

Questions for the course exam in “Traumatology and orthopaedics”
1-79 01 01 "General Medicine"
2025/2026 academic year

I. General traumatology

1. Definition of "Trauma", "orthopaedic". History of Traumatology and Orthopaedics.
2. Traumatism. Definition. Classification. Characteristics of types of traumatism.
3. Clinical and radiological signs of diaphyseal fractures.
4. The classification of fractures. Types of displacement of bone fragments.
5. Principles and methods for the treatment of patients with traumas or orthopaedic diseases.
6. Fixation method of treatment of fractures. Essence. Indications. Types.
7. Traction method of treatment of fractures. Essence. Indications. Types.
8. The external fixation (compression-distraction) method of treatment in traumatology and orthopaedics. Indications. Advantages. Complications.
9. Internal fixation (osteosynthesis). Indications. Contraindications. Advantages. Complications.
10. Regeneration of bone tissue. Stages of callus formation. Primary and secondary fracture healing. Types of callus.
11. The slow consolidation of fractures. Its predisposing causes. The clinical picture. Diagnostics. Treatment.
12. False joint (pseudoarthrosis/nonunion). Classification. The clinical picture. Diagnostics. Treatment.
13. Features of fractures in children and the elderly. Treatment options.
14. Open fractures. Classification. The clinical picture. First aid and treatment at the prehospital stage.
15. Open fractures. Treatment at the hospital stage. Primary surgical treatment. Complications and their prevention.
16. The definition of "polytrauma". Definition of "Traumatic disease."
17. The clinical groups of patients with polytrauma. Management of polytrauma patients at prehospital stage. Preliminary and final therapeutic measures.
18. Types of complications of polytrauma. Their characteristics, prevention and treatment.
19. Intra-articular injuries. The clinical picture. General principles of treatment. Features of rehabilitation.

II. Local traumatology

1. Dislocation of the clavicle. Classification. The mechanism of injury. The clinical picture. Treatment.
2. Shoulder Dislocations. Classification. The mechanism of injury. The clinical picture. Treatment.
3. Dislocation of the forearm. Classification. The mechanism of injury. The clinical picture. Treatment.
4. Hip dislocation. Classification. The mechanism of injury. The clinical picture. Methods of reduction. Treatment after reduction.
5. Fractures of the clavicle. The mechanism of injury. Typical displacement of fragments. The clinical picture. Treatment.
6. The surgical neck humeral fractures. Classification. The mechanism of injury. Types of displacement of fragments. The clinical picture. Diagnostics. Treatment.
7. Diaphyseal humeral fractures. Classification. The mechanism of injury. Types of displacement of fragments. The clinical picture. Diagnostics. Treatment.
8. Distal humeral fractures. Classification. Clinical and radiological characteristics of different fracture types. Treatment. Complications.
9. Fractures of the olecranon, head and neck of the radius. The mechanism of injury. The clinical picture. Treatment.
10. Diaphyseal fractures of the forearm bones. Classification. Types of displacement of fragments depending on the level of the fracture. Treatment.
11. Distal radius fractures. Classification. The mechanism of injury. Types of displacement of bone fragments. The clinical picture. Treatment.
12. Fractures of the scaphoid bone. The mechanism of injury. The clinical picture. Treatment.
13. Injuries of the flexor tendons of the fingers. Diagnostics. Treatment.
14. Injuries of the wrist extensor apparatus. Clinical presentation, diagnosis. Treatment.
15. Compound injuries of the hand and wrist. Tactics of treatment. The use of different types of skin plastic.
16. Proximal Femoral fractures. Classification. The mechanism of injury. Types of displacement of fragments. The clinical picture. Treatment.
17. Diaphyseal femoral fractures. Classification. The mechanism of injury. Types of displacement of fragments. The clinical picture. Treatment.
18. Fractures of the condyles of the femur and tibia, fractures of the patella. The mechanism of injury. The clinical picture. Treatment.
19. Meniscal tears and ligamentous injuries of the knee joint. The mechanism of injury. The clinical picture. Treatment.
20. Fractures of the shin bones. The mechanism of injury. The clinical picture. Treatment.
21. Ankle fractures. Classification. The clinical picture. Diagnostics. Treatment.
22. Fractures of the pelvis. Classification. The mechanism of injury. The clinical picture. Treatment.
23. Fractures of the pelvis with injury of visceral organs. The clinical picture. Treatment.
24. Spine injuries. Classification. The mechanism of injury.
25. Treatment of spinal fractures. Rehabilitation of patients.

III. Orthopaedics

1. Developmental dysplasia of the hip. Etiology. Treatment of children up to 1 year old.
2. Developmental dysplasia of the hip. Early clinical symptoms. Treatment.
3. The early radiographic signs of developmental hip dysplasia. X-ray evaluation.
4. Clinical signs of developmental hip dysplasia (dislocation) in children older than one year old.
5. Radiographic signs of hip dysplasia in older children. Methods of treatment.
6. Congenital clubfoot. Etiopathogenesis. The clinical picture. Treatment in different age groups.
7. Congenital torticollis. Etiopathogenesis. The clinical picture. Treatment in different age groups.
8. Benign and malignant bone tumors. Classification and clinical picture.
9. X-ray semiotics of the osteoma, osteoid osteoma, osteochondroma, osteoblastoklastoma, chondroma and their treatment.
10. X-ray semiotics of chondrosarcoma and osteosarcoma, Ewing's tumor.
11. Posture. Definition. The stages of its formation. Forms of its violations. Prevention of posture disorders and their treatment.
12. Scoliosis. Definition. Etiopathogenesis.
13. Clinical and radiological characteristics of I-II grades of scoliosis.
14. Clinical and radiological characterization of III-IV grades of scoliosis.
15. Signs of a possible progression of scoliosis. Principles of conservative and surgical treatment of scoliosis.
16. Flat foot. Etiopathogenesis. The clinical picture. Treatment.
17. Flat foot with deficiency of transverse arch. The clinical picture. Treatment.
18. Osteochondropathy. Etiology, pathogenesis. Pathological anatomy.
19. Leg-Calvé-Perthes disease. Pathogenesis. The clinical picture. Treatment.
20. Osteoarthritis. Etiopathogenesis. Classification.
21. Hip osteoarthritis. Stages of development. The clinical picture. Treatment.
22. Knee osteoarthritis. Clinical and x-ray evaluation. Treatment.

IV. Practical skills

1. Determination of the axis of the upper limb, types of its disorders.
2. Determination of the axis of the lower limb, types of its disorders.
3. Measuring the length of the upper limb. Types of shortening.
4. Measuring the length of the lower limb. Types of shortening.
5. Determination of the range of motion in the shoulder joint. Recording the result of the study using the 0-pass method. Types of restrictions on range of motion.
6. Determination of the range of motion in the elbow joint. Recording the result of the study using the 0-pass method. Types of restrictions on range of motion.
7. Determination of the range of motion in the hip joint. Recording the result of the study using the 0-pass method. Types of restrictions on range of motion.
8. Determination of the range of motion in the knee joint. Recording the result of the study using the 0-pass method. Types of restrictions on range of motion.

9. Determination of the range of motion in the ankle joint. Recording the result of the study using the 0-pass method. Types of restrictions on range of motion.
10. Determination of the type of lameness.
11. Technique of transport immobilization for a fracture of the humerus.
12. Technique of transport immobilization for a fracture of the femur.
13. Technique of transport immobilization for fractures of the lower leg bones.
14. Identification of absolute signs of a diaphyseal fracture.
15. Identifying symptoms of meniscus damage.
16. Identification of Trendelenburg's symptom.
17. Identification of the Marx-Ortolani sign, Barlow sign.
18. Identifying symptoms of cruciate ligament damage.
19. Identification of symptoms of damage to the collateral ligaments of the knee joint.
20. Determination of the type of periostitis in bone tumors.
21. Description of the radiograph with determination of the type of displacement of fragments.
22. Differential diagnosis of damage to the flexor tendons of the fingers.
23. Differential diagnosis of damage to the extensor tendons of the fingers.
24. Identification of clinical signs of longitudinal flatfoot.
25. Identification of clinical signs of scoliosis.