

Week	Lectures - ETW: http://portal.lf.upjs.sk	Seminars - OTW:
1.		<u>Introduction to clinical biochemistry</u> 1. Most frequent analyzed biological materials 2. Sampling and and manipulation in preanalytic phase. 3. Interpretation of results – reference intervals, biological variation, 4. Clinical performance of the test: sensitivity, specificity, predictive values <i>E.Ďurovcová, MD.</i>
2.	WATER, AND MINERAL HOMEOSTASIS - Distribution of water, sodium and potassium - Regulation of osmolality - Hyper- and dehydration - Hyponatraemia, hypernatraemia - Hyperkaleamia- and hypokalaemia <i>E.Ďurovcová, MD.</i>	
3.		<u>Case reports - water and mineral disturbances</u> 1. SIADH- case report 2. Hyperkaleamia 3. Excursion to the clinical laboratory (biochemistry) <i>E.Ďurovcová, MD.</i>
4.	ACID-BASE BALANCE DISORDERS - Regulation of hydrogen homeostasis - Blood gases analysis, measured and calculated parameters, anion gap - Compensation and correction of AB disorders - Acidosis and alkalosis - Metabolic and respiratory AB disorders <i>E.Ďurovcová, MD.</i>	
5.		<u>Interpretation of laboratory results in ABD</u> 1. Step by step – how to determine type of ABD 2. Nomogram, calculators, formulas 3. Evaluation of the degree of compensation in ABD 4. Interpretation of unknown capillary blood gases result <i>E.Ďurovcová, MD.</i>
6.	RENAL FUNCTIONS - Urinalysis - Biochemical tests for assessment of glomerular filtration rate - Acute and chronic renal failure - Biochemical tests in tubular disorders - Proteinuria, albuminuria <i>E.Ďurovcová, MD.</i>	
7.		<u>Clinical case reports in renal disorders</u> 1. Chemical and microscopical urinalysis - demonstration 2. Assesment of GFR – measured and estimated 3. Typization of proteinuria – case reports 4. Renal calculi <i>E.Ďurovcová, MD.</i>

8.	<p>LIVER FUNCTION TESTS</p> <ul style="list-style-type: none"> - Assessment of hepatic function. - Hyperbilirubinaemias – differential diagnosis - Acute and chronic liver diseases- laboratory features - Metabolic liver disorders <p style="text-align: right;"><i>E.Đurovcová, MD.</i></p>	
9.		<p><u>Interpretation of laboratory results in GI disorders</u></p> <ol style="list-style-type: none"> 1. Enzymes in hepatic disorders – case reports 2. Serum and urine findings in different types of jaundice 3. Test for pancreatic and intestinal function 4. Plasma proteins: total proteins, specific proteins, polyklonal and monoclonal gammopathies <p style="text-align: right;"><i>E.Đurovcová, MD.</i></p>
10.	<p>DIABETES MELLITUS</p> <ul style="list-style-type: none"> - Pathophysiology of glucose homeostatis-review - Biochemical tests for diagnosis and monitoring - Biochemical background of diabetic emergencies - Hypoglycaemia <p style="text-align: right;"><i>E.Đurovcová, MD.</i></p>	
11.		<p><u>Clinical case reports in diabetes mellitus</u></p> <ol style="list-style-type: none"> 1. Glycated hemoglobin-role in assessment of DM control 2. Hypersomolar hyperglycaemic coma -case report 3. Gestational diabetes mellitus – screening test <p style="text-align: right;"><i>E.Đurovcová, MD.</i></p>
12.	<p>LABORATORY TEST FOR CARDIOVASCULAR SYSTEM</p> <ul style="list-style-type: none"> - Biochemistry of cardiovascular system. - Markers of myocardial damage - Markers of heart failure - natriuretic factor - Hyperlipidaemias <p style="text-align: right;"><i>E.Đurovcová, MD</i></p>	
13.		<p><u>Interpretation of laboratory results in AMI</u></p> <ol style="list-style-type: none"> 1. Acute STEMI – case report 2. Other causes of abnormal troponin T results 3. Interpretation of lipid abnormalities <p style="text-align: right;"><i>E.Đurovcová, MD.</i></p>
14.	<p>TUMOUR MARKERS</p> <ul style="list-style-type: none"> - Definition and classification of TM - Purpose of TM usage - Ectopic hormone secretion <p style="text-align: right;"><i>E.Đurovcová, MD</i></p>	