

Content of the Core Surgical Exam

General information

The CoreSurgicalExam tests knowledge expected after two years of residency training. Approximately 60 % of the content covers general surgical knowledge, which is derived from the White Book of the Core Surgical Curriculum published by the Swiss College of Surgeons. Approximately 40 % of the content covers knowledge of surgical specialties. This specific part focuses on common diagnoses, red flags, and important principles all surgical trainees need to know, regardless of the specialty they are working in.

The exam is designed to test the ability of trainees to handle common, simple conditions independently (e.g., in the emergency department). The exam also determines whether trainees can recognize urgent and potentially life-threatening conditions, understand when to call for help, and know how to manage the patient until a specialist is available.

The proportional distribution of questions is an approximate value. In addition, the exact number of questions per topic may vary between exams.

Content distribution per topic

Topic	Proportion	Number of Questions
General Surgical Knowledge	60 %	90
Specific General Surgery	12 %	18
Orthopedics and Traumatology	8 %	12
Pediatric Surgery	4 %	6
Thoracic Surgery	4 %	6
Urology	4 %	6
Vascular Surgery	4 %	6
Hand Surgery	2 %	3
Plastic and Reconstructive Surgery	2 %	3

General Surgical Knowledge (G)

Derived from the White Book of the Core Surgical Curriculum

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Topic	Proportion*	Number of Questions
General Surgical Knowledge	60 %	90
Preoperative care of the surgical patient	9 %	13.5
Perioperative care of the surgical patient	16 %	24
Postoperative care of the surgical patient	10 %	15
Postoperative complications	11 %	16.5
Acute surgical conditions	8 %	12
Management of the dying patient	2 %	3
Legal and administrative knowledge	2 %	3
Research	2 %	3

*Proportions are in relation to entire exam.

Content Description	Proportion	Number of Questions
Preoperative care of the surgical patient	9 %	13.5
Informed consent Legal basis, most common complications, capacity of patient's discernment	2 %	3
Assessment of surgical patients Contraindication for surgery, assessment of surgical risk, preoperative blood tests and imaging	3 %	4.5
Prophylaxis Thromboembolism, antibiotics, vaccination, protective measures against transmissible pathogens	2 %	3
Management of comorbidities Safely prescribe medications used for the treatment of chronic diseases and modify their use appropriately for the perioperative period	2 %	3

Perioperative care of the surgical patient	16%	24
Anesthesia, analgesia, and sedation <ul style="list-style-type: none"> • When and how to administer local anesthetic agents • Different agents, indications, risks, contraindications • Basic principles of general anesthesia • Basic principles of sedation 	2 %	3
Surgical site approach Different surgical approaches (e.g., open, minimally invasive) and related benefits, risks, indications	2 %	3
Positioning and prepping <ul style="list-style-type: none"> • Positioning a patient on the operating table • Surgical site skin preparation and draping 	1 %	1.5
Electrocoagulation <ul style="list-style-type: none"> • Principles and settings of electrocoagulation • Various energy devices 	1 %	1.5
Surgical instruments <ul style="list-style-type: none"> • Common instruments, terminology, application • Electrical devices 	2 %	3
Wound closure Suturing material (threads and needles), suture techniques, wound dressings	2 %	3
Fractures Principles of closed reduction, immobilization	1 %	1.5
Drains Indications, types, insertion techniques, fixation, removal	1 %	1.5
Chest tubes	1 %	1.5
Urinary catheters <ul style="list-style-type: none"> • Indications of, care for, and risks of transurethral catheters • Suprapubic bladder catheters 	1 %	1.5

Patient safety and quality control <ul style="list-style-type: none"> • Team time out • World health organization (WHO) checklists, critical incident reporting system, morbidity and mortality conferences 	2%	3
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Postoperative care of the surgical patient	10%	15
Postoperative pain management	3%	4.5
Wound healing knowledge <ul style="list-style-type: none"> • Different wounds and implications for therapy and healing, including vacuum assisted closure (VAC) • Factors influencing wound healing, surgical site infection, scars, and contractions 	2%	3
Intensive care <ul style="list-style-type: none"> • Shock and its management • Fluid resuscitation • Noninvasive ventilation 	2%	3
Nutrition <ul style="list-style-type: none"> • Postaggression metabolism • Methods of enteral and parenteral nutrition • Stool regulation 	2%	3
Discharge <ul style="list-style-type: none"> • Discharge information • Legal implications of sick notes 	1%	1.5

Postoperative complications	11%	16.5
Cardiac Arrhythmias, ischemia, cardiac decompensation, high blood pressure, hemodynamics, diuretics	2%	3
Pulmonary <ul style="list-style-type: none"> • Pneumonia, pneumothorax, pleural effusion • Respiratory failure 	2%	3

Complications after abdominal surgery Emesis, ileus, constipation, stoma complications, anastomotic leakage, abdominal compartment syndrome	1 %	1.5
Hematology • Surgical hemorrhage control • Blood transfusion, supplementing factors • Tranexamic acid • Anemia, thrombopenia • Coagulation disorders	2 %	3
Infections • SIRS, bacteremia, sepsis • Antibiotic therapy	3 %	4.5
Renal failure, diabetology, neurologic symptoms	1 %	1.5

Acute surgical conditions Differentials, diagnostic tools, assessment of urgency, most common causes, and their therapy	8 %	12
Abdominal pain, acute abdomen • Differentials (age-specific, likely cohort) • Assessment of urgency • Diagnostics	3 %	4.5
Respiratory failure	1 %	1.5
Acute swelling of a limb Including septic arthritis and deep infection	1 %	1.5
Acute ischemia of a limb or finger • Typical symptoms, paralysis, and paresthesia as grading tool • Origin of embolus • Initial management: heparin	1 %	1.5
Postoperative bleeding	1 %	1.5
Compartment syndrome	1 %	1.5

Management of the dying patient	2 %	3
Resuscitation status, organ donation		
Diagnosing death after irreversible brain damage		
Declaring death and completing forms		

Legal and administrative knowledge	2 %	3
Insurance, billing • Tarmed • DRG		
Prescriptions		

Research	2 %	3
Literature research		
Study types , level of evidence		
Critical appraisal of an article		

Specific General Surgery (SGS)

Content Description	Number of Questions: 18
Upper gastrointestinal tract: esophagus, stomach, and duodenum	2
Diagnostic procedures: endoscopy, barium swallow, manometry, CT, interventional treatment for ulcers	
Benign conditions: gastroesophageal reflux disease, gastritis, ulcers, diagnostic verification and treatment	
Malignant conditions: risk factors for carcinoma	

Jejunum and ileum	2
Benign conditions: diverticula, Meckel diverticulum, Crohn's disease	
Diagnostic procedures: endoscopy, x-ray, CT	
Surgical techniques: resection, anastomosis, suturing techniques	
Postoperative care: complications	

Colorectal	3
Benign conditions: diverticulosis, diverticulitis, ulcerative colitis, colon polyps; rectal prolapse, hemorrhoids, anal fistulas and abscesses, anal fissures	
Malignant conditions: colon cancer	
Diagnostic procedures: sigmoidoscopy, colonoscopy, x-ray, CT	
Surgical techniques: resection, anastomosis, suturing techniques, colostomy	
Postoperative care: complications	

Gallbladder and bile duct	2
Benign conditions: cholecystolithiasis, choledocholithiasis, cholecystitis, cholangitis	
Diagnostic procedures: liver function tests, ultrasound, CT, MRI, ERCP	
Surgical techniques: cholecystectomy	
Postoperative care: complications	

Pancreas	1
Benign conditions: acute and chronic pancreatitis	
Diagnostic procedures: laboratory tests, ultrasound, CT, MRI, ERCP	
Postoperative care: fistulas, bleeding	

Endocrine Surgery	1
Diagnostic procedures: ultrasound, CT, MRI, nuclear medicine scan, laboratory tests, fine needle aspiration, laryngoscopy	
Conditions: goiter, hyperthyroidism, thyroid nodule / cancer, hyperparathyroidism, Cushing's syndrome, pheochromocytoma, primary hyperaldosteronism, adrenocortical cancer	
Complications of (para)thyroidectomy (hypocalcemia, hoarseness), adrenalectomy (pancreatic leak, splenic injury, adrenal insufficiency)	
Postoperative care: hypocalcemia, hoarseness, bleeding	
Spleen	1
Benign conditions: splenomegaly, splenic trauma	
Diagnostic procedures: ultrasound, CT, MRI, interventional options	
Postoperative care: overwhelming postsplenectomy infection syndrome, vaccinations	
Hernias	2
Anatomy of the abdominal wall	
Types of hernias: diaphragmatic, hiatal, abdominal wall	
Diagnostic procedures: ultrasound, CT, MRI	
Surgical techniques	
Postoperative care: complications: seroma, hematoma, infection, recurrence	
Visceral emergencies	4
Upper gastrointestinal bleeding	
Appendicitis	
Peritonitis	
Perforation	
Abdominal trauma	
Ileus	

Orthopedics and Traumatology (OT)

Content Description	Number of Questions: 12
Important principles	2
Principles of fracture fixation	
Stages of bone healing: <ul style="list-style-type: none"> • Hematoma, granulation tissue, callus formation, bone remodeling • Radiological findings 	
Open fractures <ul style="list-style-type: none"> • Gustilo-Anderson classification • Management 	
Polytraumatized patients Interdisciplinary assessment and management	
Hardware-related infections <ul style="list-style-type: none"> • Symptoms • Diagnostic workup • Assessment of urgency • Initial management 	
Crush injuries	
Technical skills	2
Casting and splinting techniques <ul style="list-style-type: none"> • Principles of fracture immobilization (length of cast, adjoining joints) • Available material (padding, Scotchcast, Softcast, etc.) • Cast indices Risks, patient counseling	
Aspiration of major joints (knee, shoulder, elbow, hip)	
Upper extremity	3.5
Clavicle fractures <ul style="list-style-type: none"> • Typical trauma mechanism • Indications for nonoperative vs. operative treatment • Complications 	
Shoulder dislocation: symptoms, diagnostic workup, reduction techniques, follow-up	

Rotator cuff tears <ul style="list-style-type: none"> • Symptoms of acute/chronic tear • Clinical assessment and specific tests Assessment of urgency	
Forearm fractures <ul style="list-style-type: none"> • Typical trauma mechanisms • Initial management: nonoperative vs. operative treatment • Associated injuries • Complications 	
Tendon and overuse injuries of the upper extremity <p>Symptoms, clinical presentation, and initial management</p> <ul style="list-style-type: none"> • Tennis elbow (lateral epicondylitis) • Golfer's elbow (medial epicondylitis) • Biceps tendon injuries 	
Lower extremity	3.5
Hip fractures <ul style="list-style-type: none"> • Typical patient characteristics, risk factors, trauma mechanism • Symptoms • Assessment of urgency • Associated risk factors • Red flag: pediatric hip disorders 	
Knee injuries <ul style="list-style-type: none"> • Clinical assessment of stability, ligaments, and meniscal injuries • Assessment of urgency • Indication for imaging 	
Tibial plateau fractures <ul style="list-style-type: none"> • Typical trauma mechanism • Initial management, surveillance, compartment syndrome 	
Ankle fractures <ul style="list-style-type: none"> • Typical trauma mechanism • Imaging • Initial management: nonoperative vs. operative treatment • Complications 	
Ankle ligament injuries <ul style="list-style-type: none"> • Clinical assessment • "Ankle rule" • Treatment, follow-up 	

Tendon and overuse injuries of the lower extremity Symptoms, clinical presentation, and initial management <ul style="list-style-type: none"> • Achilles tendon rupture • Achilles tendinitis (symptoms, diagnostic workup, follow-up) • Patellar and quadriceps tendon rupture 	
Sports injuries of the lower extremity <ul style="list-style-type: none"> • Stress fractures (mechanism, symptoms, diagnostic workup, treatment) • Patellar dislocation (symptoms, diagnostic workup, reduction techniques, follow-up) 	
Spine	1
Spinal fractures <ul style="list-style-type: none"> • Typical trauma mechanism • Assessment of neurological deficits and urgency • Indications for nonoperative vs. operative treatment Complications	
Spinal disorders/acute back pain <ul style="list-style-type: none"> • Typical symptoms and their differentials, red flags • Assessment of urgency (e.g., degenerative disc disease vs. herniated disc) 	

Pediatric Surgery (PedS)

Content Description	Number of Questions:
	6
Trauma	3
Fractures of the growing skeleton <ul style="list-style-type: none"> • Remodeling • Child-specific therapy 	
Burns <ul style="list-style-type: none"> • Assessment • Initial treatment (sedation, analgesia, debridement) 	
Foreign bodies Batteries, magnets, sharp objects	
Child abuse	

Blunt spleen and liver injuries Principles of non-operative management	
Traumatic head injuries • Concussion • Intracranial hemorrhage	
Abdomen	2
Volvulus, biliary emesis in newborns Recognizing urgency	
Intestinal malformations and Hirschsprung disease	
Hypertrophic pyloric stenoses	
Appendicitis	
Intussusception	
Ovarian cyst, ovarian torsion	
Pediatric urology	1
Inguinal hernia	
Acute scrotum	
Paraphimosis	
Infection and obstruction of the upper urinary tract	

Thoracic Surgery (TS)

Content Description	Number of Questions:
	6
Lung function tests	0.5
• Basics of lung physiology • Evaluation of postoperative risks	

Respiratory distress/symptoms	2.5
Empyema <ul style="list-style-type: none"> • Phases and natural progression of an empyema • Parapneumonic empyema • Postoperative empyema • Pleural drainage and indication (chest tube) • Principles of pleural fibrinolysis and surgical debridement 	+1.5 (G-2.9)
Pneumothorax <ul style="list-style-type: none"> • Spontaneous pneumothorax • Traumatic pneumothorax • Pathophysiology of a tension pneumothorax • Pleural exsufflation and indication • (Respiratory failure: in general content) • (Pleural drainage and indication: in empyema) 	+3 (G-5.2)
Hemoptysis Differential diagnosis and diagnostic procedures, evaluation of urgency, initial management	
Mediastinitis Symptoms, possible causes	
Trauma	2.5
Rib fractures <ul style="list-style-type: none"> • Diagnosis, management, and evaluation of potential complications • Flail chest: complications and surgical indications 	
Lung contusion Initial evaluation and management	
Hemothorax (posttraumatic, postsurgery) <ul style="list-style-type: none"> • Diagnosis • Initial management 	
Rupture of the bronchial tree Diagnosis	
Diaphragmatic Rupture Symptoms and diagnosis	

Tumors	0.5
Lung tumors <ul style="list-style-type: none"> • Basic management: characteristics of malignant lung nodules and risk of malignancy, initial diagnostic, procedures, and staging • (Assessment of urgency) 	
Pleural carcinosis Diagnosis and management	
Anterior mediastinal mass Differential diagnosis, diagnostic procedures	

Urology (U)

Content Description	Number of Questions:
	6
Upper urinary tract	1
Nephro-/ureterolithiasis <ul style="list-style-type: none"> • Diagnostic workup for flank pain • Indications for low-dose CT • In single kidneys 	
Postrenal kidney failure	
Kidney tumor	
Symptoms needing urology workup	2
Infection/pyelonephritis <ul style="list-style-type: none"> • Fever in known ureterolithiasis • Urological workup in septic patients (kidney, upper urinary tract, bladder, and prostate) 	
Urinary retention <ul style="list-style-type: none"> • Transurethral/suprapubic catheterization • Manual irrigation of blood clots • Differential in any unclear abdominal pain 	
Painless gross hematuria	

Urological Trauma	1
Penile Fracture	
Urethral trauma <ul style="list-style-type: none"> • Trauma mechanism • Symptoms, signs on imaging, diagnostic work-up, emergency interventions 	
Bladder rupture <ul style="list-style-type: none"> • Trauma mechanism • Symptoms, signs on imaging, diagnostic work-up, emergency interventions 	
Kidney trauma <ul style="list-style-type: none"> • Trauma mechanism • Symptoms, diagnostic work-up, indications for non-operative management, emergency interventions 	
Genitalia	2
Testicular torsion Scrotal exploration in suspected testicular torsion or unclear acute testicular pain	
Testicular tumor Diagnostic workup of scrotal swelling	
Prostate cancer <ul style="list-style-type: none"> • Assessment of urgency • Differential of pathological fractures 	
Paraphimosis	PedS3.3
Fournier gangrene	
Erectile dysfunction Link possible cardiovascular risk	

Vascular Surgery (VS)

Content Description	Number of Questions:
	6
Arterial occlusive disease	2
Peripheral arterial occlusive disease <ul style="list-style-type: none"> • Diagnostic steps • Relevance of Doppler pressure ultrasound • Therapeutic approaches (conservative, secondary prophylaxis) 	
Carotid stenosis <ul style="list-style-type: none"> • Symptoms: e.g., amaurosis fugax • First diagnostic steps 	
Aneurysms	2
Aortic aneurysm: thoracic and abdominal <ul style="list-style-type: none"> • Ruptured aortic aneurysm • Typical symptoms: acute back pain with rapid loss of consciousness • Therapeutic principles: permissive hypotension 	
Aortic dissection Typical symptoms; tearing pain interscapular back	
Popliteal artery aneurysm <ul style="list-style-type: none"> • Screening in aneurysm disease: e.g., abdominal aortic aneurysm often combined with popliteal artery aneurysm • Complications in peripheral aneurysms: embolism and occlusion 	
Venous disease	1
Varicose, venous ulcer, varicose bleeding Therapeutic steps: Indications for compression therapy or operation	
Deep vein thrombosis First diagnostic and therapeutic steps: etiology, duplex ultrasound, anticoagulation therapy	

Diabetic foot ulcer	1
<ul style="list-style-type: none"> • Initial management, assessment of urgency • First therapeutic steps 	

Hand Surgery (HS)

Content Description	Number of Questions:
	3
Lacerations	1
Hand lacerations <ul style="list-style-type: none"> • Injury of flexor tendons: anatomy, diagnostic tests and their reliability, indication for wound exploration, indication for specialty consultation • Injury of extensor tendons: anatomy, diagnostic tests and their reliability, indications for exploration, suturing techniques 	
Forearm lacerations <ul style="list-style-type: none"> • Anatomy of median, ulnar, and radial nerves • Diagnostic tests • Indications for specialty consultation 	
Fractures of the hand	1
Finger fractures Evaluation of rotation	
Boxer's fracture <ul style="list-style-type: none"> • Tolerable dislocation, • Counseling on indication for surgery 	
Scaphoid fracture <ul style="list-style-type: none"> • Diagnostic tests • Verification of the diagnosis (CT, repeat x-ray after 1 week) 	
Dislocations of the hand	1
Perilunate dislocation Typical trauma mechanism, possible lesion of the median nerve, recognition of urgency	
Proximal interphalangeal dislocation Details of treatment (closed reduction under local anesthesia, immobilization, postreduction x-ray)	

Plastic and Reconstructive Surgery (PS)

Content Description	Number of Questions:
Thermic injuries	3
Burns <ul style="list-style-type: none"> • Degrees/classification • Debridement and description of burn wounds 	1
Frostbites	
Chemical burns Key differences between alkaline and acid chemical burns	
Pressure sores	1
Etiology and prevention Definition, degrees Management: local therapy, indication for surgery, indication for plastic surgery involvement	
Necrotizing fasciitis	0.5
Symptoms Pain out of proportion, rapidly growing blisters, and skin necrosis, unstable patient	
Diagnostics Clinical diagnosis; MRI/CT, blood workup optional	
Management: aggressive repeated debridement, biopsies, antibiotics	
Trauma to the face	0.5
Fractures of the face: <ul style="list-style-type: none"> • Typical symptoms of midface fractures • Nasal fractures (red flag: septal hematoma) • Palsy, best outcome if timely repair 	
Soft tissue facial lesions Recognize nerve lesions (e.g., peripheral facial)	

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