



Surgical Oncology Subspecialties

- Diagnosis and treatment of all cancer types in different subspecialties.
- Cancer screening, including Breast, Colon, Cervical, Lung and Head & Neck malignancies.
- **Neoadjuvant and post-operative chemo/ radiation therapy** protocols application after multidisciplinary tumor board evaluation and discussion.
- **Head & Neck Surgical Oncology:** Active management of all Head & Neck malignancies including: Oral Cavity, Tonsils, Pharynx (Nasopharynx, Oropharynx, Hypopharynx), Larynx, Sinuses, skin malignancies (Basal, Squamous, Melanoma) with sentinel lymph node evaluation and flaps reconstruction (local and free flaps).
- **Thyroid & Parathyroid Surgical Oncology:** State of art thyroid and parathyroid surgery with intraoperative parathyroid hormone assay, radio nuclear localization with minimal invasive approach and outpatient/ Day care surgery using update international standards.
- **Salivary Glands Surgical Oncology:** Parotid, Submandibular and Minor Salivary gland surgeries for benign and malignant condition with neoadjuvant and post-operative adjuvant protocols.
- **Endocrine Surgical Oncology:** All different endocrine surgeries including laparoscopic adrenal tumor resection (Benign or Malignant) and Pancreatic Endocrine and Neuroendocrine tumors
- **Upper Gastrointestinal Surgical Oncology:** Minimal Invasive upper gastrointestinal surgery including Gastric tumors, Esophageal, Pancreas, Liver and Biliary system with all modalities of preoperative sampling, staging and neoadjuvant ChemoRadiation such as:
 - Esophagus: Laparoscopic Esophagectomy (partial or complete), Fundoplication (Nissan & Toupee)
 - Stomach: Laparoscopic Partial and Total gastrectomy with D2 lymph node dissection
 - Pancreas: Whipple procedure with laparoscopic subtotal pancreatectomy, distal pancreatectomy
 - Liver: Hepatectomy, Segmentectomy and Gall bladder cancer surgery
 - Common bile duct disease: Benign or malignant including radical lymph node dissection
- **Lower Gastrointestinal Surgical Oncology (Colorectal):** Minimally Invasive lower gastrointestinal surgery for colon and rectum including:
 - Laparoscopic Low Anterior resection (LAR)
 - Meso rectal Excision
 - Laparoscopic Total Procto colectomy and J pouch reconstruction for Inflammatory Bowel disease
 - Laparoscopic colectomies
 - Transanal Microscopic Endoscopic Surgery (TEMS)



- **Sarcoma & Melanoma**: Active management of all skin and soft tissues malignancies including Sarcoma and melanoma with reconstruction and different modalities of lymph node dissections
- **Breast Surgical Oncology**: Active management of all breast diseases (benign and malignant) with ultrasound and digital mammogram, directed biopsies, pathological evaluation and multi disciplinary tumor board discussion for malignant cases with different modalities of surgery including:
 - Partial / total mastectomy
 - Breast tumors, including imaging, needle biopsy
 - Oncoplastic breast surgery for conservative treatment of breast cancer
 - Axillary Sentinel Lymph Node / axillary lymph node dissection
 - Prophylactic surgery for High Risk patients with immediate reconstruction with breast implants Breast Reconstruction and lipofilling
- **Gynecological- Surgical Oncology**: Active management of different types of Gynecological tumors of cervix, vagina, uterus and ovaries with different modalities of diagnosis including CT and MRI with tissue sampling and tumor markers evaluation with different modalities of surgical management including:
 - **Surgical management of ovarian cancer:**
 - Total abdominal hysterectomy + bilateral adnexectomy + pelvic lymphadenectomy + Lumbo-aortic lymphadenectomy + omentectomy +/- appendectomy for mucinous type cancers.
 - Laparoscopic conservative treatment for borderline ovarian Tumors (including laparoscopic omentectomy)
 - **Surgical management of cervical cancer:**
 - Total Abdominal Colpo-hysterectomy +/- bilateral adnexectomy + pelvic lymphadenectomy + Lumbo-aortic lymphadenectomy
 - **Surgical management of endometrial cancer:**
 - Total abdominal hysterectomy + bilateral adnexectomy + pelvic lymphadenectomy + Lumbo-aortic lymphadenectomy
 - For early Stages: Laparoscopic total hysterectomy + bilateral adnexectomy + pelvic lymphadenectomy
- **Hyperthermic Intraperitoneal Heated Chemo perfusion (HIPC)**: for peritoneal surface malignancies, mesothelioma and metastatic tumors including gastrointestinal and ovarian origins - In Progress
- **Liver Surgical Oncology**: Both laparoscopic and radiology directed radiofrequency and microwave liver ablation for benign and malignant tumors with all modalities of localization and intervention:
 - Chemo/bland embolization of liver tumors
 - Portal vein embolization
 - Alcohol and Phenol injection
 - TIPS
- **Neuro Surgical Oncology**: All types of neurological tumor (Benign & Malignant) of the brain and spinal cord in addition to peripheral tumors including:
 - Microscopic vascular neurosurgery
 - Skull base, tumors of the brain and spinal cord, hydrocephalus
 - VP shunt, endoscopic third ventriculostomy ETV
 - Lumbar and cervical disc surgery, surgery of narrow spinal canal (stenosis)
 - Pituitary gland (adenoma) surgery
 - Surgical and non-surgical management of trigeminal neuralgia
 - Paediatric neurosurgery and peripheral nerve (Carpel Tunnel) surgery



- **Urological Surgical Oncology:** Different types of all urogenital system tumors (Benign & malignant) With all supportive modalities of chemo and radiation including;
 - Kidney tumors: Partial and total nephrectomies laparoscopically and open
 - Cryo ablation of kidney tumors
 - Radical cystectomies and bladder conduit creation
 - Prostatectomies with radical lymph node dissection
 - Penile and testicular tumors
 - Retroperitoneal tumors

- **Thoracic Surgical Oncology(In progress):** All types of lung and pleural tumors (Benign & Malignant) with both minimally invasive and open approaches :
 - Lung cancers: Wedge resection, Segmentectomy, Lobectomy and Pneumonectomy with radical lymph node dissection
 - Pleural tumors resection
 - Bronchoscopy and mediastinoscopy
 - Tracheal resection and free flap reconstruction

- **Surgical Oncology Supporting Services**
 - **Gastroenterological Oncology:**
 - Endoscopic intervention with stents for GI stenosis
 - Percutaneous gastrostomy tubing,
 - ERCP tissue sampling and stents for pancreatic and biliary malignancies
 - Heat probe application for bleeding tumors

 - **Interventional Radiology:**
 - Different modalities of interventional tissue sampling and biopsies,
 - Embolization using different chemicals for both bleeding and cancer therapy
 - Radiofrequency ablation

 - **Palliative Care:** For cancer pain and supportive therapy

 - **Nutritional Support** including Enteral, Parenteral and peripheral vascular nutrition