

UNIVERSITY OF ZAGREB SCHOOL OF MEDICINE

Plan of the course

Basics of Pediatric Allergy

Academic year **2016/2017**

doc. dr. sc. Mirjana Turkalj

I. COURSE AIMS

COURSE OUTLINE

The specialty of allergy involves the management of a wide range of clinical conditions that cross the organ based disciplines. Most allergic disorders are chronic and they may be debilitating; however, some of the conditions (e.g. anaphylaxis) may be life threatening. There is a well-documented substantial rise in the prevalence of allergic disease, which affects one third of the population in the developed countries.

The most common clinical conditions managed by Allergists include asthma, eczema, rhinitis (seasonal and perennial), bee and wasp venom allergy, food allergy, latex allergy, urticaria and angioedema, drug allergy, anaphylaxis and food intolerance.

The recognition and management of allergic conditions requires appropriate expertise. Unfortunately, little training is given on this subject in medical schools. It is important to capitalize on the education and training potential in the Zagreb Medical School to help meet the demand for allergy services, the unmet need and to examine ways to improve service delivery. Given the economic and health utilization burden of allergy it is essential that medical students receive basic training in pediatric allergy.

COURSE AIMS

Basic insights into Pediatric Allergy gaining basic knowledge about pathophysiology, diagnostics and treatment of allergic disorders in children.

LEARNING OUTCOMES

1. Knowledge about specific aspects of immunity as related to allergy (e.g. the mechanisms of allergic inflammation, regulation of IgE synthesis, the cellular and molecular immunology of asthma, rhinitis and urticaria, key targets for anti-allergic drugs and their mechanisms of action)
2. Clinical presentation of allergic disorders
3. Interpretation of diagnostic tests in pediatric allergy
4. Basic therapeutic concepts including new developments in therapy (e.g. immunotherapy) and primary prevention of allergic disease.

CATALOGUE OF KNOWLEDGE AND SKILLS

1. Epidemiology of Allergic Disease
2. Natural History of Allergic Diseases and Asthma
3. Genetics of Allergic Disease and Asthma
4. Regulation and Biology of IgE
5. Inflammatory Effector Cells and Cell Migration
6. The Developing Immune System and Allergy
7. Laboratory (In Vitro) Diagnostic Tests
8. In Vivo Testing for IgE-Mediated Allergens
9. In Vivo Testing for Contact Allergy
10. Principles of Pharmacological Treatment of Allergic Diseases
11. Environmental Control
12. Immunotherapy
13. Allergic Rhinitis

14. Asthma
15. Food Allergy
16. Atopic Dermatitis
17. Urticaria and Angioedema
18. Contact Dermatitis
19. Allergic Eye Disease
20. Drug Allergy
21. Latex Allergy
22. Insect Sting Anaphylaxis
23. Anaphylaxis

Catalogue of Skills

- To get the skill of performing skin prick tests
- To get the skills of performing intradermal and patch skin tests
- To get the skills of Interpretation of diagnostic tests in pediatric allergy
- To get the skills of taking the proper medical history from children (and their parents) with allergic disorders

II. COURSE STRUCTURE

Course hours:

Lectures: 8

Seminar: 7

Clinical practicals: 10

Total hours: 25

III. PLAN OF THE COURSE AND COURSE SCHEDULE

BLOCKS OF THE COURSE

Number of blocks: 1

Block number	Start	End
1.	28.11.2016	16.12.2016

BLOCKS OF THE COURSE

Number of blocks: 1

Block number	Start	End
1.	28.11.2016	16.12.2016

BLOCKS OF THE COURSE SCHEME

Block 1

Date	Time	Group	Course hours type	Theme	Teaching staff
Monday 28.11.2016.	14:30-15:15; Dječja bolnica Srebrnjak		Lectures	Introduction, Epidemiology and Natural History of Allergic Diseases	izv. prof. dr. sc. Davor Plavec
Tuesday 29.11.2016.	14:30-15:15; Dječja bolnica Srebrnjak		Lectures	Regulation and Biology of IgE, Inflammatory Effector Cells	dr. sc. Denis Polančec
	15:15-16:00; Dječja bolnica Srebrnjak		Clinical practicals	BAT/flow cytometry	dr. sc. Denis Polančec
Wednesday 30.11.2016.	14:30-15:15; Dječja bolnica Srebrnjak		Clinical practicals	Pulmonary function test (1/2)	izv. prof. dr. sc. Davor Plavec
	15:15-16:00; Dječja bolnica Srebrnjak		Clinical practicals	Laboratory (½) and BAT/flow cytometry	izv. prof. dr. sc. Davor Plavec
Thursday 1.12.2016.	14:30-15:15; Dječja bolnica Srebrnjak		Clinical practicals	Laboratory (In Vitro) Diagnostic Tests in allergic disorders	dr. sc. Denis Polančec
	15:15-16:00; Dječja bolnica Srebrnjak		Clinical practicals	BAT/flow cytometry(1/2) Spiroergometrija(1/2)	izv. prof. dr. sc. Davor Plavec
Friday 2.12.2016.	14:30-16:00; Dječja bolnica Srebrnjak		Seminar	In Vivo Testing in IgE-Mediated Allergy- Epikutani test, In Vivo Testing in non-IgE mediated allergy	doc. dr. sc. Mirjana Turkalj
Monday 5.12.2016.	14:30-15:15; Dječja bolnica Srebrnjak		Lectures	Atopic Dermatitis, Anaphylaxis/anaphylactoid reactions	doc. dr. sc. Mirjana Turkalj
	15:15-16:00; Dječja bolnica Srebrnjak		Clinical practicals	Dpt+OPC Drug challenge tests	doc. dr. sc. Mirjana Turkalj
Tuesday 6.12.2016.	14:30-15:15; Dječja bolnica Srebrnjak		Lectures	Alergic rhinitis	dr. sc. Srđan Ante Anžić
	15:15-16:00; Dječja bolnica Srebrnjak		Lectures	Genetics of Allergic Disease and Asthma	dr. sc. Željka Vlašić Lončarić
Wednesday 7.12.2016.	14:30-15:15; Dječja bolnica Srebrnjak		Lectures	Principles of Pharmacological Treatment of Allergic Disorders	doc. dr. sc. Damir Erceg
	15:15-16:00; Dječja bolnica Srebrnjak		Seminar	Urticaria and Angioedema, Contact Dermatitis (cases) Prevention of allergic diseases	doc. dr. sc. Damir Erceg
Thursday 8.12.2016.	14:30-15:15; Dječja bolnica Srebrnjak		Lectures	Food Allergy, Histamine intolerance or food allergy	doc. dr. sc. Mirjana Turkalj
	15:15-16:00; Dječja bolnica Srebrnjak		Seminar	Nutrition and diet - Atopic Dermatitis - (C&A therapy) - GMO and Food allergy	doc. dr. sc. Mirjana Turkalj
Friday 9.12.2016.	14:30-15:15; Dječja bolnica Srebrnjak		Lectures	Asthmatic phenotypes /endotypes in children	doc. dr. sc. Mirjana Turkalj
	15:15-16:00; Dječja bolnica Srebrnjak		Clinical practicals	In vivo testing for allergic diseases (bronchial challenges)	izv. prof. dr. sc. Davor Plavec, doc. dr. sc. Mirjana Turkalj
Monday 12.12.2016.	14:30-15:15; Dječja bolnica Srebrnjak		Seminar	Practical dilemmas allergic disorders	dr. sc. Željka Vlašić Lončarić
	15:15-16:00; Dječja bolnica Srebrnjak		Clinical practicals	Oral provocation tests (DBPCFPT)	dr. sc. Željka Vlašić Lončarić

Date	Time	Group	Course hours type	Theme	Teaching staff
Tuesday 13.12.2016.	14:30-16:00; Dječja bolnica Srebrnjak		Clinical practicals	Patch test in Allergy diagnostics	doc. dr. sc. Mirjana Turkalj
Wednesday 14.12.2016.	14:00-14:45; Dječja bolnica Srebrnjak		Clinical practicals	Drug allergy	doc. dr. sc. Mirjana Turkalj
	14:45-15:30; Dječja bolnica Srebrnjak		Seminar	Drug allergy-allergic reaction to anesthetic and myorelaxants in children	doc. dr. sc. Mirjana Turkalj
Thursday 15.12.2016.	13:00-14:30; Dječja bolnica Srebrnjak		Seminar	Student case report	doc. dr. sc. Mirjana Turkalj
Friday 16.12.2016.	08:00-09:00; Dječja bolnica Srebrnjak	SVI	Exam	Exam	doc. dr. sc. Mirjana Turkalj

IV. EXAMINATIONS

Students prepare actively for participating in seminars and practical work.

Testing of knowledge is done using a written exam.

Exam success rate and anonymous questionnaire about the course and teaching staff at the end of the course.

V./I. LIST OF LECTURERS AND TEACHING STAFF

V./II EXTERNAL ASSOCIATES:

1. izv. prof. dr. sc. Davor Plavec
2. doc. dr. sc. Mirjana Turkalj
3. doc. dr. sc. Damir Erceg
4. dr. sc. Željka Vlašić Lončarić
5. dr. sc. Denis Polančec
6. dr. sc. Srđan Ante Anžić

V./III UNTENURED LECTURERS:

VI. LITERATURE

Pediatric Allergy. Principles and Practice by Donald Y.M. Leung

Middleton's Allergy Principles & Practice by Adkinson NF et al.

Pediatric Allergy, Asthma and Immunology by Cantani, Arnaldo

Pediatric Allergy by Mark H. Moss