

## OSP-PO2-T PATHOLOGY FOR DENTAL STUDENTS 2

Course director:

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**4 credit - final exam - Obligatory subject for the Pre-clinical module - spring semester - recommended semester: 6**

Number of hours/semester: **28 lectures + 0 practices + 28 seminars = total of 56 hours**

Course headcount limitations (min.-max.): **5 – 999** Prerequisites: **see your [Recommended Curriculum](#)**

### Topic

There is a special emphasis during the course on the clinicopathological view of the diseases, i.e., understanding the relationship of the clinical symptoms, macroscopical and microscopical changes of the diseased organs. By the end of the academic year, a basic clinicopathological affinity and competence in differential diagnosis is required of the students. Fundamentals and major examples of specific, organ pathology are discussed.

Since this is a curriculum designated with specific regard to dentistry students, special emphasis will be placed on the oral pathology and head-neck pathology chapters.

The systemic pathology course involves the major fields of organ pathology: pulmonary pathology, haematopathology, gastrointestinal pathology, pathology of the liver, pancreas and biliary system, pathology of the skin, cardiovascular pathology, oral pathology, pathology of the head and neck, pathology of the endocrine organs, nephropathology, pathology of male and female genital system and breast pathology.

Pathology education of dentistry students consists of 28 lectures and 28 histopathology seminars (14 practices) with the emphasis on oral pathology. The education during the second semester is carried out by the leader and colleagues of the Oral Pathology Unit (Faculty) of the Pathology Department.

The third-year students are expected to acquire the pathogenesis, the macroscopy and partly the microscopy of the main pathological changes which occur in this region. This reference knowledge could be used for the ongoing dental studies and especially later in consultations with the oral pathologists. The attendance to the Oral Pathology course and the knowledge picked up there -beside the general requirements- are obligatory to the approval of the two semesters.

### Conditions for acceptance of the semester

Absences exceeding 15% of the practical classes will result in not signing the gradebook. Maximum absence: 2 practices. Each missed seminar has to be made up for with another group in the same week.

### Mid-term exams

Final exam for the dentist students includes two slides and 2 exam questions.

### Making up for missed classes

Absences exceeding 15% of the practical classes will result in not signing the gradebook. Maximum absence: 2 practices. Each missed seminar has to be made up for with another group in the same week.

### Reading material

#### - *Obligatory literature*

Robbins: Basic Pathology Medicina 2014.

#### - *Literature developed by the Department*

Tornóczy, Kajtár: Oral Pathology Histology Notes (also available here: <http://aok.pte.hu/hu/egyseg/oktatasianyagok/230> limited amounts of printed version is available at our secretary office)

Lecture slides are found on the homepage of Department of Pathology.

#### - *Notes*

#### - *Recommended literature*

R.A. Cawson, E.W. Odell: Cawson's Essentials of Oral Pathology and Oral Medicine. 8th Edition, Churchill Livingstone, Elsevier, 2012 ISBN, 978-0443-10365-0

Antonio Cardesa, Pieter J. Slootweg: Pathology of the Head and Neck. Springer-Verlag, 2006, ISBN 10-3-540-30628-5, 2006

Sook-Bin Woo: Oral Pathology: A comprehensive atlas and text. Elsevier-Saunders, 2012, ISBN:978-1-4377-2226-0

JA. Regezi, JJ. Sciubba, RCK. Jordan: Oral Pathology. Clinicopathological correlations. 6th Edition, Elsevier, 2012, ISBN: 978-1-4557-0262-6

## Lectures

### PATHOLOGY OF THE RESPIRATORY SYSTEM (2 LECTURES)

- 1 Pathology of the lung 1.  
Dr. Smuk Gábor
- 2 Pathology of the lung 2.  
Dr. Smuk Gábor

### DERMATOPATHOLOGY (2 LECTURES)

- 3 Dermatopathology I: common skin lesions occurring in the head and neck region.  
Dr. Gyömörei Csaba
- 4 Dermatopathology II: systemic skin diseases with oral cavity manifestations  
Dr. Gyömörei Csaba

### HAEMATOPATHOLOGY (2 LECTURES)

- 5 Ontogenesis of the lymphoid cells. General characteristics of lymphomas.  
Dr. Kajtár Béla
- 6 Hematological malignancies of the head and neck region.  
Dr. Kajtár Béla

### PATHOLOGY OF THE GASTROINTESTINAL TRACT (2 LECTURES)

- 7 Diseases of the esophagus and stomach  
Dr. Bogner Barna István
- 8 Pathology of the small and large intestines  
Dr. Bogner Barna István

### CARDIOVASCULAR PATHOLOGY (4 LECTURES)

- 9 Ischaemic heart diseases  
Dr. Tornóczki Tamás
- 10 Endocarditis, myocarditis  
Dr. Tornóczki Tamás
- 11 Congenital heart diseases Cardiomyopathies  
Dr. Tornóczki Tamás
- 12 Vasculitides, vascular tumors  
Dr. Tornóczki Tamás

### ORAL PATHOLOGY (7 LECTURES)

- 13 Infective disorders of the oral cavity.  
Dr. Tornóczki Tamás
- 14 Non infective disorders of the oral cavity.  
Dr. Tornóczki Tamás
- 15 Epithelial lesions of the oral cavity  
Dr. Tornóczki Tamás
- 16 Epithelial neoplasms of the oral cavity. Pathogenetic role of HPV.  
Dr. Tornóczki Tamás
- 17 Pathology of the salivary glands. 1.  
Dr. Tornóczki Tamás
- 18 Pathology of the salivary glands. 2.  
Dr. Tornóczki Tamás
- 19 Mesenchymal lesions of the oral cavity  
Dr. Tornóczki Tamás

### ENDOCRINOPATHOLOGY (2 LECTURES)

- 20 Hypophysis tumors. Pathology of the thyroid gland I (developmental anomalies, hyperplasias, thireoiditides)  
Dr. Tornóczki Tamás
- 21 Pathology of the thyroid gland II (neoplasias). Pathology of the parathyroid glands. Pathology of the adrenals.  
Dr. Tornóczki Tamás

### NEPHRO- AND UROPATHOLOGY (2 LECTURES)

- 22 Pathology of kidney tumours. Kidney failure.  
Dr. Kereskai László
- 23 Inflammations and tumors of the urinary system.  
Dr. Kereskai László

**PATHOLOGY OF THE LIVER, PANCREAS AND THE BILIARY SYSTEM (2 LECTURES)**

- 24 Liver diseases.  
Dr. Bogner Barna István
- 25 Pathology of the pancreas and the biliary tract.  
Dr. Bogner Barna István

**PATHOLOGY OF THE MALE, FEMALE GENITALIA AND THE BREAST (3 LECTURES)**

- 26 Pathology of the testis, epididymis and prostate.  
Dr. Semjén Dávid
- 27 Pathology of the ovaries and uterus.  
Dr. Kálmán Endre
- 28 Pathology of the breast.  
Dr. Kálmán Endre

**Practices**

**Seminars**

- 1 Pulmonology
- 2 Pulmonology
- 3 Dermatopathology
- 4 Dermatopathology
- 5 Haematopathology
- 6 Haematopathology
- 7 Gastroenteropathology
- 8 Gastroenteropathology
- 9 Cardiovascular Pathology
- 10 Cardiovascular Pathology
- 11 Pathology of the oral cavity 1
- 12 Pathology of the oral cavity 1
- 13 Pathology of the oral cavity 2
- 14 Pathology of the oral cavity 2
- 15 Pathology of the oral cavity 3
- 16 Pathology of the oral cavity 3
- 17 Pathology of the oral cavity 4
- 18 Pathology of the oral cavity 4
- 19 Endocrinopathology
- 20 Endocrinopathology
- 21 Nephropathology
- 22 Nephropathology
- 23 Liver, pancreas pathology
- 24 Liver, pancreas pathology
- 25 Male, female genital pathology and breast pathology
- 26 Male, female genital pathology and breast pathology
- 27 Consultation
- 28 Consultation

**Exam topics/questions**

**SLIDES**

- I. PATHOLOGY OF THE RESPIRATORY SYSTEM
  - 1. CMV pneumonitis
  - 2. Carcinoma microcellulare pulmonum
  - 3. Carcinoma planocellulare pulmonum
- II. DERMATOPATHOLOGY
  - 4. Seborrheic keratosis
  - 5. Basal cell carcinoma
  - 6. Nodular melanoma

7. Bullous pemphigoid
8. Psoriasis

### III. HAEMATOPATHOLOGY

9. Toxoplasma lymphadenitis
10. Follicular lymphoma
11. CLL/SLL infiltration in lymph node
12. Diffuse large B-cell lymphoma
13. Hodgkin lymphoma
14. CML, CP smear

### IV. PATHOLOGY OF THE GASTROINTESTINAL TRACT

15. Helicobacter pylori infection (Whartin-Starry)
16. Coeliac disease- subtotal/total villous atrophy (Marsh 3c)
17. Carcinoid of the appendix
18. Rectal adenocarcinoma

### V. CARDIOVASCULAR PATHOLOGY

19. Viral myocarditis
20. Arteritis temporalis
21. Kaposi sarcoma

### VI-IX. ORAL PATHOLOGY

22. Squamous cell papilloma
23. Keratoacanthoma
24. Squamous cell carcinoma
25. Nasopharyngeal carcinoma (lymphoepithelial carcinoma)
26. Keratinizing squamous cell metaplasia
27. Epulis (peripheral giant cell granuloma) pyogen granuloma
28. Buccal fibroma
29. granular cell tumor (Abrikosoff-tumor)
30. Orofacial actinomycosis
31. Sialoadenitis chronica in the submandibular gland (Küttner-tumor), sialolithiasis
32. Lymphoepithelial cyst (intraparotideal)
33. Mucocele (extravasation type)
34. Sjögren syndrome lymphocytic sialoadenitis (minor salivary gland)
35. Pleiomorphic adenoma
36. Warthin tumor (cystadenoma papillare lymphomatosum)
37. Adenoid cystic carcinoma
38. Mucoepidermoid carcinoma
39. Fibrous dysplasia of the jaw
40. Ameloblastoma (unicystic type)
41. Oral lichen
42. Verrucous type squamous cell carcinoma
43. Plasma cell granuloma (epulis)
44. Radicular cyst
45. Odontogen keratocyst (keratocystic odontogen tumor)
46. Crohn's disease, oral cavity
47. Salivary gland MALT lymphoma
48. BION (bisphosphonate induced osteonecrosis)
49. Plasma cell myeloma, jaw
50. Pemphigus vulgaris, oral cavity
51. Leukoplakia: in situ carcinoma
52. Oral candidiasis

X. ENDOCRINOPATHOLOGY

53. Papillary carcinoma of the thyroid gland
54. Basedow-Graves disease
55. Hashimoto's-thyreoiditis
56. Parathyroid adenoma
57. Pheochromocytoma

XI. NEPHRO- AND UROPATHOLOGY

58. Clear cell renal cell carcinoma
59. Urothelial carcinoma of the renal pelvis

XII. PATHOLOGY OF THE LIVER, PANCREAS AND THE BILIARY SYSTEM

60. HBs-antigen positivity (Shikata)
61. Chronic hepatitis
62. Hepatocellular carcinoma in cirrhotic liver

XIII. PATHOLOGY OF THE MALE, FEMALE GENITALIA AND THE BREAST

63. Prostate adenocarcinoma
64. Seminoma
65. Endometrial adenocarcinoma curettage
66. Serous papillary cystadenocarcinoma of the ovaries
67. Invasive ductal carcinoma

THEORETICAL QUESTIONS

I. PATHOLOGY OF THE RESPIRATORY SYSTEM

1. Diseases of the upper airways.
2. Infections of the lower airways (nosocomial, community acquired and opportunistic infections). ARDS
3. Chronic obstructive lung diseases: general characteristics, types
4. Malignant tumors of the lung

II. DERMATOPATHOLOGY

5. Melanocytic lesions
6. Epithelial tumors of the skin
7. Inflammatory skin diseases

III. HAEMATOPATHOLOGY

8. Reactive lymph node changes
9. Lymphomas in the head and neck region
10. Myeloid neoplasias

IV. PATHOLOGY OF THE GASTROINTESTINAL TRACT

11. Diseases of the oesophagus
12. Pathology of the stomach
13. Pathology of the small intestines
14. Colorectal pathology

V. CARDIOVASCULAR PATHOLOGY

15. Angina pectoris és chronic ischemic heart disease, sudden cardiac death
16. Clinicopathology of acute myocardial infarction
17. Pathology of valvular disorders (inflammatory and degenerative)
18. Cardiomyopathies, cardiac tumors
19. Myocarditides, pathology of the pericardium
20. Congenital heart diseases
21. Arteriosclerosis, types and clinicopathology of aneurysms
22. Pathogenesis, classification and clinicopathology of vasculitides, vascular tumors

## VI. ORAL PATHOLOGY

23. Infective inflammatory diseases of the oral mucosa
24. Non infective inflammatory diseases of the oral mucosa
25. Benign epithelial lesions of the oral mucosa
26. Role of the HPV subtypes in the pathogenesis of benign and malignant lesions of the oral mucosa
27. Precancerous conditions. Leukoplaky and its differential diagnosis. Erythroplaky.
28. Malignant epithelial neoplasms of the oral cavity: histology types, localisation and pathogenesis
29. Benign mesenchymal lesions of the oral cavity and the jaws
30. Malignant mesenchymal lesions of the oral cavity and the jaws
31. Inflammatory lesions of the salivary glands: sialoadenitis, sialolithiasis, Mikulicz syndrome, Sjögren syndrome.
32. Tumor-like lesions of the salivary glands and oral mucosa.
33. Benign tumors of the salivary gland
34. Malignant tumors of the salivary gland
35. Odontogenic and non odontogenic cysts
36. Odontogenic tumors

## VII. PATHOLOGY OF THE ENDOCRINE SYSTEM

37. Anterior lobe pituitary tumors. hypophysis elülső lebenyének tumorai. Congenital anomalies of the thyroid gland, conditions associated with hyperplasia
38. Thyreoiditides, thyroid neoplasias
39. Hyperplasia, adenoma of the parathyroid gland
40. Adrenal gland hyperplasia, atrophy, tumors of the adrenal cortex. Tumors of the adrenal medulla.

## VIII. NEPHRO- AND UROPATHOLOGY

41. Renal failure. Tumors of the kidney.
42. Cystitides, tumors of the bladder and ureter

## IX. PATHOLOGY OF HTE LIVER, PANCREAS AND THE BILIARY SYSTEM

43. Pathology of the liver
44. Diseases of the biliary tract and the pancreas

## X. PATHOLOGY OF THE MALE, FEMALE GENITALIA AND THE BREAST

45. Prostate adenocarcinoma (pathogenesis, morphology, screening, diagnosis)
46. Testicular tumors, classification, tumor markers
47. Carcinoma of the cervix (pathogenesis, pathomorphology, screening)
48. Epithelial benign and malignant tumors of the uterine corpus. Mesenchymal neoplasms of the uterus.
49. Cysts and tumors of the ovaries (surface epithelial, germ cell tumors, sex cord stromal tumors, metastases)
50. Mastitides (lactational, ductal ectasis, fat necrosis, galactocele), mastopathies (fibrocystic changes). Fibroepithelial tumors
51. Carcinoma of the breast: pathogenesis, types, prognosis

Comment: The Department of Pathology reserves the right to propose minor modifications in the curriculum

### Participants

Dr. Bogner Barna István (FWINMS), Dr. Czina Márton (DQBJDS), Dr. Gyömörei Csaba (HW4NIX), Dr. Kálmán Endre (H4MBX2), Dr. Kaszás Bálint (C6EZUZ), Dr. Pap Anita (DO1ZZP), Dr. Semjén Dávid (D3T05F), Dr. Tornóczki Tamás (FND8FK), Dr. Vida Livia (XJJ5MJ)