Colloquium 1 - examples of situational problems

Situational task:
Due to unsuccessful bone fusion after a fracture, the patient was decided to undergo an osteotomy. It was decided to abandon bone resection followed by plastic surgery.

1. What is osteotomy?
2. What is the difference between transperiosteal and subperiosteal bone resection?

Situational task:
The patient underwent successful plastic surgery of the facial nerve, previously damaged in an accident.

1. List the requirements for a nerve suture.
2. Indicate possible complications of nerve grafting.

Situational task:
The patient was admitted to the surgical department with phlegmon of the popliteal region, which arose due to the spread of pus from the posterior shin region.

1. Draw the projection line of the popliteal artery.
2. Explain the possible ways of purulent-inflammatory process generalization from the popliteal region.

Situational task:
The patient was admitted to the surgical department with a femoral artery injury resulting from an industrial injury.
1. List the requirements for the vascular suture.
2. Draw the projection line of the femoral artery.

Situational task:
Due to a significant disruption of the blood supply to the right lower limb, the patient was advised to undergo stenting of the right common iliac artery.

1. What technic is most used for the vessel stenting?
2. Specify possible complications of vessel stenting

Situational task:
The patient was diagnosed with phlegmon of the axillary region 5 days after injury to the thumb, and there were no signs of a purulent-inflammatory process at the site of the injury.

1. Describe the boundaries of the axillary region.
2. What groups of lymph nodes are located in the axillary region?

Situational task:
After repeated intramuscular injections of drugs, patient L. developed an abscess in the gluteal region.

1. Name the gluteus maximus muscle proper fascia features.
2. What anatomical structures emerge from the infrapiriform foramen?

Situational task:
The patient is indicated for limb amputation after a man-made disaster.

1. How do you understand the terms “amputation” and “exarticulation”?
2. Explain the features of treatment of blood vessels and nerves during amputation.

Situational task:
To gain access to the main neurovascular bundle, it is necessary to dissect its fascial sheath. Bleeding occurred during this intervention.

1. What instruments are needed to incise the fascial sheath keeping the neurovascular bundle?
2. What needs to be done to temporarily stop bleeding caused by damage to the neurovascular bundle?

Situational task:
An abscess was diagnosed in the gluteus maximus muscle thickness - a complication of a course of intramuscular injections.

1. What are the main differences between an abscess and phlegmon?
2. List the possible complications of surgical treatment of an abscess in this patient.

Situational task:
A patient suffering from diabetes mellitus developed phlegmon of the subdeltoid cellular space four days after the vaccine was administered to the deltoid region.

1. Explain the boundaries of the subdeltoid cellular space.
2. What synovial bursae are located in the subdeltoid space?

Situational task:
A few days after the injury with a violation of palmar surface skin of the hand second finger, the patient experienced sharp throbbing pain in this finger

1. What complication did the patient have?
2. Why one may not make incision in the “forbidden zone” (Kanavel zone) of the hand?

Situational task:
There is a patient in the department with aseptic necrosis of the femoral head, which developed as a result of a previously received femoral fracture.

1. Explain the blood supply to the femoral head.
2. Indicate the “weak points” of the hip joint.

Situational task:
A patient was admitted to the clinic with phlegmon the foot plantar region, which arose 4 days after he stepped on a nail.

1. What is the limitation of the plantar canal?
2. List the contents of the plantar canal.

Situational task:
The patient was taken to the surgical department with a laceration of the scapular region received after a man-made disaster. The wound begins above the spine of the scapula, continuing along its medial edge down 6 cm. Profuse bleeding is noted.

1. Explain the boundaries of the scapular region.
2. Explain the main neurovascular bundle of the region.

Situational task:

The patient complains of pain in the left shoulder joint, impaired abduction of the left shoulder, which arose several days after her left shoulder dislocation was fixed. The examination diagnosed purulent inflammation of the shoulder joint.

1. Describe the ligaments of the shoulder joint.
2. What kind of recesses does the shoulder joint have?

Situational task:

A patient with acute thrombosis of the right axillary artery was admitted to the vascular department. Despite the occlusion, the pulse in the brachial artery is preserved.

1. Explain the projection line of the axillary artery in the axillary region according to N.I. Pirogov
2. How can a hematoma or purulent inflammatory process spread from the anterior shoulder region to the posterior shoulder region?

Situational task:

The patient was taken to the clinic after an accident – a fall from a height. There is an open fracture of the bones of the left shin, located on the order of the middle and lower third, with displacement of fragments, soft tissue interposition. A syndrome of a "clawed" foot has been diagnosed.

1. Which nerve damage leads to this syndrome?
2. What anatomical structures form the main neurovascular bundle of the anterior shin region?