SRTC 210 Surgical Procedures

6 Credits

Community College of Baltimore County Common Course Outline

Description

SRTC 210 – Surgical Procedures: enables students to explore the commonly performed types of surgical procedures. Topics include discussions surrounding the pathology leading to surgical invention, the purposes of the surgery, problems which may arise, and the consequences of the surgery for the patient. Common surgical procedures, special instrumentation, supplies, and latest technologies are introduced.

Pre-requisites: SRTC 201 **Co-requisites:** SRTC 211

Overall Course Objectives

Upon completion of this course, students will be able to:

- forecast selected surgeries for each body system;
- 2. employ techniques for preparing the sterile field;
- 3. plan intraoperative case management sequence for selected surgical procedures;
- 4. analyze the procedural steps for each selected surgical procedure;
- 5. assemble supplies, equipment, and instrumentation required for selected surgical procedures:
- 6. select appropriate patient position, surgical incision, and surgical drapes for selected surgical procedures:
- 7. prepare for diagnostic and surgical interventions of each selected surgical procedure;
- 8. determine appropriate handling of the surgical specimen;
- 9. plan for postoperative considerations for selected surgical procedures;
- 10. structure the surgical technologists' role during the surgical procedure; and
- 11. anticipate the needs of the surgical team.

Major Topics

- I. General surgical procedures
 - a. Appendectomy: open & laparoscopic approach
 - b. Breast procedures: breast biopsy modified radical mastectomy
 - c. Cholecystectomy: open & laparoscopic approach
 - d. Colon resection: with & without colostomy
 - e. Gastrectomy: with & without gastrostomy
 - f. Hemorrhoidectomy
 - g. Herniorrhaphy: open and laparoscopic approach
 - h. Laparoscopic nissen fundoplication
 - i. Liver resection

- j. Splenectomy: open and laparoscopic approach
- k. Thyroidectomy
- I. Pancreaticoduodenectomy (Whipple procedure)
- II. Gynecological and obstetrical surgical procedures
 - a. Cervical: biopsy, cervical cerclage, dilation and curettage, hysteroscopy
 - b. Uterine: cesarean section, endometrial ablation, myomectomy, uterine radiation seeding
 - c. Hysterectomy: abdominal, laparoscopic, robotic, vaginal approaches
 - d. Oophorectomy
 - e. Salpingectomy, sterilization procedures, tuboplasty, ectopic pregnancy
 - f. External genitalia: labiaplasty, perineal laceration, vulvectomy
 - g. Vaginal: ablation, marsupialization of Bartholin's gland
 - h. Pelvic: colporrhaphy, diagnostic laparoscopy, total pelvic exenteration, Wertheim procedure
- III. Genitourinary surgical procedures
 - a. Kidney: nephrectomy, transplant, Wilms' tumor excision
 - b. Ureter: ureteroscopy, ureteropyelithotomy
 - c. Bladder: cystoscopy, transurethral resection of bladder tumor (TURBT), ileal conduit creation, suspension/sling
 - d. Prostate: transurethral resection of prostrate (TURP), prostatectomy (open and laparoscopic approaches), radiation seeding
 - e. Penile: circumcision, epispadias repair, hypospadias repair, penile implant, penectomy
 - f. Testicular: hydrocelectomy, orchiopexy, orchiectomy
- IV. Ophthalmic surgical procedures
 - a. Chalazion excision
 - b. Dacryocystorhinostomy
 - c. Entropion/ectropion repair
 - d. Enucleation
 - e. Extracapsular cataract excision
 - f. Iridectomy
 - g. Keratoplasty
 - h. Laceration repairs
 - i. Scleral buckle
 - i. Strabismus correction: recession and resection
 - k. Vitrectomy
- V. Otorhinolaryngology surgical procedures
 - a. Cochlear implant
 - b. Mastoidectomy
 - c. Myringotomy
 - d. Stapedectomy
 - e. Tympanoplasty
 - f. Choanal atresia
 - g. Endoscopic sinus surgery
 - h. Nasal antrostomy
 - i. Nasal polypectomy
 - j. Septoplasty

- k. Turbinectomy
- I. Laryngectomy
- m. Parotidectomy
- n. Radical neck dissection: glossectomy and mandibulectomy
- o. Temporomandibular joint arthroscopy (TMJ)
- p. Tonsillectomy and adenoidectomy (T&A)
- q. Tracheotomy and tracheostomy
- r. Uvulopalatopharyngoplasty
- VI. Oral and maxillofacial surgical procedures
 - a. Maxillary and mandibular open reduction of internal fracture (ORIF)
 - b. Arch bar application
 - c. Cleft lip repair
 - d. Cleft palate repair
 - e. Odontectomy: tooth extraction
 - f. Lefort I fracture
 - g. Lefort II fracture
 - h. Lefort III fracture
 - i. Orbital ORIF
- VII. Plastic and reconstructive surgical procedures
 - a. Blepharoplasty
 - b. Brow lift
 - c. Cheiloplasty/palatoplasty
 - d. Malar implants
 - e. Mentoplasty
 - f. Otoplasty
 - g. Rhinoplasty
 - h. Rhytidectomy
 - i. Breast augmentation
 - i. Mastopexy
 - k. Mammoplasty: nipple reconstruction, transverse rectus abdominus musculocutaneous flap (TRAM)
 - I. Abdominoplasty
 - m. Abdomen suction lipectomy
 - n. Superficial lesion/neoplasm
 - o. Skin grafts: full thickness, split thickness, microvascular pedicle graft
 - p. Scar revision
 - q. Dupuytren's contracture
 - r. Traumatic hand injuries
 - s. Radial dysplasia
 - t. Release of polydactyl
 - u. Elease of syndactyl
- VIII. Orthopedic surgical procedures
 - a. Shoulder acromioplasty: open and arthroscopic approach
 - b. Shoulder total arthroscopy
 - c. Bankart procedure: open and arthroscopic approach
 - d. Should arthroplasty
 - e. Radius ORIF
 - f. Radius external fixator

- g. Hip total arthroplasty
- h. Hip ORIF
- i. Femoral shaft fracture
- j. Femur rodding
- k. Knee arthroscopy
- I. Anterior cruciate ligament repair (ACL)
- m. Knee amputation: below and above the knee
- n. Knee total arthroplasty
- o. Achilles tendon repair
- p. Triple arthrodesis
- q. Bunionectomy

IX. Cardiothoracic surgical procedures

- a. Bronchoscopy
- b. Mediastinoscopy: lymph node biopsy
- c. Thoracoscopy: video assisted thoracoscopy
- d. Thoracotomy
- e. Lobectomy
- f. Pneumonectomy
- g. Decortication of the lung
- h. Lung transplant
- i. Pectus excavatum repair
- j. Pulmonary embolectomy
- k. Aortic/mitral valve replacement
- I. Atrial/ventricular septal defect repair
- m. Closure of patent ductus arteriosus
- n. Coronary artery bypass graft (CABG)
- o. Intra-aortic balloon pump
- p. Minimally invasive direct CABG
- q. Off pump CABG
- r. Ventricular assistive device insertion
- s. Heart transplant
- t. Repair of coarctation of the aorta
- u. Tetralogy of Fallot repair
- v. Ventricular aneurysm repair
- X. Peripheral vascular surgical procedures
 - a. Abdominal aortic aneurysm with graft insertion
 - b. Angioplasty: endograft placement and endostent insertion
 - c. Aortofemoral bypass
 - d. Arteriovenous fistula and shunt
 - e. Femoropopliteal bypass
 - f. Carotid endarterectomy
 - g. Embolectomy
 - h. Vena cava device
 - i. Vein ligation and stripping
 - j. Venous access device
- XI. Neurology surgical procedures
 - a. Carpal tunnel release: open and laparoscopic
 - b. Cervical laminectomy: anterior and posterior

- c. Thoracic laminectomy
- d. Lumbar laminectomy: minimally invasive and spinal fixation
- e. Craniotomy: aneurysm repair
- f. Cranioplasty
- g. Craniosynostosis repair
- h. Rhizotomy
- i. Sterotactic procedures
- j. Transsphenoidal hypohysectomy
- k. Ulnar nerve transposition
- I. Ventriculoperitoneal shunt placement
- m. Ventriculoscopy

Course Requirements

Grading will be determined by the individual faculty member, but shall include the following, at minimum:

- Weekly assignments
- Weekly quizzes
- Three exams
- Collaborative group assignment
- Professionalism
- Comprehensive final examination

Written assignments and research projects: Students are required to use appropriate academic resources in their research and cite sources according to the style selected by their professor.

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