



UNIVERSITÀ
degli STUDI
di CATANIA

DEPARTMENT OF GENERAL SURGERY AND MEDICAL-
SURGICAL SPECIALTIES
Master's Degree in School of Dentistry
Academic Year 2017/2018 - 3° Year

ANATOMIA PATOLOGICA

MED/08 - 6 CFU - 2° Semester

Teaching Staff

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Office Hours: Dal lunedì al venerdì 9:00 - 13:00

LEARNING OBJECTIVES

Knowledge of surgical pathology with particular attention to the pathology of the head and neck district.

DETAILED COURSE CONTENT

Tissue biopsy

- needle biopsy
- endoscopic biopsy
- surgical biopsy
- operative specimen

Management of surgical biopsy

- acceptance
- gross examination

Preparation of histological specimen

- fixation
- processing
- inclusion
- cut

- haematoxylin-eosin staining

- special stainings

Intraoperative diagnosis

Microscope observation

Histological diagnosis

Cytology

Cytological examination

- exfoliative cytology

- needle aspiration cytology

Preparation of cytological specimen

- smear

- thin layer

- cytocentrifugation

Fixation of cytological specimen

Stainings of cytological specimen

Microscope evaluation of cytological specimen

Evaluation of benign and malignant criteria

Cytological diagnosis

- diagnostic categories

Molecular morphology

- immunohistochemistry

- immunofluorescence

- fluorescent in situ hybridization

SECTION II: Anatomic Pathology- cellular damage.

Cellular response to stress. Reversible and irreversible cellular damage. Apoptosis. Cellular response to ischemia. Molecular mechanisms of cell death. Coagulative, colliquative, caseous, rubbery, haemorrhagic, fat and fibrinous necrosis.

SECTION III: Anatomic Pathology - the disorders of proliferation and cell differentiation: hyperplasia, metaplasia and neoplasia.

Cellular cycle. Cell proliferation in histological sections. Hyperplasia and hypertrophy. Metaplasia. Neoplasia: benign and malignant. Preneoplastic lesions: dysplasia and in situ neoplasia. Morphological invasiveness and metastasis. Histological grading of malignancy. Stadiation (TNM). Tumor classification. Molecular basis of tumor.

SECTION IV: Anatomic Pathology - flogosis and disease of immune system.

Acute and chronic flogosis. The organ-specific autoimmune diseases (Sjogren syndrome, Goodpasture syndrome, Graves disease) and systemic (SLE, rheumatoid arthritis, scleroderma).

SECTION V: Systemic Anatomic Pathology.

1) Oral cavity:

Anatomy and physiology of the oral mucosa.

Infectious disease (viral infections, bacterial infections, mycotic infections).

Inflammatory disease.

Cysts and fistula (odontogenic cysts, non-odontogenic cysts, inflammatory cysts).

Melanocytic lesions.

Benign epithelial tumors of oral cavity.

Malignant epithelial tumors of oral cavity.

Odontogenic tumors.

2) Salivary glands:

Inflammatory disease.

Benign and malignant epithelial tumors (pleomorphic adenoma, Warthin tumor, mucoepidermoid carcinoma, adenoid cystic carcinoma, acinar cell carcinoma).

3) Esophagus:

Congenital and acquired disease.

Reflux esophagitis and Barrett's disease.

Benign and malignant epithelial tumors (papilloma, squamous cell carcinoma, adenocarcinoma).

4) Thyroid:

Developmental changes.

Inflammatory disease.

Goiter.

Benign and malignant tumors (adenoma, papillary carcinoma, follicular carcinoma, anaplastic carcinoma,

medullary carcinoma).

TEXTBOOK INFORMATION

Luigi Ruco, Aldo Scarpa. Anatomia Patologica. Le basi. UTET.

Gallo, D'Amati. Anatomia Patologica. La sistematica. UTET.

Robbins e Cotran. Le basi patologiche delle malattie. 9^a edizione. Elsevier
