Academic year 2021./2022.

Course title Autoimmune diseases of ocular surface and oral mucosa involvment

Department Department of Ophthalmology

Adress Gundulićeva 5

Total ECTS points 3

Course leader assoc.prof. Ivanka Petric Vicković

Course associates prof. Renata Iveković

Teaching plan

	No. classes
Lecture	7
Seminar	5
Practical	2
Total	14

1 class = 45 minutes

Course description The ocular surface system consists of the cornea, conjunctiva, lacrimal glands, meibomian glands, nasolacrimal duct, and their associated tear and connective tissue matrices, as well as the eyelids and eyelashes, all integrated by continuous epithelia and interconnected nervous, endocrine, immune, and vascular systems.

A healthy ocular surface environment is essential to preserve visual function, and as such the eye has evolved a complex network of mechanisms to maintain homeostasis.

The innate immune system is the first-line of defense and functions to control initial infection and coordinate the adaptive immune response, which culminates in activation of antigen-specific T and B cells, decreased microbial burden and generation of immunological memory to these foreign invaders. However, aberrant activation of the immune system may result in autoimmunity to self-antigens localized to the ocular surface and associated tissues.

Ocular surface autoimmune diseases encompass a diverse spectrum of pathologies and manifest as ocular specific, systemic, or occur secondary to other common autoimmune diseases. Oral signs and symptoms may accompany numerous autoimmune diseases.

Autoimmune diseases may be reflected in changes in the oral cavity that represent the first sign of the disease, or they may occur simultaneously with or later in the course of the disease.

The course aims to educate students about the most relevant systemic autoimmune and conditions that show the ocular surface signs and symptoms with accompanying oral lesions, their implications for health, and management strategies supported by the evidence based medicine and clinical experience.

Learning outcomes

1. to analyze ocular surface function in healthy environment
2. to identify ocular tissues which are involved in the immune reaction and to analyzed their role
3. to classify and explain localized and systemic autoimmune diseases (Dry eye sindrome, Sjogren sindrom, pemfigoid mukozne membrane)
4. To explain and apply different techniques for diagnosis of autoimmune diseases of ocular surface
5. To predict oral and ocular complications of autoimmune disease

Course contet

Lecture

	Lecture topics	**Number of classes/hours**
1.	Ocular surface: anatomy and physiology	1
2.	Immune function of the ocular tissues	1
3.	Localized autoimmune diseases	1
4.	Systemic autoimmune diseases	1
5.	Systemic autoimmunity following allograft	1
6.	Diagnosis and management of autoimmune diseases	1
7.	Quality of life with autoimmune diseases	1
8.	-	-
9.	-	-
10.	-	-

1 sat = 45 minuta

Seminari

	Seminar topics	**Number of classes/hours**
1.	Imaging techniques of the ocular surface	1
2.	Differential diagnosis of ocular surface diseases	1
3.	Dry eye and dry mouth	1
4.	Dry eye as a mucosal autoimmune desease	1
5.	Mucose membrane phemphigoid with ocular involvment	1
6.	-	-

7.	-	-
8.	-	-
9.	-	-
10.	-	-

1 sat = 45 minuta

Vježbe

	practicals topics	**Number of classes/hours**
1.	Diagnostic and imaging tools in ophthalmology	1
2.	Patients with Sjogren syndrome amd mucous membrane pemphigoid	1
3.	-	-
4.	-	-
5.	-	-
6.	-	-
7.	-	-
8.	-	-
9.	-	-
10.	-	-

1 class = 45 minutes

Literature

Dubravka Šimić i suradnici. Bolesti sluznica. Medicinska naklada, Zagreb, 2012.

Basic and Clinical Science Course (BCSC). Section 8: External disease and Cornea . San Francisco : American Academy of Ophthalmology, 2018-2019.

Abbas AK, Lichtman AH, Pillai S. Stanična i molekukarna imunologija. 8. Izdanje. Medicinska naklada, Zaghreb, 2018

CV (*curriculum vitae*) and bibliography of course leader

Ivanka Petric Vicković was born in Zagreb on 23rd August 1969. She attended elementary and high school in Zagreb. She graduaded from the Medical School, University of Zagreb in 1994. Since 1996 she is been employed in the University hospital Sisters of Mercy where she specialized ophthalmology in 2000. 2009. she obtained her PhD degree with the dissertation: Predictive value of endothelin-1 in aqueous humour in patients with exfoliation syndrome for

glaucoma damage. Currently she teaches as associate professor at the School of Dental Medicine University of Zagreb and the Medical School University of Zagreb.

She is the author of more than 50 professional and scientific papers, lecturer at numerous national and international meetings and organizer of different courses, symposia and congresses and co-authored six books.

Her field of expertise is based on the cataract surgery, corneal transplantation, the transplantation of corneal limbal stem cell transplantation and ophthalmic plastic and reconstructive surgery.

She is a president of the Croatian Organisation for Cataract and Refractive Surgery (CroCRS), and a member of many croatian and international societies

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