

**DESCRIPTION OF COURSE UNIT FOR DOCTORAL STUDIES
AT VILNIUS UNIVERSITY**

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| Scientific Area/eas, Field/ds of Science | Medical and health sciences (M 000): Medicine (M 001) | | | |
| Faculty, Institute, Department/Clinic | Faculty of Medicine, Vilnius University Institute of clinical medicine Clinic of gastroenterology, nephrourology and surgery | | | |
| Course unit title (ECTS credits, hours) | Treatment of Digestive System Diseases 9 credits (240 hours) | | | |
| Study method | Lectures | Seminars | Consultations | Self-study |
| Number of ECTS credits | - | - | 2 | 7 |
| Method of the assessment (in 10 point system) | Oral examination. 3 questions are given. | | | |
| PURPOSE OF THE COURSE UNIT | | | | |
| To learn the principles of pharmacotherapy of digestive diseases. Get to know and learn how to treat the diseases of the esophagus, stomach, liver, pancreas and intestines in accordance with Lithuanian and international guidelines. | | | | |
| THE MAIN TOPICS OF COURSE UNIT | | | | |
| <p>Functional diseases of the esophagus (ROME III classification) – understanding of functional diseases of the esophagus and treatment modalities.</p> <p>Neurohumoral regulation of gastric secretion and its pharmacological correction.</p> <p>Treatment of gastroesophageal reflux disease (GORD) with acid suppression medication (histamine 2 antagonists, proton pump inhibitors, other drugs lowering gastric acidity). Prophylaxis of GORD. Treatment of motor diseases of the esophagus – diagnostics and treatment of achalasia, diagnostics and treatment of esophageal spasm, diagnostics and treatment of other rare diseases of the esophagus. Proton pump inhibitors (PPI) – classification, mode of action, side effects, consequences of long-term treatment, harmonizing treatment with other medication. Cytoprotectors (bismuth medication, sucralfate) and their role in modern treatment of acidity caused diseases. Eradication of <i>Helicobacter pylori</i> in patients with gastritis and ulcerative disease. First and second choice eradication schemes. Cascade eradication of <i>Helicobacter pylori</i>. Adjunctive (rescue) schemes of treatment. Prophylaxis for recurrence of ulcerative disease. Prophylaxis with <i>Helicobacter pylori</i> eradication. Prophylaxis when using non-steroid anti-inflammatory drugs (NSAIDs). Other methods of prophylaxis for ulcerative disease. Surgical prophylaxis of ulcerative disease. Pharmacotherapy for non-ulcerative dyspepsia. Types of non-ulcerative dyspepsia (ulcer-like, dysmotile, mixed). Treatment with acid suppressive medication – antacids, histamine receptor antagonists, proton pump inhibitors, cytoprotective medication (bismuth medication, sucralfate). Role of <i>Helicobacter pylori</i> eradication in the treatment of functional dyspepsia and different types of it.</p> <p>Interferon based treatment of infectious hepatitis (B and C). Aims and goals of chronic hepatitis B treatment. Treatment of chronic hepatitis B with lamivudine and other antiviral medication. Role of hepatoprotective agents in the treatment of chronic hepatitis B. Treatment of patients with compensated cirrhosis due to chronic viral hepatitis B. Viral hepatitis delta (hepatitis D), its relation to VHB infection and options of treatment. Treatment of chronic VHC, approved practice of treatment of chronic VHC in Lithuania (last version approved in 2008 06 20). Treatment of chronic VHC with interferon and ribavirin, treatment control, repeat treatment. Treatment</p> | | | | |

of patients with compensated liver cirrhosis due to chronic hepatitis C. Future treatment possibilities with other nucleotide analogues. Hepatoprotective agents and their role in treatment of chronic liver diseases – silymarin, essential phospholipids, antioxidants. Medical treatment of parenchymal cholestatic diseases. Treatment of PBC, intense pruritus and complications due to cholestasis. Indications for liver transplantation. Treatment of PSC – medical, invasive, indications for liver transplantation. Association of PSC and inflammatory bowel diseases, risk of cholangiocarcinoma in PSC. Treatment with ursodeoxycholic acid (UCDA) of liver diseases. Indications, dosing, side effects, treatment schedule of UCDA in various cholestatic liver diseases. Treatment of ascites. Diuretics – furosemide and spironolactone, combining and dosing, evaluation of treatment results, side effects. Other diuretics and combining them with spironolactone and furosemide in treatment of refractory forms of ascites. Methods of paracentesis, combination of paracentesis and diuretics. Indications for albumin prescribing. Spontaneous bacterial peritonitis – treatment with antibiotics, length of treatment, prophylaxis of spontaneous bacterial peritonitis. Pharmacotherapy of hepatic encephalopathy. Treatment of acute and chronic encephalopathy. Detection and treatment of subclinical forms of encephalopathy. Main drugs for treating hepatic encephalopathy – ornithine – aspartate, lactulose, antibiotics. Indications, dosing, combining and side effects of these drugs. Prophylaxis of hepatic encephalopathy. Peroral dissolution of gall bladder stones – ursodeoxycholic acid, chenodeoxycholic acid, combination of them. Transhepatic dissolution of gall bladder stones. Medical treatment and prevention of cholecystitis. Indications for surgical treatment of gall bladder stones. Antibacterial treatment for cholangitis. Interventional methods for the treatment of cholangitis and their combination with antibiotics. Prevention of cholangitis and the indications, dosing and term of treatment with ursodeoxycholic acid. Medical treatment of primary biliary cholangitis. Cholagogues and choleretics. Treatment of PSC – medical, invasive, indications for liver transplantation. Relationship between PSC with inflammatory bowel diseases and PSC and the risk of cholangiocarcinoma, medical treatment of their combination. Substitutive treatment of chronic pancreatitis. Indications for treatment with pancreatic enzyme therapy. Forms of pancreatic enzymes, dosing, possible side effects. Interaction of pancreatic enzymes with other drugs and factors. Treatment with antioxidants in patients with chronic pancreatitis. Analgesia in chronic pancreatitis. Analgesics and their combinations, adjuncts to analgesics. Indications for surgical treatment of chronic pancreatitis. Treatment of ulcerative colitis and Crohn's disease. ECCO consensus on the treatment of ulcerative colitis and Crohn's disease and their complications. The effect of mesalazines (topical and systemic), pharmacological forms of mesalazines, dosing, term of treatment, possible side effects. Treatment of Crohn's disease and ulcerative colitis with glucocorticoids, indications, dosing, term of treatment, possible side effects. Treatment with immunosuppressive agents in inflammatory bowel diseases. Indications for treatment with azathioprine, dosing, term of treatment, possible side effects. Biologic therapy of inflammatory bowel diseases (infliximab and adalimumab) – indications for treatment, dosing, term of treatment, possible side effects. Indications for surgical treatment in inflammatory bowel diseases.

RECOMMENDED LITERATURE SOURCES

1. Speičienė D., Lėtiniai hepatitai, klasifikacija, klinika, diagnostika //UAB Aola//2006.
2. Boolm S., Webster G., Oxford Handbook of Gastroenterology and hepatology//Oxford university press//2022.

3. Feldman M., Friedman Lawrence S., Brandt Lawrence J. Gastrointestinal and Liver Disease 11th edition, vol. 1//Elsevier //2020.
4. Thomas D. Boyer, Teresa L. Wright, Michael P. Manns, Zakim and Boyer's Hepatology a textbook of Liver Disease//sixth edition//Elsevier//2012.
5. Rodes J. Textbook of hepatology; from basic science to clinical practice (third edition)//Vol.1 Blackwell//2007.
6. Irnius A., Speičienė D., ir kt., Primary biliary cirrhosis in Lithuania: diagnosis and clinical Picture//Med Sci Monit, 2007; 13(7):CR299-306.
7. Yamaha T. Textbook of gastroenterology (sixth edition)// Wiley –Blackwell//2015.
8. Augalinių tinktūrų pro/antioksidacinio aktyvumo įvertinimas gastroduodeninės srities gleivinėje sergantiems skrandžio ir dvylikapirštės žarnos opoms//2009'6/tomas 19,psl. 2811-2816, Irnius A., Vasiliauskas A., ir kt.
9. Denapienė G., Opinis kolitas//Vilniaus universitetas//Vilnius//2009.
10. Irnius A. Geriatriinių pacientų virškinamojo trakto ligos //Solvay//Vilnius //2009.
11. Kepenų cirozė, jos pasekmės ir komplikacijos: diagnostika ir gydymas// UAB Vaistų žinios, 2009;Vilnius, Speičienė D., Valantinas J.
12. Klinikinė gastroenterologija, UAB Vaistų žinios, 2010, Valantinas J., Kupčinskas L. ir kt.
13. Kepenų transplantacija, 2013, prof. habil. dr. Kęstutis Strupas.
14. Bakterinių infekcijų sergant kepenų ciroze diagnostika ir gydymas, 2016, Vitalija Petrenkienė, Limas Kupčinskas.
15. Management of Pancreatic Diseases, gastroenterology clinics of North America, 2016 march, Nuzhat A. Ahmad, Gary W. Falk.

CONSULTING LECTURERS

1. Coordinating lecturer: Ieva Stundienė (Assoc. Prof. Dr.).

2. Goda Sadauskaitė (Assoc. Prof. Dr.).

3. Edita Kazėnaitė (Assoc. Prof. Dr.).

APPROVED

By Council of Doctoral School of Medicine and Health Sciences at Vilnius University:
29th of September 2022

Chairperson of the Board: Prof. Janina Tutkuvienė