

# Literatura ACTA MEDICINAE 14/2021 Vnitřní lékařství

- 3 Kombinovaná léčba dyslipidemií u pacienta s diabetes mellitus a renálním poškozením**  
prof. MUDr. Hana Rosolová, DrSc. Centrum preventivní kardiologie, LF UK a II. interní klinika FN Plzeň
- 3 Účinnost a bezpečnost hypolipidemické léčby u pacientů s diabetem**  
prof. MUDr. David Karásek, Ph.D. III. interní klinika – nefrologická, revmatologická a endokrinologická LF UP a FN Olomouc
- 3 Jak zjednodušit pacientům medikaci i život. Změna IIR na jednu denní dávku preparátu Suliqua pro recidivující hypoglykemie pacienta s DM2T**  
MUDr. Natálie Sukop-Špůrková Interní a diabetologická ambulance, Otrokovice
- 3 Expertní konsenzus k praktickým aspektům spolupráce kardiologa a diabetologa v péči o pacienty s chronickým srdečním selháním s redukovanou ejekční frakcí**  
prof. MUDr. Martin Haluzík, DrSc. Centrum diabetologie IKEM, Praha  
MUDr. Markéta Kubíčková III. interní gerontometabolická klinika, FN a LF UK, Hradec Králové  
MUDr. Jiří Veselý III. interní gerontometabolická klinika, FN a LF UK, Hradec Králové; EDUMED, s. r. o., Náchod  
prof. MUDr. Aleš Linhart, DrSc. II. interní klinika VFN a 1. LF UK, Praha  
prof. MUDr. Martin Prázný, CSc., Ph.D. | prof. MUDr. Jan Škrha, DrSc. III. interní klinika VFN a 1. LF UK, Praha  
prof. MUDr. Miloš Táborský, CSc. I. interní kardiologická klinika FN a LF UP v Olomouci  
prof. MUDr. Filip Málek, Ph.D. Kardiologické oddělení Nemocnice Na Homolce, Interní klinika FN Královské Vinohrady a 3. LF UK, Praha
- 4 Balonková aortální valvuloplastika v akutní kardiologii**  
doc. MUDr. Petr Kala, Ph.D. | MUDr. Martin Poloczek | MUDr. Tomáš Ondruš, Ph.D. | MUDr. Jan Kaňovský, Ph.D.  
Interní kardiologická klinika FN Brno, LF MU, Brno
- 4 Domácí měření krevního tlaku a jeho úloha v moderní léčbě hypertenze**  
MUDr. Petra Vysočanová Interní kardiologická klinika, FN Brno
- 4 Využití fixních kombinací v léčbě arteriální hypertenze**  
MUDr. Tomáš Kvapil I. interní klinika – kardiologická, FN Olomouc
- 4 Inhixa – lékový profil**  
doc. MUDr. Jiří Slíva, Ph.D. Ústav farmakologie, 3. LF UK, Praha
- 5 Inhixa – lékový profil – komentář k článku**  
MUDr. Tomáš Janota, CSc. 3. interní klinika VFN a 1. LF UK, Praha
- 5 Preventivní antikoagulační léčba**  
MUDr. Helena Čermáková cévní ambulance, Klinika transplantace chirurgie, IKEM
- 5 Multirezistentní forma HIV infekce – beznadějný příběh s nadějným koncem – kazuistika**  
MUDr. Lukáš Fleischhans | MUDr. David Jilich | prof. MUDr. Ladislav Machala, Ph.D. HIV centrum Kliniky infekčních nemocí FNB a 1., 2. a 3. LF UK, Praha  
Jan Weber, Ph.D. Virologická skupina Ústavu organické chemie a biochemie Akademie věd ČR, Praha
- 5 Primární hypotyreóza se zaměřením na diagnostiku a léčbu levothyroxinem u starší generace pacientů**  
MUDr. Filip Šustr II. interní klinika, Fakultní nemocnice u svaté Anny v Brně
- 6 Hepatorenální syndrom**  
MUDr. Karolína Krátká, Ph.D. | MUDr. Pavla Libicherová | MUDr. Nikola Uzlová | MUDr. Miluše Vejvodová, Ph.D. | prof. MUDr. Ivan Rychlík, CSc., FASN, FERA Interní klinika 3. LF UK a FN Královské Vinohrady, Praha
- 6 Proteinurie z pohledu internisty**  
MUDr. Marie Vanková Interní oddělení a hemodialyzační středisko, Klatovská nemocnice, a. s.  
MUDr. Jan Vachek Interní oddělení a hemodialyzační středisko, Klatovská nemocnice, a. s., Klinika nefrologie 1. LF UK a VFN, Praha
- 6 Nefrologické příznaky Fabryho choroby**  
doc. MUDr. Jana Reiterová, Ph.D. Nefrologická klinika 1. LF UK a VFN, Praha
- 6 Familiární plicní fibróza – zkušenost z klinické praxe**  
MUDr. Martina Šterclová, Ph.D. Pneumologická klinika, 2. LF UK a FN v Motole, Praha

**7 Léčba sideropenické anemie u celiakie**

doc. MUDr. Iva Hoffmanová, Ph.D. Interní klinika 3. LF UK a FN Královské Vinohrady, Praha

**7 Farmakoterapie obezity**

MUDr. Kristýna Eisnerová Poliklinika Bory – ordinace interny a obezitologie, Plzeň

**7 Bioimpedance a biometrie – praktické využití ve vnitřním lékařství**

MUDr. Robert Prosecký, MPH | Mgr. Jana Jarešová | Bc. Anna Pospíšilová Mezinárodní centrum klinického výzkumu, Fakultní nemocnice u sv. Anny v Brně, Lékařská fakulta Masarykovy univerzity

prof. MUDr. Miroslav Souček, CSc. II. interní klinika Fakultní nemocnice u sv. Anny v Brně

# Kombinovaná léčba dyslipidemií u pacienta s diabetes mellitus a renálním poškozením

prof. MUDr. Hana Rosolová, DrSc. Centrum preventivní kardiologie, LF UK a II. interní klinika FN Plzeň

- 1 Mach, E. – Baigent, C. – Catapano, A. L., et al.: 2019 ESC/EAS Guidelines for the management of dyslipidaemias: lipid modification to reduce cardiovascular risk: The Task Force for the management of dyslipidaemias of the European Society of Cardiology (ESC) and European Atherosclerosis Society (EAS). *Eur Heart J*, 2020, 41, s. 111–188.
- 2 Cannon, C. P. – Blazing, M. A. – Giugliano, R. P., et al.: Ezetimibe added to statin therapy after acute coronary syndromes. *N Engl J Med*, 2015, 372, s. 2387–2397.
- 3 Takase, H. – Dohi, Y. – Okado, T., et al.: Effects of ezetimibe on visceral fat in the metabolic syndrome: a randomised controlled study. *Eur J Clin Invest*, 2012, 42, s. 1287–1294.
- 4 Hiramitsu, S. – Miyagishima, K. – Ishii, J., et al.: The effect of ezetimibe on lipid and glucose metabolism after a fat and glucose load. *J Cardiol*, 2012, 60, s. 395–400.
- 5 Šatný, M. – Vrabík, M.: LIPControl 2 aneb co se změnilo po 3 letech. *Athero Rev*, 2020, 5, s. 185–190.
- 6 Česká diabetologická společnost ČLS JEP, Česká nefrologická společnost a Česká společnost klinické biochemie ČLS JEP: Peplíkánová, T. – Vlklický, O. – Rychlík, I., et al. Doporučené postupy při diabetickém onemocnění ledvin. *Klin Biochem Metab*, 2018, 26, s. 43–54.

## Účinnost a bezpečnost hypolipidemické léčby u pacientů s diabetem

prof. MUDr. David Karásek, Ph.D. III. interní klinika – nefrologická, revmatologická a endokrinologická LF UP a FN Olomouc

- 1 Cosentino, F. – Grant, P. J. – Aboyans, V., et al.: ESC Scientific Document Group: 2019 ESC Guidelines on diabetes, pre-diabetes, and cardiovascular diseases developed in collaboration with the EASD. *Eur Heart J*, 2020, 41, s. 255–323.
- 2 Mach, F. – Baigent, C. – Catapano, A. L., et al.: ESC Scientific Document Group: 2019 ESC/EAS Guidelines for the management of dyslipidaemias: lipid modification to reduce cardiovascular risk. *Eur Heart J*, 2020, 41, s. 111–188.
- 3 Einarson, T. R. – Acs, A. – Ludwig, C., et al.: Prevalence of cardiovascular disease in type 2 diabetes: a systematic literature review of scientific evidence from across the world in 2007–2017. *Cardiovasc Diabetol*, 2018, 17, s. 83.
- 4 Stone, N. J. – Robinson, J. G. – Lichtenstein, A. H., et al.: American College of Cardiology/American Heart Association Task Force on Practice Guidelines. 2013 ACC/AHA guideline on the treatment of blood cholesterol to reduce atherosclerotic cardiovascular risk in adults: a report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines. *J Am Coll Cardiol*, 2014, 63, s. 2889–2934.
- 5 Karásek, D.: *Diabetická dyslipidemie*. Maxdorf, Praha, 2018.
- 6 Robinson, J. G.: Statins and diabetes risk: how real is it and what are the mechanisms? *Curr Opin Lipidol*, 2015, 26, s. 228–235.
- 7 Bays, H. E. – Moore, P. B. – Drehabl, M. A., et al.: Ezetimibe Study Group: Effectiveness and tolerability of ezetimibe in patients with primary hypercholesterolemia: pooled analysis of two phase II studies. *Clin Ther*, 2001, 23, s. 1209–1230.
- 8 Cannon, C. P. – Blazing, M. A. – Giugliano, R. P., et al.: IMPROVE-IT Investigators: Ezetimibe added to statin therapy after acute coronary syndromes. *N Engl J Med*, 2015, 372, s. 2387–2397.
- 9 Giugliano, R. P. – Cannon, Ch. P. – Blazing, M. A., et al.: Benefit of adding ezetimibe to statin therapy on cardiovascular outcomes and safety in patients with versus without diabetes mellitus: results from IMPROVE-IT (Improved Reduction of Outcomes: Vytorin Efficacy International Trial). *Circulation*, 2018, 137, s. 1571–1582.
- 10 Keech, A. – Simes, R. J. – Barter, P., et al.: FIELD study investigators: Effects of long-term fenofibrate therapy on cardiovascular events in 9795 people with type 2 diabetes mellitus (the FIELD study): randomised controlled trial. *Lancet*, 2005, 366, s. 1849–1861.
- 11 Ginsberg, H. N. – Elam, M. B. – Lovato, L. C., et al.: ACCORD Study Group: Effects of combination lipid therapy in type 2 diabetes mellitus. *N Engl J Med*, 2010, 362, s. 1563–1574.
- 12 Elam, M. – Lovato, L. – Ginsberg, H.: The ACCORD-Lipid study: Implications for treatment of dyslipidemia in Type 2 diabetes mellitus. *Clin Lipidol*, 2011, 6, s. 9–20.
- 13 Davis, T. M. – Ting, R. – Best, J. D., et al.: Fenofibrate Intervention and Event Lowering in Diabetes Study Investigators: Effects of fenofibrate on renal function in patients with type 2 diabetes mellitus: the Fenofibrate Intervention and Event Lowering in Diabetes (FIELD) Study. *Diabetologia*, 2011, 54, s. 280–290.
- 14 Keech, A. C. – Mitchell, P. – Summanen, P. A., et al.: FIELD study investigators: Effect of fenofibrate on the need for laser treatment for diabetic retinopathy (FIELD study): a randomised controlled trial. *Lancet*, 2007, 370, s. 1687–1697.
- 15 ACCORD Study Group; ACCORD Eye Study Group, Chew, E. Y. – Ambrosius, W. T. – Davis, M. D., et al.: Effects of medical therapies on retinopathy progression in type 2 diabetes. *N Engl J Med*, 2010, 363, s. 233–244.
- 16 Zhang, J. – Tecson, K. M. – Rocha, N. A., et al.: Usefulness of airocumab and evolocumab for the treatment of patients with diabetic dyslipidemia. *Proc (Bayl Univ Med Cent)*, 2018, 31, s. 180–184.
- 17 Taskinen, M. R. – Del Prato, S. – Bujas-Bobanović, M., et al.: Efficacy and safety of airocumab in individuals with type 2 diabetes mellitus with or without mixed dyslipidaemia: Analysis of the ODYSSEY LONG TERM trial. *Atherosclerosis*, 2018, 276, s. 124–130.
- 18 Handelsman, Y. – Lepor, N. E.: PCSK9 inhibitors in lipid management of patients with diabetes mellitus and high cardiovascular risk: a review. *J Am Heart Assoc*, 2018, 7, s. e008953.
- 19 Sabatine, M. S. – Giugliano, R. P. – Keech, A. C., et al.: FOURIER Steering Committee and Investigators: Evolocumab and clinical outcomes in patients with cardiovascular disease. *N Engl J Med*, 2017, 376, s. 1713–1722.
- 20 Sabatine, M. S. – Leiter, L. A. – Wiviott, S. D., et al.: Cardiovascular safety and efficacy of the PCSK9 inhibitor evolocumab in patients with and without diabetes and the effect of evolocumab on glycemia and risk of new-onset diabetes: a prespecified analysis of the FOURIER randomised controlled trial. *Lancet Diabetes Endocrinol*, 2017, 5, s. 941–950.
- 21 Schwartz, G. G. – Steg, P. G. – Szarek, M., et al.: ODYSSEY OUTCOMES Committees and Investigators: Alirocumab and cardiovascular outcomes after acute coronary syndrome. *N Engl J Med*, 2018, 379, s. 2097–2107.
- 22 Ray, K. K. – Colhoun, H. – Szarek, M., et al.: ODYSSEY Outcomes Investigators: Alirocumab and cardiovascular outcomes in patients with acute coronary syndrome (ACS) and diabetes – prespecified analysis of ODYSSEY OUTCOMES. *Diabetes*, 2018, 67, suppl. 1; doi.org/10.2337/db18-6-LB.

## Jak zjednodušit pacientům medikaci i život. Změna IIR na jednu denní dávku preparátu Suliqua pro recidivující hypoglykemie pacienta s DM2T

MUDr. Natálie Sukop-Špůrková Interní a diabetologická ambulance, Otrokovice

- 1 Kvapil, M.: Hypoglykemie při léčbě diabetu – její rizika a možnosti prevence. *Remedia*, 2013, 1.
- 2 Piťhová, P.: Akutní komplikace diabetes mellitus. *Interní Med*, 2006, 12, s. 523–525.
- 3 Informace o přípravku Suliqua, [www.suqli.cz](http://www.suqli.cz).

## Expertní konsenzus k praktickým aspektům spolupráce kardiologa a diabetologa v péči o pacienty s chronickým srdečním selháním s redukovanou ejekční frakcí

prof. MUDr. Martin Haluzík, DrSc. Centrum diabetologie IKEM, Praha

MUDr. Markéta Kubíčková III. interní gerontometabolická klinika, FN a LF UK, Hradec Králové

MUDr. Jiří Veselý III. interní gerontometabolická klinika, FN a LF UK, Hradec Králové; EDUMED, s. r. o., Náchod

prof. MUDr. Aleš Linhart, DrSc. II. interní klinika VFN a 1. LF UK, Praha

prof. MUDr. Martin Prázný, CSc., Ph.D. | prof. MUDr. Jan Škrha, DrSc. III. interní klinika VFN a 1. LF UK, Praha

prof. MUDr. Miloš Táborský, CSc. I. interní kardiologická klinika FN a LF UP v Olomouci

prof. MUDr. Filip Málek, Ph.D. Kardiologické oddělení Nemocnice Na Homolce, Interní klinika FN Královské Vinohrady a 3. LF UK, Praha

- 1 McDonagh, T. A. – Metra, M. – Adamo, M., et al.: 2021 ESC Guidelines for the diagnosis and treatment of acute and chronic heart failure. *Eur Heart J*, 2021, 42, s. 3599–3726.
- 2 Lam, C. S. P. – Butler, J.: Victims of success in failure. *Circulation*, 2020, 142, s. 1129–1131.
- 3 Zinman, B. – Wanner, C. – Lachin, J. M., et al.: Empagliflozin, cardiovascular outcomes, and mortality in type 2 diabetes. *N Engl J Med*, 2015, 373, s. 2117–2128.
- 4 Wiviott, S. D. – Raz, I. – Bonaca, M. P., et al.: Dapagliflozin and cardiovascular outcomes in type 2 diabetes. *N Engl J Med*, 2019, 380, s. 347–357.
- 5 Neal, B. – Perkovic, V. – Mahaffey, K. W., et al.: Canagliflozin and

- cardiovascular and renal events in type 2 diabetes. *N Engl J Med*, 2017, 337, s. 644–657.
- 6 McMurray, J. J. V. – Solomon, S. D. – Inzucchi, S. E., et al.: Dapagliflozin in patients with heart failure and reduced ejection fraction. *N Engl J Med*, 2019, 381, s. 1995–2008.
  - 7 Packer, M. – Anker, S. D. – Butler, J., et al.: Cardiovascular and renal outcomes with empagliflozin in heart failure. *N Engl J Med*, 2020, 383, s. 1413–1424.
  - 8 Ponikowski, P. – Voors, A. A. – Anker, S. D., et al.: 2016 ESC Guidelines for the diagnosis and treatment of acute and chronic heart failure: The Task Force for the diagnosis and treatment of acute and chronic heart failure of the European Society of Cardiology (ESC) developed with the special contribution of the Heart Failure Association (HFA) of the ESC. *Eur Heart J*, 2016, 37, s. 2129–2200.
  - 9 Seferovic, P. M. – Ponikowski, P. – Anker, S. D., et al.: Clinical practice update on heart failure 2019: pharmacotherapy, procedures, devices and patient management. An expert consensus meeting report of the Heart Failure Association of the European Society of Cardiology. *Eur J Heart Fail*, 2019, 21, s. 1169–1186.
  - 10 Writing, C. – Maddox, T. M. – Januzzi, J. L., Jr., et al.: 2021 Update to the 2017 ACC Expert Consensus Decision Pathway for Optimization of Heart Failure Treatment: Answers to 10 Pivotal Issues About Heart Failure With Reduced Ejection Fraction: A Report of the American College of Cardiology Solution Set Oversight Committee. *J Am Coll Cardiol*, 2021, 77, s. 772–810.
  - 11 Bozkurt, B. – Coats, A. J. S. – Tsutsui, H., et al.: Universal definition and classification of heart failure: a report of the Heart Failure Society of America, Heart Failure Association of the European Society of Cardiology, Japanese Heart Failure Society and Writing Committee of the Universal Definition of Heart Failure: Endorsed by the Canadian Heart Failure Society, Heart Failure Association of India, Cardiac Society of Australia and New Zealand, and Chinese Heart Failure Association. *Eur J Heart Fail*, 2021, 23, s. 352–380.
  - 12 Málek, F.: Patofyziologie a diagnostika srdečního selhání. In: Táborský, M. – Linhart, A., et al.: *Kardiologie, IV. Srdeční selhání*. Česká kardiologická společnost, z. s., 2021, s. 634.
  - 13 UK NICE guideline 106: Chronic heart failure in adults: diagnosis and management (12/12/2018), dostupné z: <https://www.nice.org.uk/guidance/ng106>, vyhledáno 25. 9. 2021.
  - 14 Za ČDS: Škrha, J. – Prázny, M. – Kvapil, M.: Doporučený postup péče o diabetes mellitus 2. typu. Revize ze dne: 31. 5. 2020, dostupné z: [https://www.diab.cz/dokumenty/Standarty\\_DM.pdf](https://www.diab.cz/dokumenty/Standarty_DM.pdf), vyhledáno 25. 9. 2021.
  - 15 American Diabetes A. 9. Pharmacologic Approaches to Glycemic Treatment: Standards of Medical Care in Diabetes–2021. *Diabetes Care*, 2021, 44, suppl. 1, s. S111–S124.
  - 16 Honigberg, M. C. – Vardeny, O. – Vaduganathan, M.: Practical considerations for the use of sodium-glucose co-transporter 2 inhibitors in heart failure. *Circ Heart Fail*, 2020, 13, s. e006623.
  - 17 Špinar, J. – Špinarová, L. – Vítové, J. – Táborský, M. – Linhart, A.: Úprava guidelines ACC pro léčbu srdečního selhání v roce 2021. *Cor Vasa*, 2021, 63, s. 264–270.
  - 18 Málek, F. – Melenovsky, V. – Krejčí, J., et al.: Stanovisko výboru České asociace srdečního selhání ČKS k organizaci ambulantní srdečního selhání. *Cor Vasa*, 2020, 62, s. 309–313.
  - 19 Engelhardt, K. – Ferguson, M. – Rosselli, J. L.: Prevention and management of genital mycotic infections in the setting of sodium-Glucose cotransporter 2 inhibitors. *Ann Pharmacother*, 2021, 55, s. 543–548.
  - 20 Táborský, M. – Skála, T. – Lazárová, M., et al.: Trends in the treatment and survival of heart failure patients: a nationwide population-based study in the Czech Republic. *ESC Heart Failure*, 2021, DOI:10.1002/ehf2.13559.

## Balonková aortální valvuloplastika v akutní kardiologii

doc. MUDr. Petr Kala, Ph.D. | MUDr. Martin Poloczek | MUDr. Tomáš Ondruš, Ph.D. | MUDr. Jan Kaňovský, Ph.D.

Interní kardiologická klinika FN Brno, LF MU, Brno

- 1 Ross, J. – Braunwald, E.: Aortic stenosis. *Circulation*, 1968, 38, suppl. s. 61–67.
- 2 Varadarajan, P. – Kapoor, N. – Bansal, R. C. – Pai, R. G.: Clinical profile and natural history of 453 non surgically managed patients with severe aortic stenosis. *Ann Thorac Surg*, 2006, 82, s. 2111–2115.
- 3 Calicchio, F. – Guarascino, F. – Giannini, C., et al.: Balloon aortic valvuloplasty before noncardiac surgery in severe aortic stenosis: a single-center experience. *J Cardiovasc Med*, 2017, 18, s. 109–113.
- 4 Criber, A. – Savin, T. – Saoudi, N., et al.: Percutaneous transluminal valvuloplasty of acquired aortic stenosis in elderly patients: an alternative to valve replacement? *Lancet*, 1986, 1, s. 63–67.
- 5 Criber, A. – Eltchaninoff, H. – Tron, C.: First human transcatheter implantation of an aortic valve prosthesis in a case of severe calcific aortic stenosis. *Ann Cardiovasc Surg*, 2003, 52, s. 173–175.
- 6 Percutaneous balloon aortic valvuloplasty. Acute and 30-day follow-up results in 674 patients from the NHLBI Balloon Valvuloplasty Registry. *Circulation*, 1991, 84, s. 2383–2397.
- 7 Otto, C. M. – Mickel, M. C. – Kennedy, J. W., et al.: Three-year outcome after balloon aortic valvuloplasty. Insights into prognosis of valvular aortic stenosis. *Circulation*, 1994, 89, s. 642–650.
- 8 Ben-Dor, I. – Richard, A. D. – Satler, L. F., et al.: Complications and outcome of balloon aortic valvuloplasty in high-risk or inoperable patients. *JACC Cardiovasc Interv*, 2010, 3, s. 1150–1156.
- 9 Egron, S. – Küttig, M. – Marzelle, J., et al.: What can be done for cerebral embolic protection in TAVI? Analysis in the light of 10 years' experience with protected carotid artery stenting. *Expert Rev Med Devices*, 2016, 13, s. 15–29.
- 10 Nishimura, R. A. – Otto, C. M. – Bonow, R. O., et al.: 2020 ACC/AHA Guideline for the management of patients with valvular heart disease: A report of the American College of Cardiology/American Heart Association Joint Committee on Clinical Practice Guidelines. *J Thorac Cardiovasc Surg Circulation*, 2021, 143, s. e72–e227.
- 11 Vahanian, A. – Alfieri, O. – Andreotti, F., et al.: Guidelines on the management of valvular heart disease (version 2012). The Joint Task Force on the Management of Valvular Heart Disease of the European Society of Cardiology (ESC) and the European Association for Cardio-Thoracic Surgery (EACTS). *European Heart Journal*, 2012, 33, s. 2451–2496.

## Domácí měření krevního tlaku a jeho úloha v moderní léčbě hypertenze

MUDr. Petra Vysočanová Interní kardiologická klinika, FN Brno

- 1 Williams, B. – Mancia, G. – Spiering, W., et al.: 2018 ESC/ESH Guidelines for the management of arterial hypertension: The Task Force for the management of arterial hypertension of the European Society of Cardiology (ESC) and the European Society of Hypertension (ESH). *Eur Heart J*, 2018, 39, s. 3021–3104.
- 2 Whelton, P. K. – Carey, R. M. – Aronow, W. S., et al.: 2017 ACC/AHA/AAPA/ABC/ACPM/AGA/APA/ASH/ASPC/NMA/PCNA Guideline for the Prevention, Detection, Evaluation, and Management of High Blood Pressure in Adults: A Report of the American College of Cardiology/American Heart Association Task Force on Clinical Practice Guidelines. *Hypertension*, 2018, 71, s. e13–e115.
- 3 Widimský, J. – Filipovský, J. – Čeral, J., et al.: Diagnostická a léčebné postupy u arteriální hypertenze – verze 2017. Doporučení České společnosti pro hypertenze. *Vnitř Lék*, 2018, 64, s. 771–796.
- 4 Stergiou, G. S., et al.: 2021 European Society of Hypertension practice guidelines for office and out-of-office blood pressure measurement. *J Hypertens*, 2021, 39, s. 1293–1302.
- 5 Kario, K. – Shimbo, D. – Hoshida, S., et al.: Emergence of home blood pressure-guided management of hypertension based on global evidence. *Hypertension*, 2019, 74, doi: 10.1161/HYPERTENSIONAHA.119.12630.
- 6 Hodgkinson, J. A. – Lee, M. M. – Milner, S., et al.: Accuracy of blood-pressure monitors owned by patients with hypertension (ACCU-RATE study): a cross-sectional, observational study in central England. *Br J Gen Pract*, 2020, 70, s. e548–e554.
- 7 Schwartz, C. L. – Seyed-Safi, A. – Haque, S., et al.: Do patients actually do what we ask: patient fidelity and persistence to the Targets and Self-Management for the Control of Blood Pressure in Stroke and at Risk Groups blood pressure self-management intervention. *J Hypertens*, 2018, 36, s. 1753–1761.
- 8 McManus, R. J. – Little, P. – Stuart, B., et al.: Home and Online Management and Evaluation of Blood Pressure (HOME BP) using a digital intervention in poorly controlled hypertension: randomised controlled trial. *BMJ*, 2021, 372, s. m4858.

## Využití fixních kombinací v léčbě arteriální hypertenze

MUDr. Tomáš Kvapil I. interní klinika – kardiologická, FN Olomouc

- 1 Volpe, M. – Rump, Ch. L. – Ammentorp, B., et al.: Efficacy and safety of triple antihypertensive therapy with the olmesartan/amlodipine/hydrochlorothiazide combination. *Clin Drug Investig*, 2012, 32, s. 649–664.
- 2 Weir, M. R. – Hsueh, W. A. – Nesbitt, S. D., et al.: A titrate-to-goal study of switching patients uncontrolled on antihypertensive monotherapy to fixed-dose combinations of amlodipine and olmesartan medoxima ± hydrochlorothiazide. *J Clin Hypertens*, 2011, 13, s. 404–412.
- 3 Gupta, P. – Patel, P. – Strauch, B., et al.: Biochemical screening for nonadherence is associated with blood pressure reduction and improvement in adherence. *Hypertension*, 2017, 70, s. 1042–1048.
- 4 Mancia, G. – Facchetti, R. – Bombelli, M., et al.: Relationship of office, home, and ambulatory blood pressure to blood glucose and lipid variables in the PAMELA population. *Hypertension*, 2005, 45, s. 1072–1077.
- 5 Corrao, G. – Parodi, A. – Nicotra, F., et al.: Better compliance to antihypertensive medications reduces cardiovascular risk. *J Hypertens*, 2011, 29, s. 610–616.
- 6 Yusuf, S. – Lonn, E. – Pais, P., et al.: HOPE-3 Investigators: Blood-pressure and cholesterol lowering in persons without cardiovascular disease. *N Engl J Med*, 2016, 374, s. 2032–2043.
- 7 Wald, D. S. – Law, M. – Morris, J. K., et al.: Combination therapy versus monotherapy in reducing blood pressure: meta-analysis on 11,000 participants from 42 trials. *Am J Med*, 2009, 122, s. 290–300.
- 8 Corrao, G. – Parodi, A. – Zambon, A., et al.: Reduced discontinuation of antihypertensive treatment by two-drug combination as first step. Evidence from daily life practice. *J Hypertens*, 2010, 28, s. 1584–1590.
- 9 Conn, V. S. – Rupp, T. M. – Chase, J. A., et al.: Interventions to improve medication adherence in hypertensive patients: systematic review and meta-analysis. *Curr Hypertens Rep*, 2015, 17, s. 94.
- 10 Václavík, J., et al.: Addition of spironolactone in patients with resistant arterial hypertension (ASPIRANT); a randomized, double-blind, placebo-controlled trial. *Hypertension*, 2011, 57, s. 1069–1075.
- 11 Williams, B., et al.: Practice guidelines for the management of arterial hypertension of the European Society of Cardiology and the European Society of Hypertension. *Blood Pressure*, 2018, 27, s. 314–340.

## Inhixa – lékový profil

doc. MUDr. Jiří Slíva, Ph.D. Ústav farmakologie, 3. LF UK, Praha

- 1 Harenberg, J. – Cimmiello, C. – Agnelli, G., et al.: Biosimilars of low-molecular-weight heparin products: fostering competition or reducing 'biodiversity'? *J Thromb Haemost*, 2016, 14, s. 421–426.
- 2 Martinez, G. J. – Monreal, M. – Ayani, A., et al.: Bioequivalence of a biosimilar enoxaparin sodium to Clexane after single 100 mg subcutaneous dose: results of a randomized, double-blind, crossover study

- in healthy volunteers. *Drug Des Devel Ther*, 2018, 12, s. 575–582.
- 3 Planes, A.: Review of bemiparin sodium – a new second-generation low molecular weight heparin and its applications in venous thromboembolism. *Expert Opin Pharmacother*, 2003, 4, s. 1551–1561.
  - 4 Massel, D. – Cruickshank, M. K.: Enoxaparin in acute coronary syndromes: evidence for superiority over placebo or untreated control. *Am Heart J*, 2002, 143, s. 748–752.
  - 5 Antman, E. M. – Cohen, M. – McCabe, C., et al.: Enoxaparin is superior to unfractionated heparin for preventing clinical events at 1-year follow-up of TIMI 11B and ESSENCE. *Eur Heart J*, 2002, 23, s. 308–314.
  - 6 Antman, E. M. – Cohen, M. – Radley, D., et al.: Assessment of the treatment effect of enoxaparin for unstable angina/non-Q-wave myocardial infarction. TIMI 11B-ESSENCE meta-analysis. *Circulation*, 1999, 100, s. 1602–1608.
  - 7 Cohen, M. – Antman, E. M. – Gurfinkel, E. P., et al.: Enoxaparin in unstable angina/non-ST-segment elevation myocardial infarction: treatment benefits in prespecified subgroups. *J Thromb Thrombolysis*, 2001, 12, s. 199–206.
  - 8 Misraeti, P. – Quenot, S. – Levine, M., et al.: Enoxaparin in the treatment of deep vein thrombosis with or without pulmonary embolism: an individual patient data meta-analysis. *Chest*, 2005, 128, s. 2203–2210.
  - 9 Armstrong, P. W. – Chang, W. C. – Wallentin, L., et al.: Efficacy and safety of unfractionated heparin versus enoxaparin: a pooled analysis of ASSENT-3 and -3 PLUS data. *CMAJ*, 2006, 174, s. 1421–1426.
  - 10 Murphy, S. A. – Gibson, C. M. – Morrow, D. A., et al.: Efficacy and safety of the low-molecular weight heparin enoxaparin compared with unfractionated heparin across the acute coronary syndrome spectrum: a meta-analysis. *Eur Heart J*, 2007, 28, s. 2077–2086.
  - 11 Sherman, D. G. – Albers, G. W. – Bladin, C., et al.: The efficacy and safety of enoxaparin versus unfractionated heparin for the prevention of venous thromboembolism after acute ischaemic stroke (PREVAIL Study): an open-label randomised comparison. *Lancet*, 2007, 369, s. 1347–1355.
  - 12 Morrow, D. A. – Antman, E. M. – Murphy, S. A., et al.: Effect of enoxaparin versus unfractionated heparin in diabetic patients with ST-elevation myocardial infarction in the Enoxaparin and Thrombolysis Reperfusion for Acute Myocardial Infarction Treatment-Thrombolysis In Myocardial Infarction study 25 (EXTRACT-TIMI 25) trial. *Am Heart J*, 2007, 154, s. 1078–1084.
  - 13 Meyer, G. – Marjanovic, Z. – Valcke, J., et al.: Comparison of low-molecular-weight heparin and warfarin for the secondary prevention of venous thromboembolism in patients with cancer: a randomized controlled study. *Arch Intern Med*, 2002, 162, s. 1729–1735.
  - 14 Rostoker, G. – Durand-Zaleski, I. – Petit-Phar, M., et al.: Prevention of thrombotic complications of the nephrotic syndrome by the low-molecular-weight heparin enoxaparin. *Nephron*, 1995, 69, s. 20–28.
  - 15 O'Brien, B. J. – Anderson, D. R. – Goeree, R.: Cost-effectiveness of enoxaparin versus warfarin prophylaxis against deep-vein thrombosis after total hip replacement. *CMAJ*, 1994, 150, s. 1083–1090.
  - 16 Menzin, J. – Colditz, G. A. – Regan, M. M., et al.: Cost-effectiveness of enoxaparin vs low-dose warfarin in the prevention of deep-vein thrombosis after total hip replacement surgery. *Arch Intern Med*, 1995, 155, s. 757–764.
  - 17 Ramacciotti, E. – Ferreira, U. – Costa, A. J. V., et al.: Efficacy and safety of a biosimilar versus branded enoxaparin in the prevention of venous thromboembolism following major abdominal surgery: a randomized, prospective, single-blinded, multicenter clinical trial. *Clin Appl Thromb Hemost*, 2018, 24, s. 1208–1215.
  - 18 Fantoni, C. – Bertu, L. – Faioni, E. M., et al.: Safety and effectiveness of a biosimilar enoxaparin (Inhixa) for the prevention of thromboembolism in medical and surgical inpatients. *Intern Emerg Med*, 2021, 16, s. 933–939.
  - 19 Crowther, M. A. – Warkentin, T. E.: Bleeding risk and the management of bleeding complications in patients undergoing anticoagulant therapy: focus on new anticoagulant agents. *Blood*, 2008, 111, s. 4871–4879.
  - 20 Crowther, M. A. – Berry, L. R. – Monagle, P. T., et al.: Mechanisms responsible for the failure of protamine to inactivate low-molecular-weight heparin. *Br J Haematol*, 2002, 116, s. 178–186.

## Inhixa – lékový profil – komentář k článku

MUDr. Tomáš Janota, CSc. 3. interní klinika VFN a 1. LF UK, Praha

- 1 Antman, E. M. – Morrow, D. A. – McCabe, C. H., et al.: Enoxaparin versus unfractionated heparin with fibrinolysis for ST-elevation myocardial infarction. *N Engl J Med*, 2006, 354, s. 1477–1488.
- 2 Caprini, J. A.: Caprini Score for Venous Thromboembolism (2005). Stratifies risk of VTE in surgical patients. Dostupné z: <https://www.mdcalc.com/caprini-score-venous-thromboembolism-2005>, vyhledáno 7. 9. 2021.
- 3 Doporučení České společnosti pro trombózu a hemostázu ČLS JEP. Dostupné z: <https://csth.cz/soubory/postupy6.pdf>, vyhledáno 7. 9. 2021.
- 4 Chua, D. – Tataru, A.: Enoxaparin dosing for acute coronary syndromes in obese patients – should there be a maximum dose? *J Cardiovasc Med*, 2016, 1, s. 1–4.

## Preventivní antikoagulační léčba

MUDr. Helena Čermáková cévní ambulance, Klinika transplantacní chirurgie, IKEM

- 1 Malý, J. – Dulíček, P. – Penka, M., et al.: Prevence žilní tromboembolické nemoci ve vnitřním lékařství a neurologii. *Vnitřní Lék*, 2006, 52, suppl. 1, s. 63–67.
- 2 Hirmerová, J. – Karetová, K. – Malý, R. – Musil, D. – Roztočil, K.: Akutní žilní trombóza: současný stav prevence, diagnostiky a léčby. *Doporučení postup České angiologické společnosti ČLS JEP*. 2014.
- 3 Widimský, J. – Malý, J. – Roztočil, K.: Doporučení diagnostiky, léčby a prevence plicní embolie, verze 2007. Dostupné z: [https://www.kardio-cz.cz/data/upload/Doporucenti\\_diagnostiky\\_lecby\\_a\\_prevention\\_plicni\\_embole\\_verze\\_2007.pdf](https://www.kardio-cz.cz/data/upload/Doporucenti_diagnostiky_lecby_a_prevention_plicni_embole_verze_2007.pdf), vyhledáno 7. 9. 2021.
- 4 Nízkomolekulární hepariny; indikace, dávkování. Dostupné z: <https://csth.cz/soubory/lmwh.pdf>, vyhledáno 7. 9. 2021.

## Multirezistentní forma HIV infekce – beznadějný příběh s nadějným koncem – kazuistika

MUDr. Lukáš Fleischhans | MUDr. David Jilich | prof. MUDr. Ladislav Machala, Ph.D. HIV centrum Kliniky infekčních nemocí FNB a 1., 2. a 3. LF UK, Praha

Jan Weber, Ph.D. Virologická skupina Ústavu organické chemie a biochemie Akademie věd ČR, Praha

- 1 Puertas, M. C. – Ploumidis, G. – Ploumidis, M., et al.: Pan-resistant HIV-1 emergence in the era of integrase strand-transfer inhibitors: a case report. *Lancet Microbe*, 2020, 1, s. e130–e135.
- 2 Gupta, R. K. – Gregson, J. – Parkin, N., et al.: HIV-1 drug resistance before initiation or re-initiation of first-line antiretroviral therapy in low-income and middle-income countries: a systematic review and meta-regression analysis. *Lancet Infect Dis*, 2018, 18, s. 346–355.
- 3 Molina, J.-M. – Segal-Maurer, S. – Stellbrink, H.-J., et al.: Efficacy and safety of long-acting subcutaneous lenacapavir in phase 2/3 in heavily treatment-experienced people with HIV: week 26 results (Capella study). 11<sup>th</sup> IAS Conference on HIV Science 18–21, abstract OALX01LB02, 2021. Dostupné z: [https://www.natap.org/2021/IAS/IAS\\_29.htm](https://www.natap.org/2021/IAS/IAS_29.htm), vyhledáno 30. 9. 2021.
- 4 Emu, B. – Fessel, J. – Schrader, S., et al.: Phase 3 study of ibalizumab for multidrug-resistant HIV-1. *N Engl J Med*, 2018, 379, s. 645–654.
- 5 Woollard, S. M. – Kamhogne, G. D.: Maraviroc: a review of its use in HIV infection and beyond. *Drug Des Devel Ther*, 2015, 9, s. 5447–5468.
- 6 Kozal, M. – Åberg, J. – Pialoux, G., et al.: Fostemsavir in adults with multidrug-resistant HIV-1 infection. *N Engl J Med*, 2020, 382, s. 1232–1243.
- 7 Chahine, E. B.: Fostemsavir: the first oral attachment inhibitor for treatment of HIV-1 infection. *Am J Health-Syst Pharm*, 2021, 78, s. 376–388.
- 8 Thompson, M. – Mendo, F. – Latif, G., et al.: Long-term safety & efficacy of fostemsavir in treatment-experienced HIV participants. Prezentováno 4.–7. 3. 2019 na Conference on Retroviruses and Opportunistic Infections 2019 v Seattlu.
- 9 Lataillade, M. – Zhou, N. – Joshi, SR., et al.: Viral drug resistance through 48 weeks, in a phase 2b, randomized, controlled trial of the HIV-1 attachment inhibitor prodrug, fostemsavir. *J Acquir Immune Defic Syndr*, 2018, 77, s. 299–307.
- 10 Beerewinkel, N. – Schmidt, B. – Walter, H., et al.: Diversity and complexity of HIV-1 drug resistance: A bioinformatics approach to predicting phenotype from genotype. *PNAS*, 2002, 99, s. 8271–8276.
- 11 De Luca, A.: The impact of resistance on viral fitness and its clinical implications. In: Geretti, A. M., ed: *Antiretroviral Resistance in Clinical Practice*. London, Mediscript, 2006, kap. 12. Dostupné z: <https://www.ncbi.nlm.nih.gov/books/NBK2244/>, vyhledáno 30. 9. 2021.

## Primární hypotyreóza se zaměřením na diagnostiku a léčbu levothyroxinem u starší generace pacientů

MUDr. Filip Šustr II. interní klinika, Fakultní nemocnice u svaté Anny v Brně

- 1 Vlček, P.: Tyreopatie v ambulantní praxi. *Vnitřní Lek*, 2011, 57, s. 786–790.
- 2 Češka, R. – Štulc, T. – Tesář, V. – Lukáš, M.: Interna. *Cor et Vasa*, 2020, 62, s. 344.
- 3 Bílek, R. – Horáková, L. – Goš, R., et al.: Thyroid disease in the Czech Republic: the EUthyroid project and the evaluation of the General Health Insurance Company epidemiological data for the period of 2012–2015. *Vnitřní Lek Fall*, 2017, 63, s. 548–554.
- 4 Límanová, Z.: Thyroid disease in the elderly. *Vnitřní Lek*, 2018, 64, s. 993–1002.
- 5 Marek, J. – Hána, V., et al.: *Endokrinologie*. Galén, Praha, 2017.
- 6 Cibas, E. S. – Ali, S. Z.: The 2017 Bethesda System for reporting thyroid cyt pathology. *Thyroid*, 2017, 27, s. 1341–1346.
- 7 Wiersinga, W. M. – Duntas, L. – Fadeyev, V., et al.: 2012 ETA Guidelines: The Use of L-T<sub>4</sub> + L-T<sub>3</sub> in the Treatment of Hypothyroidism. *Eur Thyroid J*, 2012, 2, s. 55–71.
- 8 Waring, A. C. – Arnold, A. M. – Newman, A. B., et al.: Longitudinal changes in thyroid function in the oldest old and survival: the cardiovascular health study all-stars study. *J Clin Endocrinol Metab*, 2012, 97, s. 3944–3950.
- 9 Bremner, A. P. – Feddema, P. – Leedman, P. J., et al.: Age-related changes in thyroid function: a longitudinal study of

- a community-based cohort. *J Clin Endocrinol Metab*, 2012, 97, s. 1554–1562.
- 10 Surks, M.I. – Hollowell, J.G.: Age-specific distribution of serum thyrotropin and antithyroid antibodies in the U.S. population: Implications for the prevalence of subclinical hypothyroidism. *J Clin Endocrinol Metab*, 2007, 92, s. 4575–4582.
- 11 Jiskra, J.: Hypothyroidism in patients with heart disease. *Vnitr Lek*, 2017, 63, s. 566–571.
- 12 Pearce, S. H. S. – Brabant, G. – Duntas, L. H., et al.: 2013 ETA Guideline: management of subclinical hypothyroidism. *Eur Thyroid J*, 2013, 2, s. 215–228.
- 13 van de Ven, A. C. – Netea-Maier, R. T. – de Vegt, F., et al.: Associations between thyroid function and mortality: the influence of age. *Eur Endocrinol*, 2014, 171, s. 183–191.
- 14 Cappola, A. R. – Arnold, A. M. – Wulczyn, K., et al.: Thyroid function in the euthyroid range and adverse outcomes in older adults. *J Clin Endocrinol Metab*, 2015, 100, s. 1088–1096.
- 15 Grossman, A. – Weiss, A. – Koren-Morag, N., et al.: Subclinical thyroid disease and mortality in the elderly: a retrospective cohort study. *Am J Med*, 2016, 129, s. 423–430.
- 16 Singer, R. B.: Mortality in a complete 4-year follow up of 85-year-old residents of Leiden, classified by serum level of thyrotropin and thyroxine. *J Insur Med NY N*, 2006, 38, s. 14–19.
- 17 Vadiveloo, T. – Donnan, P.T. – Murphy, M. J.: Age- and gender-specific TSH reference intervals in people with no obvious thyroid disease in tayside, Scotland: The Thyroid Epidemiology, Audit, and Research Study (TEARS). *J Clin Endocrinol Metab*, 2013, 98, s. 1147–1153.

## Hepatorenální syndrom

MUDr. Karolína Krátká, Ph.D. | MUDr. Pavla Libicherová | MUDr. Nikola Uzlová | MUDr. Miluše Vejvodová, Ph.D. | prof. MUDr. Ivan Rychlík, CSc., FASN, FERA Interní klinika 3. LF UK a FN Královské Vinohrady, Praha

- 1 ČHS ČLS JEP. Doporučený postup ČHS pro diagnostiku a léčbu hepatorenálního syndromu (6. 12. 2005). Dostupné z: <https://www.ces-hep.cz/file/323/doporučeny-postup-chs-hepatorenalni-syndrom.pdf>; vyhledáno 9. 8. 2021.
- 2 Angeli, P. – Ginès, P. – Wong, F., et al.: Diagnosis and management of acute kidney injury in patients with cirrhosis: revised consensus recommendations of the International Club of Ascites. *J Hepatol*, 2015, 62, s. 986–994.
- 3 Huelin, P. – Piano, S. – Solà, E., et al.: Validation of a staging system for acute kidney injury in patients with cirrhosis and association with acute-on-chronic liver failure. *Clin Gastroenterol Hepatol*, 2017, 15, s. 438–445.
- 4 Krones, E. – Fickerl, P. – Zitta, S., et al.: The chronic kidney disease epidemiology collaboration equation combining creatinine and cystatin C accurately assesses renal function in patients with cirrhosis. *BMC Nephrol*, 2015, 16, s. 1–10.
- 5 Bucscis, T. – Krones, E.: Renal dysfunction in cirrhosis: acute kidney injury and the hepatorenal syndrome. *Gastroenterol Rep*, 2017, 5, s. 127–137.
- 6 Barreto, R. – Elia, C. – Solà, E., et al.: Urinary neutrophil gelatinase-associated lipocalin predicts kidney outcome and death in patients with cirrhosis and bacterial infections. *J Hepatol*, 2014, 61, s. 35–42.
- 7 Belcher, J. M. – Sanyal, A. J. – Peixoto, A. J., et al.: Kidney biomarkers and differential diagnosis of patients with cirrhosis and acute kidney injury. *Hepatology*, 2013, 57, s. 1–37.
- 8 European Association for the Study of the Liver: EASL Clinical Practice Guidelines for the management of patients with decompensated cirrhosis. *J Hepatol*, 2018, 69, s. 406–460.
- 9 Sola, E. – Kerbert, A. J. – Verspaget, H. W., et al.: Plasma copeptin as biomarker of disease progression and prognosis in cirrhosis. *J Hepatol*, 2016, 65, s. 914–920.
- 10 Kerbert, A. J. – Verbeke, L. – Chiang, F. W., et al.: Copeptin as an Indicator of Hemodynamic Derangement and Prognosis in Liver Cirrhosis. *Plos One*, 2015, 10, s. e0138264.
- 11 Mandorff, M. – Bota, S. – Schwabl, P., et al.: Nonselective beta blockers increase risk for hepatorenal syndrome and death in patients with cirrhosis and spontaneous bacterial peritonitis. *Gastroenterology*, 2014, 146, s. 1680–1690.
- 12 Theocharidou, E. – Krag, A. – Bendtsen, F., et al.: Cardiac dysfunction in cirrhosis – does adrenal function play a role? A hypothesis. *Liver Int*, 2012, 32, s. 1327–1332.
- 13 Shah, N. – Mohamed, P. E. – Jover-Cobos, M., et al.: Increased renal expression and urinary excretion of TLR4 in acute kidney injury associated with cirrhosis. *Liver Int*, 2013, 33, s. 398–409.
- 14 Bernardi, M. – Caraceni, P. – Navickis, R. J., et al.: Albumin infusion in patients undergoing large-volume paracentesis: a meta-analysis of randomized trials. *Hepatology*, 2012, 55, s. 1172–1181.
- 15 Bernardi, M. – Ricci, C. S. – Zaccherini, G.: Role of human albumin in the management of complications of liver cirrhosis. *J Clin Exp Hepatol*, 2014, 4, s. 302–311.
- 16 Caraceni, P. – Riggio, O. – Angeli, P., et al.: Long-term albumin administration in decompensated cirrhosis (ANSWER): an open-label randomized trial. *Lancet*, 2018, 391, s. 2417–2429.
- 17 China, L. – Freemantle, N. – Forrest, E., et al.: A randomized trial of albumin infusions in hospitalized patients with cirrhosis. *N Engl J Med*, 2021, 384, s. 808–817.
- 18 Cavallin, M. – Piano, S. – Romano, A., et al.: Terlipressin given by continuous intravenous infusion versus intravenous boluses in the treatment of hepatorenal syndrome: a randomized controlled study. *Hepatology*, 2016, 63, s. 983–992.
- 19 Cavallin, M. – Kamath, P. S. – Merli, M., et al.: Terlipressin plus albumin versus midodrine and octreotide plus albumin in the treatment of hepatorenal syndrome: A randomized trial. *Hepatology*, 2015, 62, s. 567–574.
- 20 Davenport, A. – Sheikh, M. F. – Lamb, E., et al.: Acute kidney injury in acute-on-chronic liver failure: where does hepatorenal syndrome fit? *Kidney Int*, 2017, 92, s. 1058–1070.
- 21 Nadim, M. K. – Durand, F. – Kellum, J. A., et al.: Management of the critically ill patients with cirrhosis: A multidisciplinary perspective. *J Hepatol*, 2016, 64, s. 717–735.

## Proteinurie z pohledu internisty

MUDr. Marie Vanková Interní oddělení a hemodialyzační středisko, Klatovská nemocnice, a. s.

MUDr. Jan Vachek Interní oddělení a hemodialyzační středisko, Klatovská nemocnice, a. s., Klinika nefrologie 1. LF UK a VFN, Praha

- 1 Rajkumar, S. V. – Kyle, R. A.: Multiple myeloma: Diagnosis and treatment. *Mayo Clin Proc*, 2005, 80, s. 1371–1382.
- 2 Tesař, V.: Vyšetřovací metody u nemoci ledvin. *Klinická nefrologie*. Grada, Praha, 2015, s. 53–70.
- 3 Burton, C. – Harris, K. P.: The role of proteinuria in the progression of chronic renal failure. *Am J Kidney Dis*, 1996, 27, s. 765–775.
- 4 Sandmark, D. K. – Messé, S. R. – Zhang, X., et al.: Proteinuria, but not eGFR, predicts stroke risk in chronic kidney disease: Chronic Renal Insufficiency Cohort Study. *Stroke*, 2015, 46, s. 2075–2080.

## Nefrologické příznaky Fabryho choroby

doc. MUDr. Jana Reiterová, Ph.D. Nefrologická klinika 1. LF UK a VFN, Praha

- 1 Arends, M. – Wanner, C. H. – Hughes, D., et al.: Characterization of classical and nonclassical Fabry disease: a multicentric study. *J Am Soc Nephrol*, 2017, 28, s. 1631–1641.
- 2 Germain, D. P. – Elliott, P. M. – Falissard, B., et al.: The effect of enzyme replacement therapy on clinical outcomes in male patients with Fabry disease: a systematic literature review by a European panel of experts. *Mol Genet Metab Reports*, 2019, 19, s. 217–222.
- 3 Linthorst, G. E. – Bouwman, M. G. – Wijburg, F. A., et al.: Screening for Fabry disease in high-risk populations: a systematic review. *J Med Genet*, 2010, 47, s. 217–222.
- 4 MacDermot, K. L. D. – Holmes, A. – Miners, A. H.: Anderson-Fabry disease: clinical manifestations and impact of disease on a cohort of 98 hemizygous males. *J Med Genet*, 2001, 38, s. 750–760.
- 5 Merta, M. – Reiterová, J. – Ledvinová, J., et al.: A nationwide blood spot screening study for Fabry disease in the Czech Republic haemodialysis patient population. *Nephrol Dial Transplant*, 2007, 22, s. 179–186.
- 6 Tahir, H. – Jackson, L. L. – Warnock, D. G.: Antiproteinuric therapy and fabry nephropathy: sustained reduction of proteinuria in patients receiving enzyme replacement therapy with agalsidase-beta. *J Am Soc Nephrol*, 2007, 18, s. 2609–2617.
- 7 Thadhani, R. – Wolf, M. – West, L. M., et al.: Patients with Fabry disease on dialysis in the United States. *Kidney Int*, 2002, 61, s. 249–255.

## Familiární plicní fibróza – zkušenost z klinické praxe

MUDr. Martina Šterclová, Ph.D. Pneumologická klinika, 2. LF UK a FN v Motole, Praha

- 1 Zhang, D. – Newton, C. A.: Familial pulmonary fibrosis: genetic features and clinical implications. *Chest*, 2021, doi.org/10.1016/j.chest.2021.06.037.
- 2 Garcia, C. K. – Talbert, J. L.: Pulmonary fibrosis predisposition overview. In: Adam, M. P. – Ardingher, H. H. – Pagon, R. A., et al.; editors: *GeneReviews*. Seattle (WA): University of Washington, Seattle; 1993–2021. Dostupné z: <https://www.ncbi.nlm.nih.gov/books/NBK1230/>; vyhledáno 11. 2. 2021.
- 3 Mangaonkar, A. A. – Patnaik, M. M.: Short telomere syndromes in clinical practice: bridging bench and bedside. *Mayo Clin Proc*, 2018, 93, s. 904–916.
- 4 Justet, A. – Klay, D. – Porcher, R., et al.: OrphaLung Network: Safety and efficacy of pirfenidone and nintedanib in patients with idiopathic pulmonary fibrosis and carrying a telomere-related gene mutation. *Eur Respir J*, 2021, 57, s. 2003198.
- 5 Stock, C. J. W. – Renzoni, E. A.: Telomeres in interstitial lung disease. *J Clin Med*, 2021, 10, s. 1384.
- 6 Bennett, D. – Refini, R. M. – Valentini, M. L., et al.: Pirfenidone therapy for familial pulmonary fibrosis: a real-life study. *Lung*, 2019, 197, s. 147–153.
- 7 Courtwright, A. M. – Lamattina, A. M. – Takahashi, M., et al.: Shorter telomere length following lung transplantation is associated with clinically significant leukopenia and decreased chronic lung allograft dysfunction-free survival. *ERJ Open Res*, 2020, 6, s. 00003–2020.
- 8 Borie, R. – Tabèze, L. – Thabut, G., et al.: Prevalence and characteristics of TERT and TERC mutations in suspected genetic pulmonary fibrosis. *Eur Respir J*, 2016, 48, s. 1721–1731.
- 9 Šterclová, M. – Doubek, M. – Doubková, M.: Familial pulmonary fibrosis – guidelines for diagnostics and treatment. *Vnitr Lek*, 2020, 66, s. 365–370.

# Léčba sideropenické anemie u celiakie

doc. MUDr. Iva Hoffmanová, Ph.D. Interní klinika 3. LF UK a FN Královské Vinohrady, Praha

- 1 Rej, A. – Sanders, D. S.: An update on coeliac disease from the NHS England National Centre for Refractory Coeliac Disease. *Clin Med*, 2021, 21, s. 127–130.
- 2 Ricaño-Ponce, I. – Wijmenga, C. – Gutierrez-Achury, J.: Genetics of celiac disease. *Best Pract Res Clin Gastroenterol*, 2015, 29, s. 399–412.
- 3 Therrien, A. – Kelly, C. P. – Silvester, J. A.: Celiac disease: extraintestinal manifestations and associated conditions. *J Clin Gastroenterol*, 2020, 54, s. 8–21.
- 4 Naik, R. D. – Seidner, D. L. – Adams, D. W.: Nutritional consideration in celiac disease and nonceliac gluten sensitivity. *Gastroenterol Clin North Am*, 2018, 47, s. 139–154.
- 5 Cílený screening celiakie. Věstník Ministerstva zdravotnictví České republiky. 2011, 3, s. 51–54, dostupné z: <https://www.mzcr.cz/wp-content/uploads/wepub/4741/36198/V%C4%9Bstn%C3%AD%20MZ%20%C4%8C%203-2011.pdf>, vyhledáno 25. 9. 2021.
- 6 Husby, S. – Koletzko, S. – Korponay-Szabó, I., et al.: European Society Paediatric Gastroenterology, Hepatology and Nutrition Guidelines for Diagnosing Coeliac Disease 2020. *J Pediatr Gastroenterol Nutr*, 2020, 70, s. 141–156.
- 7 Martin-Masot, R. – Nestares, M. T. – Diaz-Castro, J., et al.: Multifactorial etiology of anemia in celiac disease and effect of gluten-free diet: a comprehensive review. *Nutrients*, 2019, 11, s. 2557.
- 8 Talarico, V. – Giancotti, L. – Mazza, G. A., et al.: Iron deficiency anemia in celiac disease. *Nutrients*, 2021, 13, s. 1695.
- 9 Leffler, D. A. – Green, P. H. R. – Fasano, A.: Extraintestinal manifestations of celiac disease. *Nat Rev Gastroenterol Hepatol*, 2015, 12, s. 561–571.
- 10 Gómez-Ramírez, S. – Brilli, E. – Tarantino, G., et al.: Sucrosomial iron: a new generation iron for improving oral supplementation. *Pharmaceuticals*, 2018, 11, s. 97.
- 11 Halfdanarson, T. R. – Litzow, M. R. – Murray, J. A.: Hematologic manifestations of celiac disease. *Blood*, 2007, 109, s. 412–421.
- 12 Shahriari, M. – Honar, N. – Yousefi, A., et al.: Association of potential celiac disease and refractory iron deficiency anemia in children and adolescents. *Arch Gastroenterol*, 2018, 55, s. 78–81.
- 13 Stefanelli, G. – Viscido, A. – Longo, S., et al.: Persistent iron deficiency anemia in patients with celiac disease despite a gluten-free diet. *Nutrients*, 2020, 12, s. 2176.
- 14 Cardo, A. – Churruca, I. – Lasa, A., et al.: Nutritional imbalances in adult celiac patients following a gluten-free diet. *Nutrients*, 2021, 13, 2877, doi.org/10.3390/nu13082877.
- 15 De Falco, L. – Tortora, R. – Imperatore, N., et al.: The role of TMPRSS6 and HFE variants in iron deficiency anemia in celiac disease. *Am J Hematol*, 2018, 93, s. 383–393.
- 16 Tolone, C. – Bellini, G. – Punzo, F., et al.: The DMT1 IVS4+4CA polymorphism and the risk of iron deficiency anemia in children with celiac disease. *PLoS One*, 2017, 12, s. e0185822.
- 17 Leonard, M. M. – Weir, D. C. – DeGroote, M., et al.: Value of IgA tTG in predicting mucosal recovery in children with celiac disease on a gluten-free diet. *J Pediatr Gastroenterol Nutr*, 2017, 64, s. 286–291.
- 18 Freeman, H. J.: Dietary compliance in celiac disease. *World J Gastroenterol*, 2017, 23, s. 2635–2639.
- 19 Wahab, P. J. – Meijer, J. – Mulder, W. J. – Chris, J. J.: Histologic follow-up of people with celiac disease on a gluten-free diet: slow and incomplete recovery. *Am J Clin Pathol*, 2002, 118, s. 459–463.
- 20 Čermák, J.: Léčba anémie a nedostatku železa z pohledu hematologa. *Kardiol Rev Int Med*, 2014, 16, s. 359–363.
- 21 Elli, L. – Ferretti, F. – Branchi, F., et al.: Sucrosomial iron supplementation in anemic patients with celiac disease not tolerating oral ferrous sulfate: a prospective study. *Nutrients*, 2018, 10, s. 330.
- 22 European Medicines Agency New Recommendations to Manage Risk of Allergic Reactions with Intravenous Iron Containing Medicines. Dostupné z: [http://www.ema.europa.eu/docs/en\\_GB/document\\_library/Referrals\\_document/IV\\_iron\\_31/WC500151308.pdf](http://www.ema.europa.eu/docs/en_GB/document_library/Referrals_document/IV_iron_31/WC500151308.pdf), vyhledáno 25. 9. 2021.
- 23 Alergické reakce při nitrožilním podávání železa – nová doporučení. Dostupné z: <https://www.sukl.cz/alergicke-reakce-pri-nitrozilnim-podavani-zeleza-nova>, vyhledáno 25. 9. 2021.

# Farmakoterapie obezity

MUDr. Kristýna Eisnerová Poliklinika Bory – ordinace interny a obezitologie, Plzeň

- 1 Fried, M. – Svačina, Š., et al.: Moderní trendy v léčbě obezity a diabetu. Praha, Axonite, 2018.
- 2 Hainer, V., et al.: Základy klinické obezitologie. Praha, Grada Publishing, 2011.
- 3 Svačina, Š.: Obezitologie a teorie metabolického syndromu. Lékařské repetitorium. Praha, Triton, 2013.
- 4 Haluzík, M. – Svačina, Š.: Inkretinová léčba diabetu. Praha, Mladá Fronta, 2010.
- 5 Tsigas, C. – Hainer, V. – Basdevant, A., et al.: Management of Obesity in Adults: European Clinical Practice Guidelines. *Obes Facts*, 2008, 1, s. 106–116.
- 6 Brunerová, L. – Anděl, M.: Regulace příjmu potravy – I. část. *Vnitř Lék*, 2013, 59, s. 808–817.
- 7 Brunerová, L. – Anděl, M. Regulace příjmu potravy – II. část. *Vnitř Lék*, 2014, 60, s. 38–50.

# Bioimpedance a biometrie – praktické využití ve vnitřním lékařství

MUDr. Robert Prosecký, MPH | Mgr. Jana Jarešová | Bc. Anna Pospíšilová Mezinárodní centrum klinického výzkumu,

Fakultní nemocnice u sv. Anny v Brně, Lékařská fakulta Masarykovy univerzity

prof. MUDr. Miroslav Souček, CSc. II. interní klinika Fakultní nemocnice u sv. Anny v Brně

- 1 Stergiou, G. S. – Palatini, P. – Parati, G., et al.: European Society of Hypertension practice guidelines for office and out-of-office blood pressure measurement. *J Hypertens*, 2021, 39, s. 1293–1302.
- 2 Cerhan, J. R. – Moore, S. C. – Jacobs, E. J., et al.: Pooled analysis of waist circumference and mortality in 650,000 adults. *Mayo Clin Proc*, 2014, 89, s. 335–345.
- 3 Chen, C. L. – Liu, L. – Huang, J. Y., et al.: Thigh circumference and risk of all-cause, cardiovascular and cerebrovascular mortality: A cohort study. *Risk Manag Healthc Policy*, 2020, 13, s. 1977–1987.
- 4 Shi, J. – Shi, J. – Yang, Z., et al.: Large thigh circumference is associated with lower blood pressure in overweight and obese individuals: a community-based study. *Endocr Connect*, 2020, 9, s. 271–278.
- 5 Edmonds, P. J. – Gunasekaran, K. – Edmonds, L. C.: Neck girth predicts obstructive sleep apnea in type 2 diabetes mellitus. *Sleep Disord*, 2019, 2019, s. 1–6.
- 6 Del Zotto, M. – Framorando, D. – Pegna, A. J.: Waist-to-hip ratio affects female body attractiveness and modulates early brain responses. *Eur J Neurosci*, 2020, 52, s. 4490–4498.
- 7 Heitmann, B. L. – Erikson, H. – Ellsinger, B. M., et al.: Mortality associated with body fat, fat-free mass and body mass index among 60-year-old Swedish men – A 22-year follow-up. The study of men born in 1913. *Int J Obes*, 2000, 24, s. 33–37.
- 8 De Lorenzo, A. – Bianchi, A. – Maroni, P., et al.: Adiposity rather than BMI determines metabolic risk. *Int J Cardiol*, 2013, 166, s. 111–117.
- 9 Oliveros, E. – Somers, V. K. – Sochor, O., et al.: The concept of normal weight obesity. *Prog Cardiovasc Dis*, 2014, 56, s. 426–433.
- 10 Iozzo, P. – Rossi, G. – Michelassi, C., et al.: Interpretation of the „obesity paradox“: a 30-year study in patients with cardiovascular disease. *Int J Cardiol*, 2013, 168, s. 112–116.
- 11 De Schutter, A. – Lavie, C. J. – Milani, R. V.: The impact of obesity on risk factors and prevalence and prognosis of coronary heart disease—the obesity paradox. *Prog Cardiovasc Dis*, 2014, 56, s. 401–408.
- 12 Benatti, F. – Solis, M. – Artioli, G., et al.: Liposuction induces a compensatory increase of visceral fat which is effectively counteracted by physical activity: A randomized trial. *J Clin Endocrinol Metab*, 2012, 97, s. 2388–2395.