



Pomeranian Medical University in Szczecin

SYLLABUS of the MODULE (SUBJECT)

General Information

Code		Title	Internal Diseases_Hypertensiology
Module type			<i>Obligatory</i>
Faculty			<i>Faculty of Medicine (WLA)</i>
Field of study			<i>medicine (KL)</i>
Major			<i>Not applicable</i>
Level of study			<i>II level/ long-cycle (S2J)</i>
Mode of study			<i>intramural</i>
Year of study			<i>I</i>
Semester			<i>Block system</i>
ECTS points			<i>1</i>
Types of training			<i>Seminars 2h practical classes 6h (8 hours in total)</i>
Tutor responsible for the module			<i>Professor of Medical Sc. Krystyna Widecka khchw@pum.edu.pl</i>
Tutors conducting the subject			<i>Professor of Medical Sc. Krystyna Widecka (khchw@pum.edu.pl) Professor of Medical Sc. Tomasz Miazgowski (khchw@pum.edu.pl) Justyna Widecka MD (widecka@gmail.com) Katarzyna Widecka- Ostrowska MD (k.widecka@gmail.com)</i>
WWW			<i>www.pum.edu.pl</i>
Language			<i>Polish, English</i>

Detailed information

Module objectives		<p>The aim of the implemented module is to familiarize students with the definition, blood pressure measurement methods, symptoms (ability to collect medical history) and signs of hypertension (basic methods for cardiovascular examination).</p> <p>Furthermore, the objective is to provide knowledge about secondary hypertension along with the symptomatology of diseases manifested by hypertension. The student becomes familiar with the diagnosis, differentiation and management of hypertension (including surgical treatment).</p>
Prerequisite /essential requirements	Knowledge	<i>Physiological and pathophysiological basis of disease symptoms.</i>
	Skills	<i>The ability to establish a contact with the patient, taking into consideration that medical examination has to be individualized.</i>
	Competences	<i>Applies methods of self-education, working in team applies the principles of medical ethics, knows the patient's rights, keeps medical confidentiality.</i>

Description of the learning outcomes for the subject /module			
Number of learning outcome	Student, who has passed the (subject) Knows /is able to /can:	SYMBOL (referring the standards) EKK	Method of verification of learning outcomes
W01	knows and recognizes the causes and symptoms versus abnormalities on physical examination of circulatory system diseases incl. of: ischemic heart disease, organic heart diseases, endocardium, myocardium and pericardium diseases, heart failure (acute and chronic), angiopathy, primary and secondary hypertension, pulmonary hypertension	K_E.W7	End of the block- Credit (oral form) Verification of theoretical knowledge and practical skills
W02	knows and recognizes the causes and symptoms versus abnormalities on physical examination of endocrine system diseases, inc. adrenal gland diseases, acromegaly, thyroid disorders, obesity	K_E.W7	
W03	knows and recognizes the causes and symptoms of nephropathy diseases as a cause of arterial hypertension or its complication	K_E.W7	
W04	knows and recognizes the causes, symptoms, diagnostics and therapeutic procedures with regard to water-electrolyte and base-acid disorders: dehydration, overhydration, electrolytic equilibrium disorder, acidosis and	K_E.W7	

	alkalosis,		
W05	knows and recognizes the causes, symptoms, diagnostics and therapeutic procedures with regard to cerebrovascular diseases, in particular cerebral stroke,	K_E.W14	
U01	takes history interview of adult patient	K_E.U1	
U02	carries out complete and guided physical examination of adult patient	K_E.U3	
U03	evaluates general state, state of patient's consciousness and awareness	K_E.U7	
U04	carries out differentiation diagnostics of most frequent diseases in adults and children	K_E.U12	
U05	recognizes states representing direct threat to life	K_E.U14	
U06	plans diagnostics, therapeutic and preventive procedures	K_E.U16	
U07	interprets laboratory investigations and identifies reasons for deviations	K_E.U24	
U08	performs basic procedures and operations, incl.: -body temperature measurement, heart rate measurement, -blood pressure measurement ; -standard resting electrocardiogram with interpretation -24 hour ambulatory blood pressure monitoring with interpretation	K_E.U29	
K01	accepts the need for ethical standards	K_K01	
K02	demonstrates the awareness for self-education, understands the need for continuing professional education, can inspire and organize learning processes in others	K_K03	
K03	co-operates with team members; can co-operate within a group and take different roles	K_K04	
K04	adheres to proper examiner/examinee relationship while performing functional tests and observations	K_K05	
K05	is aware of patients' rights	K_K11	

Matrix presenting the learning outcomes of the subject/module in relation to the form of classes

Number of learning outcome	Student, who has passed the (subject) Knows /is able to /can:	Types of training							
		Lecture	Seminar	Laboratory classes	Project work	Clinical classes	Classes	Practical classes	Other
W01	knows and recognizes the causes		X			X			
W02	knows and recognizes the causes		X			X			
W03	knows and recognizes the causes		X			X			
W04	knows and recognizes the causes,		X			X			
W05	knows and recognizes the causes,		X			X			
U01	takes history interview of adult					X			

U02	carries out complete and guided					X			
U03	evaluates general state, state of					X			
U04	carries out differentiation					X			
U05	recognizes states representing					X			
U06	plans diagnostics, therapeutic and					X			
U07	interprets laboratory investigations					X			
U08	performs basic procedures and					X			
K01	accepts the need for ethical					X			
K02	demonstrates the awareness for					X			
K03	co-operates with team members;					X			
K04	adheres to proper					X			
K05	is aware of patients' rights					X			

Module (subject) contents		
Symbol of teaching programme	Content of teaching programme	References to learning outcomes
TK_01	SEMINARS: -Patients with essential hypertension (medical history; physical examination; methods of blood pressure monitoring: office and home blood pressure measurements, 24-h ambulatory blood pressure monitoring (ABPM) -Stratification of cardiovascular risk in patients with hypertension. -Nonfarmacological treatment, the main groups of antihypertensive drugs. -Assessment of the hypertension complications (left ventricular hypertrophy, thickening of the carotid intima-media complex, renal complications, evaluation of the fundus. -Metabolic syndrome. -Resistant hypertension Practical classes: Physical and symptomatic examination of the patient. Explanation of medical records including medical history. Discussion/argumentation and further planning of additional medical examinations	K_E.W7 K_E.U1; 3; 7; 12; 16 K_K01; 04; 05
TK_02	SEMINARS: -Primary hyperaldosteronism. -Pheochromocytoma Practical classes: Physical and symptomatic examination of the patient. Explanation of medical records including medical history. Discussion/argumentation and further planning of additional medical examinations	K_E.W7 K_E.U1; 3; 7; 12; 14; 16; 24 K_K03; 11
TK_03	SEMINARS: -Renal artery stenosis -Urgent and emergency cases of hypertension -Hypertension during pregnancy - Obstructive sleep apnea	K_E.W7; 14 K_E.U1; 3; 7; 12; 14; 16; 24

	Practical classes: Physical and symptomatic examination of the patient. Explanation of medical records including medical history. Discussion/argumentation and further planning of additional medical examinations	K_K03; 04; 05; 11		
References and educational resources				
Tykarski A., Narkiewicz K., Gaciong Z., et al. Guidelines for the Management of Hypertension. p-ISSN: 1428-5851, e- ISSN: 2449-6170 Parts 1-7 in Arterial Hypertension 2015;19(2):53-83. DOI: 10.5603/AH.2015.0010 Part 8 in Arterial Hypertension 2015;19(4):153-173.DOI: 10.5603/AH.2015.0020 Part 9 in Arterial Hypertension 2015;19(3):101-119. DOI: 10.5603/AH.2015.0014				
Form of student’s activity (in-class participation; activeness, produce a report, etc.)	Workload [h]			
	Tutor	Student	Average	
activities that require direct participation of tutors	8	8		
Preparation to the classes		10		
Reading of the indicated/specified literature		7		
Report writing/project making				
Time spent to prepare for the exam				
Other				
Student’s workload in total		25		
ECTS points for the subject	1			
Remarks at the end				

Methods of assessment, for example:

E – exam- problem resolving

S – verifying of practical skills

R – report

D – discussion

P – presentation

Others-