main artery during
- 5) ☐ intake part of the blood vessel for bypass

115. Puncture and catheterization a.femoralis according to the method of Seldinger is performed after determining the pulse at the point, with the following guidelines:

- 1) ☐ the middle of the line Ken
- 2) ☒ 1 cm medial from the middle of the linea spinosymphisialis (inguinal ligament)
- 3) ☐ 2 cm downward from the tuberculum pubicum
- 4) ☐ 3 cm down from spina iliaca anterior superior
- 5) ☒ 1 cm down from the middle of the line between the upper anterior iliac spine and the pubic symphysis

116. Projection approach to reveal the arteries:

- 1) ☐ a.brachialis
- 2) ☒ radiation
- 3) ☐ femoral (at the femoral triangle)
- 4) ☒ ulnar
- 5) ☒ the anterior tibial

117. Extraprojectional access is used in operations on the arteries:

- 1) ☒ axillary
 - 2) ☒ a.femoralis (femoral triangle)
 - 3) ☐ radiation
 - 4) ☐ ulnar
 - 5) ☒ brachial
-

118. Requirements for vascular suture:

- 1) ☒ tightness
 - 2) ☒ hemostasis
 - 3) ☐ elasticity
 - 4) ☒ thrombogenicity
 - 5) ☒ do not allow scar stenosis
-

119. The diameter of the artery and the properties of its wall determine the choice:

- 1) ☐ operative approach to the vessel
 - 2) ☒ diameter of suture material (monofilament non-absorbable polished synthetic thread)
 - 3) ☒ needles (round atraumatic)
 - 4) ☒ set of tools for macro - and microsurgical procedures
 - 5) ☐ position of the patient on the operating table
-

120. Tightness and hemostasis of the vascular suture are achieved:

- 1) ☐ by connecting the ends of the vessel with the inner shells
- 2) ☒ uniformity of stitches (step of a seam of 1-2 mm)

- 3) ☒ the same distance of the needle and the needle from the edge of the vessel (1 mm)
- 4) ☒ in conditions of pathologically changed vascular wall of large arteries of the weld step the weld and the distance of puncture and Mykola needle from the edge of the vessel increases
- 5) ☐ excision of the ends of the vessel with eye scissors or a blade of a safety razor in a hemostatic clip

121. After the initial surgical treatment of the wound, operations on nerve trunks are performed 4-6 weeks later, because:

- 1) ☒ wound healing occurs
- 2) ☒ under the influence of drug therapy scars are resorbed
- 3) ☒ reduces the risk of exacerbation of "dormant" infection (microflora in the rumen)
- 4) ☐ provides the best cosmetic effect
- 5) ☐ patients are concentrated in specialized surgical departments

122. The nerve from the scar is isolated (neurolysis) by extra-projection access, allowing:

- 1) ☒ to expose the nerve in an unmodified topographic conditions
- 2) ☒ eliminate the possibility of damage to large blood vessels accompanying the nerve
- 3) ☐ the choice of access to the nerve in the scar area does not matter
- 4) ☒ to facilitate the release of the nerve from the Central and peripheral parts of the scar area
- 5) ☒ to avoid the formation of adhesions between the membranes of nerve and soft tissue

123. The timing of the nerve suture is distinguished:

- 1) ☒ primary nerve suture (in the primary surgical treatment of the wound)
- 2) ☐ in primary surgical treatment wounds are limited to nerve blockade
- 3) ☒ early delayed nerve suture (3-4 weeks after the wound, if the initial treatment of the wound had no conditions

for the primary suture)

- 4) ☐ primary suture of the nerve is not applied
- 5) ☐ early delayed nerve suture does not provide a satisfactory functional result

124. In relation to the shells, the following types of nerve sutures are distinguished:

- 1) ☒ epineural
- 2) ☒ perineural
- 3) ☐ through all layers of nerve
- 4) ☐ nodal
- 5) ☐ "U" shaped

125. For suture tendons use straight round atraumatic needles with

- 1) ☒ nylon thread
- 2) ☒ lavsan thread
- 3) ☐ silk
- 4) ☐ catgut
- 5) ☒ metal wire (tantalum)

126. Requirements for tendon suture:

- 1) ☒ must ensure the strength of the joint ends of the tendon
- 2) ☒ compression of blood vessels of a tendon is inadmissible
- 3) ☐ should be hemostatic
- 4) ☒ must avoid opening the tendon

- 5) ☒ should create a smooth surface to slip the tendon in the synovial vagina
-

127. The basic rules of opening of purulent focus:

- 1) ☒ opening of the purulent cavity in the zone of the greatest fluctuation
- 2) ☒ in order to avoid infection of the adjacent bed, it is unacceptable to dissect the intermuscular fascial partitions
- 3) ☒ ensure complete evacuation of pus and removal of necrotic tissue
- 4) ☒ treat the purulent cavity with an antiseptic solution and drain it
- 5) ☐ layer-by-layer suturing the wound
-

128. At opening of the purulent center the section of soft tissues should be:

- 1) ☒ the shortest path to the purulent focus
- 2) ☒ outside the projection of the neurovascular bundle
- 3) ☒ ensure the completeness of the examination of the purulent cavity
- 4) ☐ if necessary, combined with contrapunctual
- 5) ☒ creating a free outflow of pus
-

129. Contrapertura (additional incision(s)) away from the main form with the purpose:

- 1) ☒ completeness of the revision of the purulent cavity (are there pockets and foci of necrotic tissues?)
- 2) ☒ evacuation of pus when the main incision does not create conditions for adequate drainage of the purulent cavity
- 3) ☒ the use of a flow-wash drainage system
- 4) ☒ visual control over the course of healing processes
- 5) ☐ laser treatment of purulent cavity
-

130. In subcutaneous felon surface of the distal phalanx of the finger, the following incisions are used:

- 1) ☒ "like a hockey stick" on the anterior surface
- 2) ☒ linear on the anterior surface
- 3) ☒ different combinations of "club" and linear cuts
- 4) ☐ through the nail plate
- 5) ☐ on the middle line of the Palmar surface of the finger with the continuation of the interphalangeal joint

131. According to the classical method of Clapp with tendovaginitis II-IV fingers of the hand, cuts are applied:

- 1) ☐ at the rear of the interdigital spaces
- 2) ☐ on the anterior-lateral surfaces of the distal phalanx
- 3) ☒ on the anterior-lateral surfaces of the middle phalanx
- 4) ☒ on the anterior-lateral surfaces of the proximal phalanx
- 5) ☒ in the distal part of the palm, respectively, the proximal end of the synovial vagina at the level of the metacarpal heads

132. To the phlegmon of the upper third of the bed, the forearms approach between:

- 1) ☐ ulna
- 2) ☐ elbow flexor wrist
- 3) ☒ m. flexor pollicis longus
- 4) ☐ m. flexor carpi radialis
- 5) ☒ radius

133. Stages of opening the back of the forearm:

- 1) ☒ incision of the skin, subcutaneous base, superficial fascia laterally from the posterior edge of the ulna
 - 2) ☒ own fascia is incised between m.extensor digitorum and the extensor of the little finger
 - 3) ☐ to fit the phlegmon between the shoulder muscle and the long radial extensor wrist
 - 4) ☒ a strip of glove rubber is introduced between the surface and deep layers of muscles
 - 5) ☒ a strip of glove rubber is introduced under the deep muscles of the back bed of the forearm
-

134. Phlegmon front of the bed open shoulder slits (10-12 cm):

- 1) ☒ at the medial edge of m.biceps brachii
 - 2) ☐ the biceps muscle of the shoulder is dissected in the transverse direction
 - 3) ☒ on the lateral edge of m.biceps brachii
 - 4) ☐ the biceps muscle of the shoulder is separated along the fibers
 - 5) ☐ by sulcus bicipitalis medialis
-

135. Incision at deep phlegmon of a sole carry out in the middle third of the lines corresponding to projections:

- 1) ☐ the transverse joint of the foot
 - 2) ☐ I-th metatarsal
 - 3) ☐ The V-th metatarsal
 - 4) ☒ the medial fascial septum
 - 5) ☒ the lateral fascial septum
-

136. Incision by Delorme with deep phlegmons of the sole have the following advantages:

- 1) ☒ cuts out the main reference points of the foot
- 2) ☒ there is no damage of plantar aponeurosis

- 3) ☐ eliminates the risk of damage n.tibialis
 - 4) ☒ is not damaged the short flexor of the fingers
 - 5) ☒ the integrity of the lateral and medial plantar neurovascular bundles is preserved
-

137. The deep phlegmon of the posterior region of the tibia is opened as follows:

- 1) ☐ incision along the midline of the Shin area throughout its length
 - 2) ☒ incision in the upper third of the tibia, receding 2 cm from the medial edge of tibiae (V. saphena magna)
 - 3) ☒ pull the medial head of the calf muscle and cut off the tibia from the soleus muscle
 - 4) ☒ in the lower third form contrapartes incision of the layers of the area including the deep lamina of the fascia of the lower leg
 - 5) ☒ in the upper and lower sections introduce strips of glove rubber
-

138. Subdeltoid phlegmon approach:

- 1) ☐ pectoral muscle
 - 2) ☒ the front edge of the deltoid muscle
 - 3) ☐ the edge of the broadest back muscle
 - 4) ☐ the lower edge of the pectoralis major muscle
 - 5) ☒ the rear edge of the m.deltoideus
-

139. The puncture of the elbow joint is made in the posterolateral part - in a triangle, limited:

- 1) ☒ lateral epicondyle of the humerus
 - 2) ☐ deltoid tuberosity
 - 3) ☒ olecranon
-

4) ☐ the sulcus of the ulnar nerve

5) ☒ caput radii

140. The point of puncture of the wrist joint is determined by the intersection on its back surface:

1) ☐ the axes of the radius and of the I metacarpal bone

2) ☐ the axes of the ulna and the pisiform bones

3) ☒ the line between the styloid processes of the radius et ulna

4) ☒ axis II metacarpal

5) ☐ above the neck of the radius

141. Articulatio coxae punctured in the:

1) ☐ the sciatic tuber

2) ☐ trochanter minor

3) ☒ the top of the big spit

4) ☒ the middle of the distance between the middle of the linea spinosymphisialis et trochanter major

5) ☐ Roser-Nelaton lines

142. Puncture of the knee joint at the lateral edge of the base of the patella provides the receipt of the needle in the:

1) ☐ deep kneecap bag

2) ☐ subcutaneous tibial tuberosity bursa

3) ☒ bursa suprapatellaris

4) ☐ bursa subtendineus suprapatellaris

- 5) ☒ the joint cavity
-

143. Rules for the implementation of the operational approach to long tubular bones:

- 1) ☒ away from the neurovascular bundle
- 2) ☐ projection approach
- 3) ☒ on intermuscular spaces, furrows and fascial partitions - intermuscular access
- 4) ☐ an out-of-project approach
- 5) ☒ in the area with the smallest thickness of the muscle layer - percutaneous access
-

144. The guidelines of one of the less traumatic accesses to the femur are:

- 1) ☐ trochanter minor
- 2) ☐ Ken line
- 3) ☒ greater trochanter
- 4) ☐ Roser-Nelaton line
- 5) ☒ the lateral epicondyle of the femur
-

145. Principles of surgical treatment of osteomyelitis:

- 1) ☒ radical surgical treatment of purulent focus
- 2) ☐ puncture of the joint adjacent to the focus of inflammation
- 3) ☒ plastic bone defect
- 4) ☒ plastic defect of soft tissues surrounding the bone
- 5) ☒ immobilization of a limb
-

146. In operative orthopedics are used such types of osteotomy as:

- 1) ☒ linear and angular
- 2) ☒ transverse and oval
- 3) ☒ oblique (in different planes)
- 4) ☒ "Z" – shaped and figured
- 5) ☐ the form of osteotomy does not matter in obtaining good results

147. Basic requirements for osteosynthesis:

- 1) ☒ careful reposition of bone fragments along the axis and plane
- 2) ☒ reliable fixation of bone fragments for a long period of bone regeneration
- 3) ☒ providing a mild degree of compression of bone fragments
- 4) ☒ unacceptable interposition – the presence of adipose tissue, fascia, etc. between bone fragments
- 5) ☐ interpolation is possible

148. Traditional places of a fence of autograft for bone grafting are:

- 1) ☐ gluteal tuberosity of femur
- 2) ☒ tibia
- 3) ☒ the iliac crest
- 4) ☐ lateral epicondyle of humerus
- 5) ☒ rarely – fibula

149. For intramedullary osteosynthesis using clamps (pins, screws) from:

- 1) ☒ metal alloy

- 2) ☒ metal polymer
 - 3) ☒ polymeric
 - 4) ☒ the pins, over time, undergoes resorption with the excretion of waste products from the body
 - 5) ☐ bone pins
-

150. When amputation of the limb, the following methods of treatment of the periosteum and bone are used:

- 1) ☒ aperiostal - length of the bone sawdust without periosteum 3-5 mm
 - 2) ☐ transperiostal- the level of incision of the periosteum corresponds to bone sawdust
 - 3) ☒ subperiostal - filing closes periosteal bone cuff
 - 4) ☐ the periosteum and bone are not treated
 - 5) ☐ sawdust bones closes the musculo-periosteal flap
-