

SYLLABUS FOR POST- DOCTORAL FELLOWSHIP IN MINIMAL INVASIVE ONCO SURGERY

1. Cancer Epidemiology

- Cancer Epidemiology

2. Cancer Prevention

- Principles of dose, schedule, and combination
- Chemo-prevention of cancer
- Regional Chemotherapy
- Cytokinetics
- Chemotherapy
- Nutrition in the etiology and prevention of cancer

3. Chemotherapeutic Agents

- Pyrimidine and Purine Antimetabolites
- Alkylating Agents and Platinum Antitumor Compounds
- Anthracyclines and DNA Intercalators
- Epipodophyllotoxins / DNA Topoisomerases
- Recent Advances/concepts
- Microtubule – targeting anticancer drugs derived from plants and microbes
- Folate Antagonists
- Vinca Alkaloids, Taxanes, and Epothilones, Asparaginase

4. Principles of Cancer Pathology

- Principles of cancer pathology

5. Principles of Surgical Oncology

- Vascular access in cancer patients
- Principles of Surgical Oncology

6. Principles of Radiation Oncology

- Photodynamic Therapy for cancer
- Principles of Hyperthermia
- Physical and biologic basis of Radiation Oncology

7. Principles of Medical Oncology

- Principles of Medical Oncology

8. Principles of Endocrine Therapy

- Hypothalamic and Other Peptide Hormones
- Steroid Hormone Binding and Hormone Receptors
- Progestins
- Estrogens and Anti-estrogens

- Corticosteroids
- Clinical use of Aromatase Inhibitors in Breast Carcinoma
- Androgen Deprivation Strategies in the treatment of Advanced Prostate Cancer

9. Principles of Imaging

- Imaging neoplasms of the abdomen and pelvis
- Ultrasound in cancer medicine
- Cross-sectional imaging of musculoskeletal neoplasms
- Radionuclide imaging in cancer medicine
- Interventional radiology for the cancer patient
- Perspectives in imaging
- Imaging neoplasms of the thorax

10. Neoplasms of the Thorax

- Thymomas and Thymic Tumors
- Malignant Mesothelioma

11. Neoplasms of the Female Reproductive Organs

- Neoplasms of the fallopian tube
- Neoplasms of the cervix
- Gestational Trophoblastic Disease
- Endometrial cancer
- Neoplasms of the vulva and vagina
- Ovarian cancer

Neoplasms of the Alimentary Canal

- Primary Neoplasms of the Liver
- Neoplasms of the Esophagus
- The Gallbladder
- Neoplasms of the Ampulla of Vater
- Neoplasms of the Stomach
- Treatment of Liver Metastases
- Neoplasms of the small intestine, vermiform appendix, and peritoneum, colon and rectum & anal canal
- Diagnosis and Management of Biliary Tract Cancer
- Neoplasms of the Exocrine Pancreas

Neoplasms of the Genitourinary Tract

- Renal Cell Carcinoma
- Neoplasms of the Renal Pelvis and Ureter
- Bladder Cancer
- Neoplasms of the Prostate
- Neoplasms of the Penis

- Neoplasms of the Testis
- Neoplasms in Acquired Immunodeficiency Syndrome

Neoplasms of Unknown Primary Site

- Neoplasms of unknown primary site

Complications of Cancer and its Treatment

- Secondary cancers : incidence, risk factors, and management
- Antiemetic Therapy
- Neurologic complications
- Dermatologic complications of cancer chemotherapy
- Skeletal complications
- Urologic complications
- Anorexia and Cachexia
- Hematologic complications of cancer
- Blood bank support
- Oral complications
- Management of cancer pain
- Cardiac complications
- Coagulopathic complications of cancer
- Liver function and hepatotoxicity in cancer
- Gastrointestinal complications
- Gonadal complications
- Endocrine complications
- Respiratory complications

Oncologic Emergencies

- Oncologic Emergencies

Infections in Patients with Cancer

- Infections in patients with cancer

CLINICAL PROCEDURES

The trainee in Minimal Invasive Onco Surgery must achieve knowledge and skills in performing complex cancer operations in her/his specialty. The final aim with surgical training is to develop skills in performing RO (radical) resections, adequate diagnostic procedures, lymph node dissections and meaningful palliative procedures. The numbers of operations are not fixed but should be guidance to what is needed to accomplish relevant skills.

The trainee should have experience in the following procedures:

1. Gastrointestinal surgery

- Liver resection
- Gastrectomy with lymph node dissection
- Whipple's pancreaticoduodenectomy
- Palliative procedures
- Rectal resection
- Oesophagectomy
- Colonic resection

2. Laparoscopic surgery

- Staging laparoscopy for malignant lymphoma
- Laparoscopic resection of malignant tumours
- Staging laparoscopy for GI cancer

3. Gynecologic surgery

- Radical hysterectomy
- Other pelvic malignancies
- Surgery of endometrial, ovarian and tubal cancer

4. Urologic surgery

- Retroperitoneal lymphadenectomy
- Radical nephrectomy
- Partial nephrectomy
- Radical prostatectomy with lymphadenectomy
- Inguinal lymphadenectomy
- Iliac lymphadenectomy
- Radical cystectomy with lymphadenectomy

5. Endocrine surgery

- Adrenalectomy
- Thyroidectomy with regional lymph node dissection

6. Vascular access

- Venous Port System

7. Thoracic surgery

- Pneumonectomy with lymphadenectomy
- Thoracoscopic approaches
- Pulmonary lobectomy with lymphadenectomy
- Mediastinoscopy