

Vnitřní lékařství

- 2 **Chronické srdeční selhání v roce 2015**
prof. MUDr. Jindřich Špinar, CSc., FESC Interní kardiologická klinika FN Brno, LF MU a ICRC, Brno
prof. MUDr. Lenka Špinarová, Ph.D., FESC | prof. MUDr. Jiří Vítovec, CSc., FESC I. interní kardiologická klinika LF MU a FN u sv. Anny, Brno
- 2 **Betablokátory v léčbě kardiovaskulárních onemocnění**
prof. MUDr. Jiří Vítovec, CSc., FESC 1. interní kardiologická klinika FN u sv. Anny a LF MU, Brno
prof. MUDr. Jindřich Špinar, CSc., FESC 1. interní kardiologická klinika LF MU a FN, Brno
- 2 **Kombinační hypolipidemická léčba: kde jsme a kam směřujeme**
doc. MUDr. Michal Vrablík, Ph.D. Centrum preventivní kardiologie, 3. interní klinika 1. LF UK a VFN, Praha
- 3 **Cirkulující mikropartikuly – představují nový rizikový faktor, nebo sú markerom pre kardiovaskulárne ochorenia?**
prof. MUDr. Andrej Dukát, CSc. II. Interná klinika LFUK a UNB, Bratislava
- 3 **Sartany v léčbě hypertenze**
MUDr. Jiří Slíva Ústav farmakologie 3. LF UK, Praha
- 4 **Jaké jsou příčiny nedostatečné kontroly krevního tlaku a jak to změnit**
MUDr. Ondřej Petrák, Ph.D. Centrum pro výzkum, diagnostiku a léčbu hypertenze, III. interní klinika 1. LF UK a VFN, Praha
- 4 **Diuretika v léčbě arteriální hypertenze**
prof. MUDr. Hana Rosolová, DrSc. Centrum preventivní kardiologie, II. interní klinika LF a FN, Plzeň, UK, Praha
- 4 **Zjednodušením léčby arteriální hypertenze ke snížení kardiovaskulárního rizika**
doc. MUDr. Michal Vrablík, Ph.D. 3. interní klinika 1. LF UK a VFN, Praha
- 5 **Candesartan s amlodipinem nově v jediné tabletě**
MUDr. Jiří Slíva, Ph.D. Ústav farmakologie 3. LF UK, Praha
- 5 **Fixní kombinace dapagliflozin + metformin – výhody fixních kombinací**
MUDr. Dina Odarčenkova | prof. MUDr. Milan Kvapil, CSc., MBA Interní klinika 2. LF UK a FN Motol, Praha
- 5 **Výhody intenzifikace antidiabetické léčby lixisenatidem**
MUDr. Milan Flekač, Ph.D. 3. interní klinika VFN a 1. LF UK, Praha
- 6 **Aktuálně: Glifloziny v léčbě diabetes mellitus 2. typu v roce 2015**
MUDr. Dina Odarčenkova | prof. MUDr. Milan Kvapil, CSc., MBA Interní klinika 2. LF UK a FN Motol, Praha
- 6 **Postavení fixní dvojkombinace Amesos v léčbě hypertenze**
prof. MUDr. Miroslav Souček, CSc. II. interní klinika LF MU a ICRC FN u sv. Anny, Brno
- 6 **Evolokumab v léčbě dyslipidemií se zaměřením na familiární hypercholesterolemii**
doc. MUDr. Michal Vrablík, Ph.D. Centrum preventivní kardiologie, 3. interní klinika 1. LF UK a VFN, Praha
- 7 **LDL-cholesterol: Čím nižší, tím lépe! Potřebujeme nová hypolipidemika? Zaměřeno na alirokumab**
prof. MUDr. Richard Češka, CSc. | MUDr. Tereza Altschmiedová | MUDr. Michaela Šnejdrová, Ph.D.
Centrum preventivní kardiologie, III. interní klinika 1. LF UK a VFN, Praha
- 7 **Abstrakt: Možné vysvětlení rozporů výsledků studie EMPA-REG OUTCOM. Zvyšují sulfonylurea a inzulin mortalitu diabetiků 2. typu v porovnání s empagliflozinem?**
prof. MUDr. Milan Kvapil, CSc., MBA Interní klinika 2. LF UK a FN Motol, Praha
- 8 **Bolest dolních končetin – žilní příčiny**
prof. MUDr. Alena Pospíšilová, CSc. Dermatovenerologická klinika LF MU a FN, Brno
MUDr. Marek Hák, Ph.D. Centrum pro léčbu bolesti, Anesteziologická klinika LF MU a FN u sv. Anny, Brno
- 8 **Idiopatická plicní fibróza – základy pro interní praxi**
MUDr. Martina Plačková Klinika plicních nemocí a tuberkulózy, FN Ostrava, LF UK, Plzeň
- 8 **Pokroky v pankreatologii – chronická pankreatitida**
prof. MUDr. Petr Dítě, DrSc. | MUDr. Martina Bojková | MUDr. Tomáš Kupka | MUDr. Pavel Svoboda | MUDr. Arnošt Martínek
Akademické centrum gastroenterologie – Interní klinika FN a LF, Ostrava
MUDr. Bohuslav Kianička, Ph.D. | MUDr. Miroslav Souček II. interní klinika FN u sv. Anny, Brno
MUDr. Kateřina Kapounková Katedra podpory zdraví, Fakulta sportovních studií MU, Brno
- 9 **Virová hepatitida**
prof. MUDr. Petr Husa, CSc. Klinika infekčních chorob LF MU a FN, Brno
- 9 **Příznaky střeďavých onemocnění**
MUDr. Lubor Golář II. interní klinika – kardiologie a angiologie VFN, Praha
- 9 **Dysfagie a výživa**
MUDr. Zuzana Kala Grofová Nutriční a dietologické oddělení NPK, a. s., Pardubická nemocnice, Pardubice

Chronické srdeční selhání v roce 2015

prof. MUDr. Jindřich Špinar, CSc., FESC Interní kardiologická klinika FN Brno, LF MU a ICRC, Brno
prof. MUDr. Lenka Špinarová, Ph.D., FESC | prof. MUDr. Jiří Vítovec, CSc., FESC
I. interní kardiologická klinika LF MU a FN u sv. Anny, Brno

- 1 Hradec, J. – Vítovec, J. – Špinar, J.: Summary of the ESC Guidelines for the diagnosis and treatment of acute and chronic heart failure 2012. Prepared by the Czech Society of cardiology. *Cor et Vasa*, 2013, 55, s. 33–48.
- 2 McMurray, J. J. – Adamopoulos, S. – Anker, S. D., et al.: ESC guidelines for the diagnosis and treatment of acute and chronic heart failure 2012. The Task Force for the Diagnosis and Treatment of Acute and Chronic Heart Failure 2012 of the European Society of Cardiology. Developed in collaboration with the Heart Failure Association (HFA) of the ESC. *Eur Heart J*, 2012, 33, s. 1787–1847.
- 3 Špinar, J. – Vítovec, J. – Hradec, J. – Málek, L. – Meluzín, J. – Špinarová, L., et al.: Doporučení pro diagnostiku a léčbu chronického srdečního selhání – ČKS 2011. *Cor et Vasa*, 2012, 54, s. 161–182.
- 4 Špinar, J. – Vítovec, J. – Hradec, J. – Málek, L. – Meluzín, J. – Špinarová, L.: Srovnání doporučení pro diagnostiku a léčbu chronického srdečního selhání. *Cor et Vasa*, 2013, 55, s. 307–313.
- 5 Špinar, J. – Vítovec, J.: Liší se ESC a ČKS doporučení pro diagnostiku a léčbu srdečního selhání? *Kardiologická revue*, 2013, 15, s. 99–103.
- 6 Špinarová, L. – Špinar, J. – Vítovec, J.: Novinky v léčbě chronického srdečního selhání – guidelines ČKS – srovnání s minulými doporučeními. *Remedia*, 2012, 22, s. 127–131.
- 7 Yancy, C. W. – Jessup, M. – Bozkurt, B., et al.: 2013 ACCF/AHA guideline for the management of heart failure: a report of the American College of Cardiology Foundation/American Heart Association Task Force on Practice Guidelines. *J Am Coll Cardiol*, 2013, 62, s. e147–239.

Betablokátory v léčbě kardiovaskulárních onemocnění

prof. MUDr. Jiří Vítovec, CSc., FESC 1. interní kardiologická klinika FN u sv. Anny a LF MU, Brno
prof. MUDr. Jindřich Špinar, CSc., FESC 1. interní kardiologická klinika LF MU a FN, Brno

- 1 Opie, L. H. – Gersh, B. J., et al.: *Drugs for the Heart*. Saunders Elsevier, 2013.
- 2 Vítovec, J. – Widimský, J. jr.: Betablokátory. In: Widimský, J. jr., et al.: *Hypertenze*. Triton, 2014, s. 247–256.
- 3 Vítovec, J. – Špinar, J.: Praktické použití betablokátorů v léčbě chronického srdečního selhání. *Kardiologie*, 2002, 3, s. 171–174.
- 4 Hradec, J.: Kontroverze kolem betablokátorů. *Vnitřní Lek*, 2015, 61, s. 410–416.
- 5 Vítovec, J. – Špinar, J.: Betablokátory – indikace a dávka. *Kap Kardiol*, 2005, s. 742–745.

Kombinační hypolipidemická léčba: kde jsme a kam směřujeme

doc. MUDr. Michal Vrablík, Ph.D.

Centrum preventivní kardiologie, 3. interní klinika 1. LF UK a VFN, Praha

- 1 Brown, G. B. – Zhao, X. Q.: Nicotinic acid, alone and in combinations, for reduction of cardiovascular risk. *Am J Cardiol*, 2008, 101 (dopl.), s. 58B–62B.
- 2 AIM-HIGH Investigators, Boden, W. E. – Probstfield, J. L. – Anderson, T., et al.: Niacin in patients with low HDL cholesterol levels receiving intensive statin therapy. *N Engl J Med*, 2011, 365, s. 2255–2267.
- 3 Schwartz, G. G. – Olsson, A. G. – Abt, M., et al.: Effects of dalcetrapibin patients with a recent acute coronary syndrome. *N Engl J Med*, 2012, 367, s. 2089–2099.
- 4 Varbo, A. – Benn, M. – Nordestgaard, B. D.: Remnant cholesterol as a cause of ischemic heart disease: evidence, definition, measurement, atherogenicity, high risk patients, and present and future treatment. *Pharmacol Ther*, 2014, 141, s. 358–367.
- 5 Nordestgaard, B. G. – Wootton, R. – Lewis, B.: Selective retention of VLDL, IDL, and LDL in the arterial intima of genetically hyperlipidemic rabbits in vivo. Molecular size as a determinant of fractional loss from the intima-inner media. *Arterioscler Thromb Vasc Biol*, 1995, 15, s. 534–542.
- 6 Vaarbo, A. – Benn, M. – Tybjaerg-Hansen, A. – Jørgensen, A. B. – Nordestgaard, B. G.: Remnant cholesterol as a causal risk factor for ischemic heart disease. *J Am Coll Cardiol*, 2013, 61, s. 427–436.
- 7 Nordestgaard, B. G. – Chapman, M. J. – Humphries, S. E., et al.: Familial hypercholesterolemia is underdiagnosed and undertreated in the general population: guidance for clinicians to prevent coronary heart disease. *Eur Heart J*, 2013, 34, s. 3478–3490a.
- 8 Bruckert, E. – Hayem, G. – Dejager, S. – Yau, C. – Bégaud, B.: Mild to moderate muscular symptoms with high-dosage statin therapy in hyperlipidemic patients—the PRIMO study. *Cardiovasc Drugs Ther*, 2005, 19, s. 403–414.
- 9 Barter, P. – Gotto, A. M. – LaRosa, J. C., et al.: HDL cholesterol, very low levels of LDL cholesterol and cardiovascular events. *N Engl J Med*, 2007, 357, s. 1301–1310.
- 10 The ACCORD Study Group and ACCORD Eye Study Group. Effects of combination lipid therapy in type 2 diabetes mellitus. *N Engl J Med*, 2010, 363, s. 233–244.
- 11 Vrablík, M.: Není statin jako statin aneb jeden dělá to a co ten druhý? *Practicus*, 2012, 6, s. 13–15.
- 12 Davidson, M. H. – Ballantyne, C. M. – Kerzner, B., et al.: Efficacy and safety of ezetimibe coadministered with statins: randomised, placebo-controlled, blinded experience in 2382 patients with primary hypercholesterolemia. *Int J Clin Pract*, 2004, 58, s. 746–755.
- 13 Canon, 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.
- 14 Bays, H. E. – Goldberg, R. B.: The 'forgotten' bile acid sequestrants: is now a good time to remember? *Am J Ther*, 2007, 14, s. 567–580.
- 15 Handelsman, Y.: Role of bile acid sequestrants in the treatment of type 2 diabetes. *Diab Care*, 2011, 34 (dopl.), s. S244–S250.
- 16 Gylling, H. – Plat, J. – Turley, S.: European Atherosclerosis Society Consensus Panel on Phytosterols. Plant sterols and plant stanols in the management of dyslipidaemia and prevention of cardiovascular disease. *Atherosclerosis*, 2014, 232, s. 346–360.
- 17 Pitha, J. – Vrablík, M.: Rostlinné steroly a stanoly: zatím samy v doporučeních pro obhacování diety s cílem snížení hladin LDL-cholesterolu a KV rizika. *Hypertenze a KV prevence*, 2015, 1, s. 57–58.
- 18 Soška, V. – Vavřková, H. – Vrablík, M., et al.: Stanovisko výboru ČSAT k doporučením ESC/EAS pro diagnostiku a léčbu dyslipidemií z roku 2011. *DMEV*, 2013, 16, s. 24–29.
- 19 Catapano, A. L. – Reiner, Z. – De Backer, G., et al.: ESC/EAS Guidelines for the management of dyslipidaemias. *Atherosclerosis*, 2011, 217, s. 3–46.
- 20 Vrablík, M.: *Farmakoterapie dyslipidemií*. Maxdorf Praha, 2012, 170 s.
- 21 Jun, M. – Foote, C. – Lv, J., et al.: Effects of fibrates on cardiovascular outcomes: review and meta-analysis. *Lancet*, 2010, 375, s. 1875–1884.
- 22 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.
- 23 The ACCORD Study Group and ACCORD Eye Study Group. Effects of combination lipid therapy in type 2 diabetes mellitus. *N Engl J Med*, 2010, 363, s. 233–244.
- 24 Farnier, M. – Freeman, M. W. – Macdonell, G., et al.: Efficacy and safety of the coadministration of ezetimibe with fenofibrate in patients with mixed hyperlipidemia. *Eur Heart J*, 2005, 26, s. 897–905.
- 25 Agouridis, A. P. – Filippatos, T. D. – Derdemezis, C. S., et al.: Combination of fenofibrate with non-statin drug regimens. *Curr Pharm Des*, 2010, 16, s. 3401–3416.
- 26 Farnier, M. – Taggart, W. – Dong, Q., et al.: Influence of simvastatin, fenofibrate and/or ezetimibe on correlation of low-density lipoprotein and nonhigh-density lipoprotein cholesterol with apolipoprotein B in mixed dyslipidemic patients. *J Clin Lipidol*, 2011, 5, s. 179–187.
- 27 Davidson, M. H. – Stein, E. A. – Bays, H. E., et al.: COMBination of prescription Omega-3 with Simvastatin (COMBOS) Investigators. Efficacy and tolerability of adding prescription omega-3 fatty acids 4 g/d to simvastatin 40 mg/d in hypertriglyceridemic patients: an 8-week, randomized, double-blind, placebo controlled study. *Clin Ther*, 2007, 29, s. 1354–1367.
- 28 Vrablík, M. – Česka, R.: Novinky v oblasti hypolipidemické léčby. *Vnitřní Lek*, 2014, 60, s. 924–932.

Cirkulujúce mikropartikuly – predstavujú nový rizikový faktor, alebo sú markerom pre kardiovaskulárne ochorenia?

prof. MUDr. Andrej Dukát, CSc. II. Interná klinika LFUK a UNB, Bratislava

- 1 Sabatier, F. – Lacroix, R. – Camoin-Jau, L., et al.: Circulating endothelial cells, microparticles and progenitors: towards the definition of vascular competence. *Rev Med Intern*, 2011, 32, s. 54–63.
- 2 Boulanger, C. M. – Dignat-George, F.: Microparticles: an introduction. *Arterio-sclerosis, Thrombosis, and Vascular Biology*, 2011, 31, s. 2–3.
- 3 Van Craenenbroeck, E. M. – Conraads, V. M.: Endothelial progenitor cells in vascular health. *Microvasc Res*, 2010, 79, s. 184–192.
- 4 Mause, S. F. – Weber, C.: Microparticles: protagonists of a novel communication network for intercellular information exchange. *Circ Res*, 2010, 107, s. 1047–1057.
- 5 Martinon, F. – Tesse, A. – Andriantsitohaina, R.: Microparticles are vectors of paradoxical information in vascular cells including the endothelium: role in health and diseases. *Pharmacological Reports*, 2008, 60, s. 75–84.
- 6 Moulin, V. J. – Mayrand, D. – Messier, H.: Shedding of microparticles by myo-fibroblasts as mediator of cellular cross-talk during normal wound healing. *J Cell Physiol*, 2010, 225, s. 734–740.
- 7 Mezentsev, A. – Merks, R. M. – O'Riordan, E.: Endothelial microparticles affect angiogenesis in vitro: role of oxidative stress. *Am J Physiol Heart Circ Physiol*, 2005, 289, s. 1106–1114.
- 8 Brodsky, S. V. – Zhang, F. – Nasjletti, A., et al.: Endothelium-derived microparticles impair endothelial function in vitro. *Am J Physiol Heart Circ Physiol*, 2004, 286, s. 1910–1915.
- 9 Morel, O. – Jesel, L. – Frevsinet, J. M., et al.: Cellular mechanisms underlying the formation of circulating microparticles. *Art Thromb Vasc Biol*, 2011, 31, s. 15–26.
- 10 Endemann, D. H. – Schiffrin, E. L.: Endothelial dysfunction. *Review J Am Soc Nephrol*, 2004, 15, s. 1983–1992.
- 11 Tesse, A. – Martinez, M. C. – Hugel, B., et al.: Upregulation of proinflammatory proteins through NF-kappaB pathway by shed membrane microparticles results in vascular hyporeactivity. *Arterioscler Thromb Vasc Biol*, 2005, 25, s. 2522–2527.
- 12 Kolár, J.: Cirkulujúce mikropartikuly – príčina, alebo konzekvencia kardiovaskulárnych chorôb? *Ateroskleróza*, 2009, 13, s. 86–104.
- 13 Berckmans, R. J. – Nieuwland, R. – Boing, A. N., et al.: Cell-derived microparticles circulate in healthy humans and support low grade of thrombin generation. *Thrombosis and Haemostasis*, 2001, 85, s. 639–646.
- 14 Leroyer, A. S. – Isobe, H. – Lesèche, G., et al.: Cellular origins and thrombotic activity of microparticles isolated from human atherosclerotic plaques. *J Amer Coll Cardiol*, 2007, 49, s. 772–777.
- 15 Bonello, L. – Sabatier, F. – Basire, A., et al.: The imbalance between circulating endothelial cells and progenitors in cardiovascular diseases: a mirror of disrupted endothelial integrity. *Arch Mal Coeur Vaiss*, 2006, 99, s. 607–613.
- 16 Yong, P. J. – Koh, C. H. – Shim, W. S.: Endothelial microparticles: missing link in endothelial dysfunction? *Eur J Prev Cardiol*, 2013, 3, s. 496–512.
- 17 Markiewicz, M. – Richard, E. – Marks, N., et al.: Impact of endothelial microparticles on coagulation, inflammation, and angiogenesis in age-related vascular diseases. *J Aging Res*, 2013, 201, s. 734–739.
- 18 D'Agostino, R. B. – Vasan, R. S. – Pencina, M. J., et al.: General risk profile for use in primary care. *The Framingham Heart Study*, 2013, doi: 10.1161/circulationaha.107.699579.
- 19 Amabile, N. – Cheby, S. – Renard, J. M.: Association of circulating endothelial microparticles with cardiovascular risk factors in the Framingham Heart Studies. ESC Congress, Mnichov, 2012.
- 20 Boulanger, C. M.: Microparticles, vascular function and hypertension. *Curr Opin Nephrol Hypertens*, 2010, 19, s. 177–180.
- 21 Berezin, A. E. – Kremzer, A. A. – Samura, T. A., et al.: Impaired immune phenotype of circulating endothelial-derived microparticles in patients with metabolic syndrome and diabetes mellitus. *J Endocrin Inv*, 2015.
- 22 Matikainen, N. – Taskinen, M. R.: Postprandial triglyceride-rich lipoproteins in insulin resistance and type 3 diabetes. *Future Lipidol*, 2008, 3, s. 531–543.
- 23 Presto, R. A. – Jy, J. – Jimenez, J., et al.: Effects of severe hypertension on endothelial and platelet microparticles. *Hypertension*, 2003, 41, s. 211–217.
- 24 Amabile, N. – Guérin, A. P. – Tedqui, A., et al.: Predictive value of circulating endothelial microparticles for cardiovascular mortality in end-stage renal failure. *Nephrol Dial Transplant*, 2012, 5, s. 1873–1880.
- 25 Ling, L. – Juany, H. – Zhu, L., et al.: Evaluation of plasma endothelial microparticles in pre-eclampsia. *J Int Med Res*, 2014, 42, s. 42–51.
- 26 Amabile, N. – Cheby, S. – Renard, J. M., et al.: Association of circulating endothelial microparticles with cardiometabolic risk factors in the Framingham Heart Study. *Eur Heart J*, 2014, 35, s. 2972–2979.
- 27 Jansen, F. – Yang, X. – Proebsting, S., et al.: Increased microRNA-126 and microRNA-199 expression in circulating microparticles is associated with reduced risk for cardiovascular events. 2013.
- 28 Cavaretta, E. – Chiariello, G. A. – Condorelli, G.: Platelets, endothelium, and circulating microRNA-126 as a prognostic biomarker in cardiovascular diseases. *Eur Heart J*, 2013, 34, s. 3400–3402.
- 29 Sinning, J. M. – Losch, J. – Valenta, K., et al.: Circulating CD31/Annexin V1 microparticles correlate with cardiovascular outcomes. *Eur Heart J*, 2011, 32, s. 2034–2041.
- 30 Velez, P. – Parquina, A. – Rosa, I., et al.: Novel potential biomarkers for ST elevation myocardial infarction identified by proteomic analysis of plasma derived microparticles. *Eur Heart J*, 2013.
- 31 Porto, I. – Biasucci, L. M. – DeMaria, L. G., et al.: Intracoronary microparticles and microvascular obstruction in patients with ST elevation myocardial infarction undergoing primary percutaneous intervention. *Eur Heart J*, 2012, 33, s. 2928–2938.
- 32 Berezin, A. – Zulli, A. – Kerrigan, S., et al.: Predictive role of circulating endothelial-derived microparticles in cardiovascular diseases. *Clin Biochem*, 2015, 48, s. 562–568.
- 33 Howes, J. M.: Proteomic profiling of plasma microparticles following deep-vein thrombosis. *Exp Rev Proteomics*, 2010, 7, s. 327–330.
- 34 Sellam, J. – Proulle, V. – Ittah, M., et al.: Increased levels of circulating microparticles in primary Sjogren's syndrome, systemic lupus erythematosus and rheumatoid arthritis and relation with disease activity. *Arthr Res Ther*, 2009, 11, s. 156–161.
- 35 Berezin, A. – Kremzer, A. A. – Samura, T. A., et al.: Circulating endothelial-derived apoptotic microparticles in the patients with ischemic symptomatic chronic heart failure: relevance of pro-inflammatory activation and outcomes. *Int Card Res J*, 2014, 8, s. 116–123.
- 36 Zwicker, J. I. – Liebman, H. A. – Bauer, K. A., et al.: Prediction and prevention of thromboembolic events with enoxaparin in cancer patients with elevated tissue factor-bearing microparticles: a randomized-controlled phase II trial (the Microtec study). *Br J Haematol*, 2013, 160, s. 530–537.

Sartany v léčbě hypertenze

MUDr. Jiří Slíva Ústav farmakologie 3. LF UK, Praha

- 1 Muszalska, I. – Sobczak, A. – Dolhan, A. – Jelinska, A.: Analysis of Sartans: a review. *J Pharm Sci*, 2014, 103, s. 2–28.
- 2 Kakuta, H. – Sudoh, K. – Sasamata, M., et al.: Telmisartan has the strongest binding affinity to angiotensin II type 1 receptor: comparison with other angiotensin II type 1 receptor blockers. *Int J Clin Pharmacol Res*, 2005, 25, s. 41–46.
- 3 Vauquelin, G. – Fierens, F. – Van, L. I.: Long-lasting angiotensin type 1 receptor binding and protection by candesartan: comparison with other biphenyl-tetrazole sartans. *J Hypertens*, 2006, 24, dopl. s. S23–S30.
- 4 Van Liefde, I. I. – Vauquelin, G.: Sartan-AT₁ receptor interactions: in vitro evidence for insurmountable antagonism and inverse agonism. *Mol Cell Endocrinol*, 2009, 302, s. 237–243.
- 5 Kurtz, T. W. – Kajuta, T.: Differential pharmacology and benefit/risk of azilsartan compared to other sartans. *Vasc Health Risk Manag*, 2012, 8, s. 133–143.
- 6 Lancia, G. – Tabard, R. – Narkiewicz, K., et al.: 2013 ESH/ESC Practice Guidelines for the Management of Arterial Hypertension. *Blood Press*, 2014, 23, s. 3–16.
- 7 Burnier, M. – Vuignier, Y. – Wuerzner, G.: State-of-the-art treatment of hypertension: established and new drugs. *Eur Heart J*, 2014, 35, s. 557–562.
- 8 Ogihara, T. – Fujimoto, A. – Nakao, K. – Saruta, T.: ARB candesartan and CCB amlodipine in hypertensive patients: the CASE-J trial. *Expert Rev Cardiovasc Ther*, 2008, 6, s. 1195–1201.
- 9 Barnett, A. H. – Bain, S. C. – Bouter, P., et al.: Angiotensin-receptor blockade versus converting-enzyme inhibition in type 2 diabetes and nephropathy. *N Engl J Med*, 2004, 351, s. 1952–1961.
- 10 Kasanuki, H. – Hagiwara, N. – Hosoda, S., et al.: Angiotensin II receptor blocker-based vs. non-angiotensin II receptor blocker-based therapy in patients with angiographically documented coronary artery disease and hypertension: the Heart Institute of Japan Candesartan Randomized Trial for Evaluation in Coronary Artery Disease (HU-CREATE). *Eur Heart J*, 2009, 30, s. 1203–1212.
- 11 Lewis, E. J. – Hunsicker, L. G. – Clarke, W. R., et al.: Renoprotective effect of the angiotensin-receptor antagonist irbesartan in patients with nephropathy due to type 2 diabetes. *N Engl J Med*, 2001, 345, s. 851–60.
- 12 Mochizuki, S. – Dahlof, B. – Shimizu, M., et al.: Valsartan in a Japanese population with hypertension and other cardiovascular disease (Jikei Heart Study): a randomised, open-label, blinded endpoint morbidity-mortality study. *Lancet*, 2007, 369, s. 1431–1439.
- 13 Sawada, T. – Yamada, H. – Dahlof, B. – Matsubara, H.: Effects of valsartan on morbidity and mortality in uncontrolled hypertensive patients with high cardiovascular risks: KYOTO HEART Study. *Eur Heart J*, 2009, 30, s. 2461–2469.
- 14 Dahlof, B. – Devereux, R., et al.: The Losartan Intervention For Endpoint reduction (LIFE) in Hypertension study: rationale, design, and methods. *The LIFE Study Group. Am J Hypertens*, 1997, 10, s. 705–713.
- 15 Dahlof, B. – Devereux, R. B. – Kjeldsen, S. E., et al.: Cardiovascular morbidity and mortality in the Losartan Intervention For Endpoint reduction in hypertension study (LIFE): a randomised trial against atenolol. *Lancet*, 2002, 359, s. 995–1003.
- 16 Schrader, J. – Luders, S. – Kulschewski, A., et al.: Morbidity and Mortality After Stroke, Eprosartan Compared with Nitrendipine for Secondary Prevention: principal results of a prospective randomized controlled study (MOSSES). *Stroke*, 2005, 36, s. 1218–1226.
- 17 McMurray, J. J. – Holman, R. R. – Haffner, S. M., et al.: Effect of valsartan on the incidence of diabetes and cardiovascular events. *N Engl J Med*, 2010, 362, s. 1477–1490.
- 18 Yusuf, S. – Diener, H. C. – Sacco, R. L., et al.: Telmisartan to prevent recurrent stroke and cardiovascular events. *N Engl J Med*, 2008, 359, s. 1225–1237.
- 19 Brenner, B. M. – Cooper, M. E., et al.: Effects of losartan on renal and cardiovascular outcomes in patients with type 2 diabetes and nephropathy. *N Engl J Med*, 2001, 345, s. 861–869.
- 20 Lithell, H. – Hansson, L. – Skoog, I., et al.: The Study on Cognition and Prognosis in the Elderly (SCOPE): principal results of a randomized double-blind intervention trial. *J Hypertens*, 2003, 21, s. 875–886.
- 21 Yusuf, S. – Teo, K. – Anderson, C., et al.: Effects of the angiotensin-receptor blocker telmisartan on cardiovascular events in high-risk patients intolerant to angiotensin-converting enzyme inhibitors: a randomised controlled trial. *Lancet*, 2008, 372, s. 1174–1183.
- 22 Julius, S. – Kjeldsen, S. E. – Weber, M., et al.: Outcomes in hypertensive patients at high cardiovascular risk treated with regimens based on valsartan or amlodipine: the VALUE randomised trial. *Lancet*, 2004, 363, s. 2022–2031.
- 23 Yusuf, S. – Teo, K. K. – Pogue, J., et al.: Telmisartan, ramipril, or both in patients at high risk for vascular events. *N Engl J Med*, 2008, 358, s. 1547–1559.
- 24 Meredith, P. A. – Murray, L. S. – McInnes, G. T.: Comparison of the efficacy of candesartan and losartan: a meta-analysis of trials in the treatment of hypertension. *J Hum Hypertens*, 2010, 24, s. 525–531.
- 25 Zhenfeng, Z. – Huilan, S. – Junya, J. – Dong, L. – Shan, L.: A systematic review and meta-analysis of candesartan and losartan in the management of essential hypertension. *J Renin Angiotensin Aldosterone Syst*, 2011, 12, s. 365–374.
- 26 Zanchetti, A. – Elmfeldt, D.: Findings and implications of the Study on COgnition and Prognosis in the Elderly (SCOPE)—a review. *Blood Press*, 2006, 15, s. 71–79.
- 27 Takai, S. – Jin, D. – Shimosato, T., et al.: Candesartan and amlodipine combination therapy provides powerful vascular protection in stroke-prone spontaneously hypertensive rats. *Hypertens Res*, 2011, 34, s. 245–252.
- 28 Rakugi, H. – Ogihara, T. – Miyata, Y., et al.: Evaluation of the efficacy and tolerability of combination therapy with candesartan cilexetil and

- amlodipine besilate compared with candesartan cilexetil monotherapy and amlodipine besilate monotherapy in Japanese patients with mild-to-moderate essential hypertension: a multicenter, 12-week, randomized, double-blind, placebo-controlled, parallel-group study. *Clin Ther*, 2012, 34, s. 838–848.
- 29 **Yasuno, S. – Fujimoto, A. – Nakagawa, Y., et al.:** Fixed-dose combination therapy of candesartan cilexetil and amlodipine besilate for the treatment of hypertension in Japan. *Expert Rev Cardiovasc Ther*, 2012, 10, s. 577–583.
- 30 **Maeda, A. – Tamura, K. – Kanaoka, T., et al.:** Combination therapy of angiotensin II receptor blocker and calcium channel blocker exerts pleiotropic therapeutic effects in addition to blood pressure lowering: amlodipine and candesartan trial in Yokohama (ACTY). *Clin Exp Hypertens*, 2012, 34, s. 249–257.
- 31 **Yamaguchi, J. – Hagiwara, N. – Ogawa, H., et al.:** Effect of amlodipine + candesartan on cardiovascular events in hypertensive patients with coronary artery disease (from The Heart Institute of Japan Candesartan Randomized Trial for Evaluation in Coronary Artery Disease [HIJ-CREATE] Study). *Am J Cardiol*, 2010, 106, s. 819–824.
- 32 **Koyanagi, R. – Hagiwara, N. – Yamaguchi, J., et al.:** Efficacy of the combination of amlodipine and candesartan in hypertensive patients with coronary artery disease: a subanalysis of the HIJ-CREATE study. *J Cardiol*, 2013, 62, s. 217–223.
- 33 **Sharma, A. M. – Bakris, G. – Neutel, J. M., et al.:** Single-pill combination of telmisartan/amlodipine versus amlodipine monotherapy in diabetic hypertensive patients: an 8-week randomized, parallel-group, double-blind trial. *Clin Ther*, 2012, 34, s. 537–551.
- 34 **Jafarzadeh, E. R. – Mahmoodi, G. A. – Jafarzadeh, E. A., et al.:** Comparative study of the management of stage 2 hypertension by combined therapy with losartan, amlodipine and hydrochlorothiazide. *Int Cardiovasc Res J*, 2012, 6, s. 79–83.
- 35 **ARB Trialists collaboration.** Effects of telmisartan, irbesartan, valsartan, candesartan, and losartan on cancers in 15 trials enrolling 138,769 individuals. *J Hypertens*, 2011, 29, s. 623–635.
- 36 **Corrao, G. – Zambon, A. – Parodi, A., et al.:** Discontinuation of and changes in drug therapy for hypertension among newly-treated patients: a population-based study in Italy. *J Hypertens*, 2008, 26, s. 819–824.
- 37 **Jonkman, J. H. – van Lier, J. J. – van Heiningen, P. N., et al.:** Pharmacokinetic drug interaction studies with candesartan cilexetil. *J Hum Hypertens*, 1997, 11, dopl. 2, s. S31–S35.
- 38 **Quan, A.:** Fetopathy associated with exposure to angiotensin converting enzyme inhibitors and angiotensin receptor antagonists. *Early Hum Dev*, 2006, 82, s. 23–28.

Jaké jsou příčiny nedostatečné kontroly krevního tlaku a jak to změnit

MUDr. Ondřej Petrák, Ph.D.

Centrum pro výzkum, diagnostiku a léčbu hypertenze, III. interní klinika 1. LF UK a VFN, Praha

- 1 **Cífková, R. – Škodová, Z. – Bruthans, J., et al.:** Longitudinal trends in cardiovascular mortality and blood pressure levels, prevalence, awareness, treatment, and control of hypertension in the Czech population from 1985 to 2007/2008. *J Hypertens*, 2010, 28, s. 2196–2203.
- 2 **Mazzaglia, G. – Mantovani, L. G. – Sturkenboom, M. C., et al.:** Patterns of persistence with antihypertensive medications in newly diagnosed hypertensive patients in Italy: a retrospective cohort study in primary care. *J Hypertens*, 2005, 23, s. 2093–2100.
- 3 **Van Wijck, B. L. – Klungel, O. H. – Heerdink, E. R., et al.:** Rate and determinants of 10-year persistence with antihypertensive drugs. *J Hypertens*, 2005, 23, s. 2101–2107.
- 4 **Štrauch, B. – Petrák, O. – Zelinka, T., et al.:** Precise assessment of noncompliance with the antihypertensive therapy in patients with resistant hypertension using toxicological serum analysis. *J Hypertens*, 2013, 31, s. 2455–2461.
- 5 **Mancia, G. – Fagard, R. – Narkiewicz, K., et al.:** ESH/ESC Guidelines for the management of arterial hypertension: The Task Force for the management of arterial hypertension of the European Society of Hypertension (ESH) and of the European Society of Cardiology (ESC). *J Hypertens*, 2013, 31, s. 1281–1357.
- 6 **Filipovský, J. – Widimský, Jr. J. – Ceral, J., et al.:** Diagnostické a léčebné postupy u arteriální hypertenze – verze 2012. Doporučení České společnosti pro hypertenzi. *Hypertenze & kardiologická prevence*, 2012, 3, s. 1–16.
- 7 **Colussi, G. – Catena, C. – Sechi, L. A.:** Spironolactone, eplerenone and the new aldosterone blockers in endocrine and primary hypertension. *J Hypertens*, 2013, 31, s. 3–15.

Diuretika v léčbě arteriální hypertenze

prof. MUDr. Hana Rosolová, DrSc.

Centrum preventivní kardiologie, II. interní klinika LF a FN, Plzeň, UK, Praha

- 1 **Law, M. R. – Morris, J. K. – Wald, N. J.:** Use of blood pressure lowering drugs in the prevention of cardiovascular disease: meta-analysis of 147 randomised trials in the context of expectations from prospective epidemiological studies. *BMJ*, 2009, 338, s. b1665.
- 2 **Messerli, F. H. – Makani, H. – Benjo, A., et al.:** Antihypertensive efficacy of hydrochlorothiazide as evaluated by ambulatory blood pressure monitoring: a meta-analysis of randomized trials. *J Am Coll Cardiol*, 2011, 57, s. 590–600.
- 3 **Ernst, M. E. – Carter, B. L. – Goerdt, C. J., et al.:** Comparative antihypertensive effects of hydrochlorothiazide and chlorthalidone on ambulatory and office blood pressure. *Hypertension*, 2006, 47, s. 352–358.
- 4 **Leren, P. – Helgeland, A.:** Oslo Hypertension Study. *Drugs*, 1986, 31, dopl. 1, s. 41–45.
- 5 **Wing, L. M. – Reid, C. M. – Ryan, P., et al.:** Second Australian National Blood Pressure Study Group: A comparison of outcomes with angiotensin-converting-enzyme inhibitors and diuretics for hypertension in the elderly. *N Engl J Med*, 2003, 348, s. 583–592.
- 6 **Dorsch, M. P. – Gillespie, B. W. – Erickson, S. R., et al.:** Chlorthalidone reduces cardiovascular events compared with hydrochlorothiazide: A retrospective cohort analysis. *Hypertension*, 2011, 57, s. 689–694.
- 7 **Weber, M. A. – Bakris, G. L. – Jamerson, K., et al.:** ACCOMPLISH Investigators. Cardiovascular events during differing hypertension therapies in patients with diabetes. *J Am Coll Cardiol*, 2010, 56, s. 77–85.
- 8 **Weber, M. A. – Julius, S. – Sverre, K. E., et al.:** Cardiovascular outcomes in hypertensive patients: comparing single-agent therapy with combination therapy. *J Hypertens*, 2012, doi:10.1097/HJH.0bo13e3283582ed6.
- 9 **ADVANCE-ON Collaborative Group:** Follow-up of blood pressure lowering and glucose control in type 2 diabetes. *N Engl J Med*, 2014, 371, s. 1392–1406.
- 10 **Olde Engberink, R. H. – Frenkel, W. J. – van den Bogaard, B., et al.:** Effects of thiazide-type and thiazide-like diuretics on cardiovascular events and mortality. Systematic review and meta-analysis. *Hypertension*, 2015, doi: 10.1161/HYPERTENSIONAHA.114.05122.

Zjednodušením léčby arteriální hypertenze ke snížení kardiovaskulárního rizika

doc. MUDr. Michal Vrablík, Ph.D. 3. interní klinika 1. LF UK a VFN, Praha

- 1 **European Guidelines on cardiovascular disease prevention in clinical practice (version 2012): the Fifth Joint Task Force of the European Society of Cardiology and Other Societies on Cardiovascular Disease Prevention in Clinical Practice (constituted by representatives of nine societies and by invited experts).** *Eur J Prev Cardiol*, 2012, 19, s. 585–667.
- 2 **Soška, V. – Vavřková, H. – Vrablík, M., et al.:** Stanovisko výboru ČSAT k doporučením ESC/EAS pro diagnostiku a léčbu dyslipidemií z roku 2011. *DMEV*, 2013, 16, s. 24–29.
- 3 **Lancia, G. – Tabard, E. – Narkiewicz, K., et al.:** 2013 guidelines for the management of arterial hypertension. *Eur Heart J*, 2013, epub: doi:10.1093/eurheartj/eh1151.
- 4 **Filipovský, J. – Widimský, Jr. J. – Ceral, R., et al.:** Doporučení diagnostických a léčebných postupů u arteriální hypertenze – verze 2012. Doporučení České společnosti pro hypertenzi. *Hypertenze KV prevence*, 2012, 1, s. 1–16.
- 5 **Vrablík, M.:** Adherence v léčbě hypertenze: pomohou nové lékové formy? *Interní Medicina*, 2012, 12, s. 60–2.
- 6 **Wald, D. S. – Law, M. – Morris, J. K., et al.:** Combination therapy versus monotherapy in reducing blood pressure: meta-analysis on 11000 participants from 42 trials. *Am J Med*, 2009, 122, s. 290–300.
- 7 **Dahlöf, B. – Sever, P. S. – Poulter, N. R., et al.:** for the ASCOT investigators: Prevention of cardiovascular events with an antihypertensive regimen of amlodipine adding perindopril as required versus atenolol adding bendroflumethiazide as required, in the Anglo Scandinavian Cardiac Outcomes Trial Blood Pressure Lowering Arm (ASCOT BPLA): a multicentre randomised controlled trial. *Lancet*, 2005, 366, s. 895–906.
- 8 **Jamerson, K. – Weber, M. A. – Bakris, G. L., et al.:** Benazepril plus amlodipine or hydrochlorothiazide for hypertension in high-risk patients. *N Engl J Med*, 2008, 359, s. 2417–2428.
- 9 **The Heart Outcomes Prevention Evaluation (HOPE) Study Investigators:** Effects of ramipril on cardiovascular and microvascular outcomes in people with diabetes mellitus: results of the HOPE study and MICROHOPE substudy. *Lancet*, 2000, 355, s. 253–259.

Candesartan s amlodipinem nově v jediné tabletě

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

- Lithell, H. – Hansson, L. – Skoog, I., et al.: The Study on Cognition and Prognosis in the Elderly (SCOPE): principal results of a randomized double-blind intervention trial. *J Hypertens*, 2003, 21, s. 875–886.
- Zanchetti, A. – Elmfeldt, D.: Findings and implications of the Study on COgnition and Prognosis in the Elderly (SCOPE) – a review. *Blood Press*, 2006, 15, s. 71–79.
- Meredith, P. A. – Murray, L. S. – McInnes, G. T.: Comparison of the efficacy of candesartan and losartan: a meta-analysis of trials in the treatment of hypertension. *J Hum Hypertens*, 2010, 24, s. 525–531.
- Stoukides, C. A. – McVoy, H. J. – Kaul, A. F.: Candesartan cilexetil: an angiotensin II receptor blocker. *Ann Pharmacother*, 1999, 33, s. 1287–1298.
- Takai, S. – Jin, D. – Shimosato, T. – Sakonjo, H. – Miyazaki, M.: Candesartan and amlodipine combination therapy provides powerful vascular protection in stroke-prone spontaneously hypertensive rats. *Hypertens Res*, 2011, 34, s. 245–252.
- Rakugi, H. – Ogihara, T. – Miyata, Y. – Sasai, K. – Totsuka, N.: Evaluation of the efficacy and tolerability of combination therapy with candesartan cilexetil and amlodipine besilate compared with candesartan cilexetil monotherapy and amlodipine besilate monotherapy in Japanese patients with mild-to-moderate essential hypertension: a multicenter, 12-week, randomized, double-blind, placebo-controlled, parallel-group study. *Clin Ther*, 2012, 34, s. 838–848.
- Yasuno, S. – Fujimoto, A. – Nakagawa, Y. – Kuwahara, K. – Ueshima, K.: Fixed-dose combination therapy of candesartan cilexetil and amlodipine besilate for the treatment of hypertension in Japan. *Expert Rev Cardiovasc Ther*, 2012, 10, s. 577–583.
- Maeda, A. – Tamura, K. – Kanaoka, T., et al.: Combination therapy of angiotensin II receptor blocker and calcium channel blocker exerts pleiotropic therapeutic effects in addition to blood pressure lowering: amlodipine and candesartan trial in Yokohama (ACTY). *Clin Exp Hypertens*, 2012, 34, s. 249–257.
- Yamaguchi, J. – Hagiwara, N. – Ogawa, H., et al.: Effect of amlodipine + candesartan on cardiovascular events in hypertensive patients with coronary artery disease (from The Heart Institute of Japan Candesartan Randomized Trial for Evaluation in Coronary Artery Disease [HU-CREATE] Study). *Am J Cardiol*, 2010, 106, s. 819–824.
- Koyanagi, R. – Hagiwara, N. – Yamaguchi, J., et al.: Efficacy of the combination of amlodipine and candesartan in hypertensive patients with coronary artery disease: a subanalysis of the HU-CREATE study. *J Cardiol*, 2013, 62, s. 217–223.
- Furuhashi, M. – Mita, T. – Moniwa, N., et al.: Angiotensin II receptor blockers decrease serum concentration of fatty acid-binding protein 4 in patients with hypertension. *Hypertens Res*, 2015, 38, s. 252–259.

Fixní kombinace dapagliflozin + metformin – výhody fixních kombinací

MUDr. Dina Odarčenkova | prof. MUDr. Milan Kvapil, CSc., MBA

Interní klinika 2. LF UK a FN Motol, Praha

- Effect of intensive blood-glucose control with metformin on complications in overweight patients with type 2 diabetes (UKPDS 34). UK Prospective Diabetes Study (UKPDS) Group. *Lancet*, 1998, 352, s. 854–865. Erratum in: *Lancet*, 1998, 352, s. 1558.
- http://www.diab.cz/dokumenty/dm2_12.pdf, vyhledáno 26. 9. 2015.
- Abdul-Ghani, M. A. – Bortin, L. – DeFronzo, R. A.: Efficacy and safety of SGLT2 inhibitors in the treatment of type 2 diabetes mellitus. *Curr Diab Rep*, 2012, 12, s. 230–238.
- Bolinder, J., et al.: Effects of dapagliflozin on body weight, total fat mass, and regional adipose tissue distribution in patients with type 2 diabetes mellitus with inadequate glycemic control on metformin. *J Clin Endocrinol Metab*, 2012, 97, s. 1020–1031.
- SPC Dapagliflozin.
- Rozenfeld, Y. – Hunt, J. S. – Plauschinat, C. – Wong, K. S.: Oral antidiabetic medication adherence and glycemic control in managed care. *Am J Manag Care*, 2008, 14, s. 71–75.
- Benford, M. – Milligan, G. – Pike, J., et al.: Fixed-dose combination antidiabetic therapy: real-world factors associated with prescribing choices and relationship with patient satisfaction and compliance. *Adv Ther*, 2012, 29, s. 26–40.
- Paes, A. H. – Akker, A. – Soe-Agnie, C. J.: Impact of dosage frequency on patient compliance. *Diabetes Care*, 1997, 20, s. 1512–1517.
- Melikian, C. – White, T. J. – Vanderplas, A., et al.: Adherence to oral antidiabetic therapy in a managed care organization: a comparison of monotherapy, combination therapy, and fixed-dose combination therapy. *Clin Ther*, 2002, 24, s. 460–467.
- Blonde, L. – San Juan, Z. T.: Fixed-dose combinations for treatment of type 2 diabetes mellitus. *Adv Ther*, 2012, 29, s. 1–13.
- Pan, F. – Chermew, M. E. – Fendrich, A. M.: Impact of fixed-dose combination drugs on adherence to prescription medications. *J Gen Intern Med*, 2008, 23, s. 611–614.
- Melikian, C. – White, T. J. – Vanderplas, A., et al.: Adherence to oral antidiabetic therapy in a managed care organization: a comparison of monotherapy, combination therapy, and fixed-dose combination therapy. *Clin Ther*, 2002, 24, s. 460–467.
- Rozenfeld, Y. – Hunt, J. S. – Plauschinat, C. – Wong, K. S.: Oral antidiabetic medication adherence and glycemic control in managed care. *Am J Manag Care*, 2008, 14, s. 71–75.
- Cheong, C. – Barner, J. C. – Lawson, K. A. – Johnsrud, M. T.: Patient adherence and reimbursement amount for antidiabetic fixed-dose combination products compared with dual therapy among Texas Medicaid recipients. *Clin Ther*, 2008, 30, s. 1893–1907.
- Cramer, J. A.: A systematic review of adherence with medications for diabetes. *Diabetes Care*, 2004, 27, s. 1218–1224.
- Salas, M. – Hughes, D. – Zuluaga, A. – Vardeva, K. – Lebmeier, M.: Costs of medication nonadherence in patients with diabetes mellitus: a systematic review and critical analysis of the literature. *Value Health*, 2009, 12, s. 915–922.

Výhody intenzifikace antidiabetické léčby lixisenatidem

MUDr. Milan Flekač, Ph.D. 3. interní klinika VFN a 1. LF UK, Praha

- Ceriello, A.: The glucose triad and its role in comprehensive glycaemic control: current status, future management. *Int J Clin Pract*, 2010, 64, s. 1705–1711.
- Meneghini, L. F.: Intensifying insulin therapy: what options are available to patients with type 2 diabetes? *Am J Med*, 2013, 126, dopl. 1, s. S28–S37.
- Bell, D. S. – O'Keefe, J. H. – Jellinger, P.: Postprandial dysmetabolism: the missing link between diabetes and cardiovascular events? *Endocr Pract*, 2008, 14, s. 112–124.
- O'Keefe, J. H. – Bell, D. S.: Postprandial hyperglycemia/hyperlipidemia (postprandial dysmetabolism) is a cardiovascular risk factor. *Am J Cardiol*, 2007, 100, s. 899–904.
- Bolli, G. B. – Owens, D. R.: Lixisenatide, a novel GLP-1 receptor agonist: efficacy, safety and clinical implications for type 2 diabetes mellitus. *Diabetes Obes Metab*, 2014, 16, s. 588–601.
- Bain, S. C.: The clinical development program of lixisenatide: a once-daily glucagon-like Peptide-1 receptor agonist. *Diabetes Ther*, 2014, 5, s. 367–383.
- Bentley-Lewis, R. – Aguilar, D. – Riedle, M. C., et al.: ELIXA Investigators. Rationale, design, and baseline characteristics in Evaluation of LIXisenatide in Acute Coronary Syndrome, a long-term cardiovascular end point trial of lixisenatide versus placebo. *Am Heart J*, 2015, 169, s. 631–638.
- Fonseca, V. A. – Alvarado-Ruiz, R. – Raccach, D., et al.: Efficacy and safety of the once-daily GLP-1 receptor agonist lixisenatide in monotherapy: a randomized, double-blind, placebo-controlled trial in patients with type 2 diabetes (GetGoal-Mono). *Diabetes Care*, 2012, 35, s. 1225–1231.
- Ahrén, B. – Lequizado Dinás, A. – Miossec, P., et al.: Efficacy and safety of lixisenatide once-daily morning or evening injections in type 2 diabetes inadequately controlled on metformin (GetGoal-M). *Diabetes Care*, 27. 3. 2013.
- Rosenstock, J. – Hanefeld, M. – Shamanna, P., et al.: Beneficial effects of once-daily lixisenatide on overall and postprandial glycemic levels without significant excess of hypoglycemia in type 2 diabetes inadequately controlled on a sulfonylurea with or without metformin (GetGoal-S). *J Diabetes Complications*, 2014, 28, s. 386–392.
- Pinget, M. – Goldenberg, R. – Niemoeller, E., et al.: Efficacy and safety of lixisenatide once daily versus placebo in type 2 diabetes insufficiently controlled on pioglitazone (GetGoal-P). *Diabetes Obes Metab*, 2013, 15, s. 1000–1007.
- Rosenstock, J. – Raccach, D. – Korányi, L., et al.: Efficacy and safety of lixisenatide once daily versus exenatide twice daily in type 2 diabetes inadequately controlled on metformin: a 24-week, randomized, open-label, active-controlled study (GetGoal-X). *Diabetes Care*, 2013, 36, s. 2945–2951.
- Meier, J. J. – Rosenstock, J. – Hincelin-Méry, A., et al.: Contrasting effects of lixisenatide and liraglutide on postprandial glycemic control, gastric emptying, and safety parameters in patients with type 2 diabetes on optimized insulin glargine with or without metformin: a randomized, open-label trial. *Diabetes Care*, 2015, 38, s. 1263–1273.
- Riedle, M. C. – Forst, T. – Aronson, R., et al.: Adding once-daily lixisenatide for type 2 diabetes inadequately controlled with newly initiated and continuously titrated basal insulin glargine: a 24-week, randomized, placebo-controlled study (GetGoal-Duo 1). *Diabetes Care*, 2013, 36, s. 2497–2503.
- Charbonnel, B. – Bertolini, M. – Tinahones, F. J., et al.: Lixisenatide plus basal insulin in patients with type 2 diabetes mellitus: a meta-analysis. *J Diabetes Complications*, 2014, 28, s. 880–886.
- Rosenstock, J., et al.: ADA 2015, poster 107.
- Pfeffer, M., et al.: ADA 2015, session 3-CT-SY28.

Aktuálně: Glifloziny v léčbě diabetes mellitus 2. typu v roce 2015

MUDr. Dina Odarčenková | prof. MUDr. Milan Kvapil, CSc., MBA

Interní klinika 2. LF UK a FN Motol, Praha

- 1 **Abdul-Ghani, M. A. – Bortin, L. – DeFronzo, R. A.**: Efficacy and safety of SGLT2 inhibitors in the treatment of type 2 diabetes mellitus. *Curr Diab Rep*, 2012, 12, s. 230–238.
- 2 **Bolinder, J., et al.**: Effects of dapagliflozin on body weight, total fat mass, and regional adipose tissue distribution in patients with type 2 diabetes mellitus with inadequate glycemic control on metformin. *J Clin Endocrinol Metab*, 2012, 97, s. 1020–1031.
- 3 **SPC Dapagliflozin**.
- 4 **Merovci, A. – Solis-Herrera, C. – Daniele, G., et al.**: Dapagliflozin improves muscle insulin sensitivity but enhances endogenous glucose production. *J Clin Invest*, 2014, 124, s. 509–514.
- 5 **Rosenstock, J. – Hansen, L. – Zee, P., et al.**: Dual add-on therapy in type 2 diabetes poorly controlled with metformin monotherapy: a randomized double-blind trial of saxagliptin plus dapagliflozin addition versus single addition of saxagliptin or dapagliflozin to metformin. *Diabetes Care*, 2015, 38, s. 376–383.
- 6 **Wilding, J. P. – Woo, V. – Rohwedder, K., et al.**: Dapagliflozin 006 Study Group. Dapagliflozin in patients with type 2 diabetes receiving high doses of insulin: efficacy and safety over 2 years. *Diabetes Obes Metab*, 2014, 16, s. 124–136.
- 7 **van Haalen, H. G. – Pompen, M. – Bergenheim, K. – McEwan P. – Townsend, R. – Roudaut, M.**: Cost effectiveness of adding dapagliflozin to insulin for the treatment of type 2 diabetes mellitus in the Netherlands. *Clin Drug Investig*, 2014, 34, s. 135–146.
- 8 **Henry, R. R. – Rosenstock, J. – Edelman, S., et al.**: Exploring the potential of the SGLT2 inhibitor dapagliflozin in type 1 diabetes: a randomized, double-blind, placebo-controlled pilot study. *Diabetes Care*, 2015, 38, s. 412–419.
- 9 **Bolinder, J. – Ljunggren, Ö. – Johansson, L., et al.**: Dapagliflozin maintains glycaemic control while reducing weight and body fat mass over 2 years in patients with type 2 diabetes mellitus inadequately controlled on metformin. *Diabetes Obes Metab*, 2014, 16, s. 159–169.
- 10 **Kovacs, C. S. – Seshiah, V. – Swallow, R., et al.**: EMPA-REG PIO trial investigators. Empagliflozin improves glycaemic and weight control as add-on therapy to pioglitazone or pioglitazone plus metformin in patients with type 2 diabetes: a 24-week, randomized, placebo-controlled trial. *Diabetes Obes Metab*, 2014, 16, s. 147–158.
- 11 **Stein, P. – Berg, J. K. – Morrow, L., et al.**: Canagliflozin, a sodium glucose co-transporter 2 inhibitor, reduces post-meal glucose excursion in patients with type 2 diabetes by a non-renal mechanism: results of a randomized trial. *Metabolism*, 2014, 63, s. 1296–1303.
- 12 **Merovci, A. – Mari, A. – Solis, C., et al.**: Dapagliflozin lowers plasma glucose concentration and improves β -cell function. *J Clin Endocrinol Metab*, 2015, 100, s. 1927–1932.
- 13 **Zinman, B. – Wanner, C. – Lachin, J. M., et al.**: EMPA-REG OUTCOME Investigators. Empagliflozin, cardiovascular outcomes, and mortality in type 2 diabetes. *N Engl J Med*, 17. 9. 2015, Epub před tiskem.

Postavení fixní dvojkombinace Amesos v léčbě hypertenze

prof. MUDr. Miroslav Souček, CSc. II. interní klinika LF MU a ICRC FN u sv. Anny, Brno

- 1 **Dahlöf, B. – Sever, P. S. – Poulter, N. R., et al.**: Prevention of cardiovascular events with an antihypertensive regimen of amlodipine adding perindopril as required versus atenolol adding bendroflumethiazide as required, in Anglo-Scandinavian Cardiac Outcomes Trial-Blood Pressure Lowering Arm (ASCOT-BPLA) a multicenter randomized controlled trial. *Lancet*, 2005, 366, s. 895–906.
- 2 **Williams, B. – Lacy, P. S.**: CAFE and the ASCOT (Anglo-Scandinavian Cardiac Outcomes trial) Investigators Impact of heart rate on central aortic pressures and hemodynamics analysis from the CAFE (Conduit Artery Function Evaluation) study: CAFE-Heart Rate. *J Am Coll Cardiol*, 2009, 18, s. 705–713.
- 3 **Filipovský, J. – Widimský, J. – Ceral, J., et al.**: Diagnostické a léčebné postupy u arteriální hypertenze – verze 2012. Doporučení České společnosti pro hypertenzi. *Hypertenze a kardiovaskulární prevence*, 2012, 2, s. 1–16.
- 4 **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.
- 5 **Widimský, J.**: Kombinace inhibitoru ACE a blokátoru kalciových kanálů je optimální dvojkombinací léčby hypertenze. *Vnitřní Léč*, 2009, 55, s. 123–130.
- 6 **Sliva, J.**: AMESOS – fixní kombinace lisinoprilu a amlodipinu v léčbě hypertenze. *ACTA MEDICINAE*, 2014, 11, s. 54–56.
- 7 **Randomized placebo-controlled trial of lisinopril in normotensive patients with insulin-dependent diabetes and normoalbuminuria or microalbuminuria. The EUCLID Study Group.** *Lancet*, 1997, 349, s. 1787–1792.
- 8 **Abraham, G. – Bodu, K., et al.**: The effect of Lisopress treatment on ambulatory blood pressure and urinary microalbuminuria excretion in patients with hypertension and diabetes. *Hypertension and nephrology*, 2003, 7, s. 13–20.
- 9 **Pilote, L. – Abrahamowicz, M. – Eisenberg, M., et al.**: Effect of different angiotensin-converting-enzyme inhibitors on mortality among elderly patients with congestive heart failure. *CMAJ*, 2008, 178, s. 1303–1311.
- 10 **Pall, D. – Katona, E. – Juhasz, M., et al.**: Prevention of target organ damage with modern antihypertensive agents. *Orv Hetil*, 2006, 147, s. 1505–1511.
- 11 **Farsang, C. – Abraham, G. – Kovács, P., et al.**: The effectivity and safety of Amlodipin-Lisinopril Fix-combination in patients with ESsential hypertension (ALFESS study). *Hypertension and nephrology*, 2009, 13, s. 81–88.
- 12 **Krupička, J. – Souček, M. – Widimský, J., jr., et al.**: Projekt Györgyi – neintervenci sledování účinnosti a tolerance léčby hypertenze přípravkem Amesos prostřednictvím 24hodinové kontroly krevního tlaku. *ACTA MEDICINAE*, 2014, 9, s. 50–55.
- 13 **Packej, M., et al.**: Studie ATLAS. *Circulation*, 1999, 100, s. 2312–2318.
- 14 **Goa, K. L. – Haria, M. – Wilde, M. I.**: Lisinopril. A review of its pharmacology and use in the management of the complications of diabetes mellitus. *Drugs*, 1997, 53, s. 1081–1105.

Evolokumab v léčbě dyslipidemií se zaměřením na familiární hypercholesterolemii

doc. MUDr. Michal Vrablík, Ph.D.

Centrum preventivní kardiologie, 3. interní klinika 1. LF UK a VFN, Praha

- 1 **Seidah, N. G.**: PCSK9 as a therapeutic target of dyslipidemia. *Expert Opin Ther Targets*, 2009, 13, s. 19e28.
- 2 **Ference, B. A. – Yoo, W. – Alesh, I., et al.**: Effect of long-term exposure to lower low-density lipoprotein cholesterol beginning early in life on the risk of coronary heart disease: a Mendelian randomization analysis. *J Am Coll Cardiol*, 2012, 60, s. 2631–2639.
- 3 **Cohen, J. C. – Boerwinkle, E. – Mosley, Jr. T. H. – Hobbs, H. H.**: Sequence variations in PCSK9, low LDL, and protection against coronary heart disease. *N Engl J Med*, 2006, 354, s. 1264e72.
- 4 **Cicero, A. F. G. – Colletti, A. – Borghi, C.**: Profile of evolocumab and its potential in the treatment of hyperlipidemia. *Drug Design, Development and Therapy*, 2015, 9, s. 3073–3082.
- 5 **Dias, C. S. – Shaywitz, A. J. – Wasserman, S. M., et al.**: Effects of AMG145 on low-monoclonal antibody to proprotein convertase subtilisin/kexin type 9 as monotherapy in patients with hypercholesterolemia (MENDEL): a randomised, double-blind, placebo-controlled, phase 2 study. *Lancet*, 2012, 380, s. 1995–2006.
- 6 **Kohli, P. – Desai, N. R. – Giugliano, R. P., et al.**: Design and rationale of the LAPLACE-TIMI 57 trial: a phase II, double-blind, placebo-controlled study of the efficacy and tolerability of a monoclonal antibody inhibitor of PCSK9 in subjects with hypercholesterolemia on background statin therapy. *Clin Cardiol*, 2012, 35, s. 385–391.
- 7 **Blom, D. J. – Hala, T. – Bolognese, M., et al.**: A 52-week placebo-controlled trial of evolocumab in hyperlipidemia. *N Engl J Med*, 2014, 370, s. 1809–1819.
- 8 **Nordestgaard, B. G. – Chapman, M. J. – Ray, K. K., et al.**: Lipoprotein (a) as a cardiovascular risk factor: current status. *European Heart Journal*, 2010, 31, s. 2844–2853.
- 9 **Raal, F. – Scotty, R. – Somaratne, R., et al.**: Low-density lipoprotein cholesterol-lowering effects of AMG 145, a monoclonal antibody to proprotein convertase subtilisin/kexin type 9 serine protease in patients with heterozygous familial hypercholesterolemia: the Reduction of LDL-C with PCSK9 Inhibition in Heterozygous Familial Hypercholesterolemia Disorder (RUTHERFORD) randomized trial. *Circulation*, 2012, 126, s. 2408–2417.
- 10 **Raal, F. J. – Honarpour, N. – Blom, D. J., et al.**: for the TESLA Investigators: Inhibition of PCSK9 with evolocumab in homozygous familial hypercholesterolemia (TESLA Part B): a randomised, double-blind, placebo-controlled trial. *Lancet*, 2014, 385, s. 341–350.
- 11 **Bruckert, E. – Blaha, V. – Stein, E., et al.**: Trial assessing long-term use of PCSK9 inhibition in patients with genetic LDL disorders (TAUSSIG). Efficacy and safety in patients with familial hypercholesterolemia receiving lipid apheresis. Poster sessions, AHA Scientific Sessions, Chicago, 2014, s. 15–19.
- 12 **Sabatine, M. S. – Giugliano, R. P. – Wiviott, S. D., et al.**: Efficacy and safety of evolocumab in reducing lipids and cardiovascular events. *N Engl J Med*, 2015, 372, s. 1500–1509.

LDL-cholesterol: Čím níže, tím lépe! Potřebujeme nová hypolipidemika? Zaměřeno na alirokumab

prof. MUDr. Richard Češka, CSc. | MUDr. Tereza Altschmiedová | MUDr. Michaela Šnejdrová, Ph.D.
Centrum preventivní kardiologie, III. interní klinika 1. LF UK a VFN, Praha

- Reiner, Z. – Catapano, A. L. – De, B. G., et al.: ESC/EAS Guidelines for the management of dyslipidaemias: The Task Force for the management of dyslipidaemias of the European Society of Cardiology (ESC) and the European Atherosclerosis Society (EAS). *Eur Heart J*, 2011, 32, s. 1769–1818.
- Watts, G. F. – Gidding, S. – Wierzbicki, A. S., et al.: Integrated guidance on the care of familial hypercholesterolaemia from the International FH Foundation. *Int J Cardiol*, 2014, 171 s. 309–320.
- Baigent, C. – Blackwell, L. – Emberson, J., et al.: Efficacy and safety of more intensive lowering of LDL cholesterol: a meta-analysis of data from 170,000 participants in 26 randomised trials. *Lancet*, 2010, 376 s. 1670–1681.
- Mihaylova, B. – Emberson, J. – Blackwell, L., et al.: The effects of lowering LDL cholesterol with statin therapy in people at low risk of vascular disease: meta-analysis of individual data from 27 randomised trials. *Lancet*, 2012, 380 s. 581–590.
- Nordstgaard, B. G. – Chapman, M. J. – Humphries, S. E., et al.: Familial hypercholesterolaemia is underdiagnosed and undertreated in the general population: Guidance for clinicians to prevent coronary heart disease. *Eur Heart J*, 2013, 34, s. 3478–3490.
- Jennifer, G. – Robinson, M. D. – Farnier, M. – Krempf, M.: Efficacy and safety of alirocumb in reducing lipids and cardiovascular events. *N Engl J Med*, 2015, 372, s. 1489–1499.
- Moriarty, P. M. – Jacobson, T. A. – Bruckert, E., et al.: Efficacy and safety of alirocumb, a monoclonal antibody to PCSK-9, in statin-intolerant patients: Design and rationale of ODYSSEY ALTERNATIVE, a randomized phase 3 trial. *J Clin Lipidol*, s. 554–561.
- Canon, C. P. – Blazing, M. A. – Giuliano, R. P., et al.: Ezetimibe added to statin therapy after acute coronary syndromes. *N Engl J Med*, 2015, 372, s. 2387–2397.
- Lunven, C. – Paehler, T. – Poitiers, F., et al.: A randomized study of the relative pharmacokinetics, pharmacodynamics, and safety of alirocumb, a fully human monoclonal antibody to PCSK-9, after single subcutaneous administration at three different injection sites in healthy subjects. *Cardiovasc Ther*, 2014, 32, s. 297–301.
- Kereiakes, D. J. – Robinson, J. G. – Cannon, C. P., et al.: Efficacy and safety of the proprotein convertase subtilisin/kexin type 9 inhibitor alirocumb among high cardiovascular risk patients on maximally tolerated statin therapy: the ODYSSEY COMBO I study. *Am Heart J*, 2015, 169, s. 906–915.e13, doi: 10.1016/j.ahj.2015.03.004, Epub 13. 3. 2015.
- Canon, C. P. – Cariou, B. – Blom, D., et al.: Efficacy and safety of alirocumb in high cardiovascular risk patients with inadequately controlled hypercholesterolaemia on maximally tolerated doses of statins: the ODYSSEY COMBO II randomized controlled trial. *Eur Heart J*, 2015, 36, s. 1186–1194.
- Robinson, J. G. – Farnier, M. – Krempf, M., et al.: Efficacy and safety of alirocumb in reducing lipids and cardiovascular events. *N Engl J Med*, 2015, 372, s. 1489–1499.
- Bays, H. – Gaudet, D. – Weiss, R., et al.: Alirocumb as add-on to atorvastatin versus other lipid treatment strategies: ODYSSEY OPTIONS I randomized trial. *J Clin Endocrinol Metab*, 2015, 100, s. 3140–3148.
- Bays, H. – Farnier, M. – Gaudet, D., et al.: Efficacy and safety of combining alirocumb with atorvastatin or rosuvastatin versus statin intensification or adding ezetimibe in high cardiovascular risk patients: ODYSSEY OPTIONS I and II (abstrakt). *Circulation*, 2015, 130, s. 2118–2119.
- Roth, E. – Rader, D. J. – Moriarty, P.: Phase 3 randomized trial evaluating alirocumb every four weeks dosing as add-on to statin or as monotherapy: ODYSSEY CHOICE I (abstrakt č. 0254). In: 17th International Symposium on Atherosclerosis, 2015.
- McKenney, J. M. – Koren, M. J. – Kereiakes, D. J., et al.: Safety and efficacy of a monoclonal antibody to proprotein convertase subtilisin/kexin type 9 serine protease, SAR236553/REGN727, in patients with primary hypercholesterolemia receiving ongoing stable atorvastatin therapy. *J Am Coll Cardiol*, 2012, 59, s. 2344–2353.
- Roth, E. M. – McKenney, J. M. – Hanotin, C., et al.: Atorvastatin with or without an antibody to PCSK-9 in primary hypercholesterolemia. *N Engl J Med*, 2012, 367, s. 1891–1900.
- Roth, E. M. – Taskiran, M. R. – Ginsberg, H. N., et al.: Monotherapy with the PCSK-9 inhibitor alirocumb versus ezetimibe in patients with hypercholesterolemia: results of a 24 week, double-blind, randomized phase 3 trial. *Int J Cardiol*, 2014, 176, s. 55–61.
- Moriarty, P. M. – Thompson, P. D. – Canon, C. P., et al.: ODYSSEY ALTERNATIVE: efficacy and safety of the proprotein convertase subtilisin/kexin type 9 monoclonal antibody, alirocumb, versus ezetimibe, in patients with statin intolerance as defined by a placebo run-in and statin rechallenge arm. *Circulation*, 2014, 130, s. 2108–2109.
- Ginsberg, H. N. – Rader, D. J. – Raal, F. J.: ODYSSEY HIGH FH: efficacy and safety of alirocumb in patients with severe heterozygous familial hypercholesterolemia. *Circulation*, 2014, 130, s. 2119.

Abstrakt: Možné vysvětlení rozporů výsledků studie EMPA-REG OUTCOM. Zvyšují sulfonylurea a inzulin mortalitu diabetiků 2. typu v porovnání s empagliflozinem?

prof. MUDr. Milan Kvapil, CSc., MBA Interní klinika 2. LF UK a FN Motol, Praha

- Intensive blood-glucose control with sulphonylureas or insulin compared with conventional treatment and risk of complications in patients with type 2 diabetes (UKPDS 33). UK Prospective Diabetes Study (UKPDS) Group. *Lancet*, 1998, 352, s. 837–853.
- Effect of intensive blood-glucose control with metformin on complications in overweight patients with type 2 diabetes (UKPDS 34). UK Prospective Diabetes Study (UKPDS) Group. *Lancet*, 1998, 352, s. 854–865. Erratum v: *Lancet*, 1998, 352, s. 1558.
- ACCORD Study Group, Gerstein, H. C. – Miller, M. E. – Genuth, S. – Ismail-Beigi, F., et al.: Long-term effects of intensive glucose lowering on cardiovascular outcomes. *N Engl J Med*, 2011, 364, s. 818–828.
- Canon, C. P. – Blazing, M. A. – Giuliano, R. P. – McCagg, A., et al.: IMPROVE-IT Investigators. Ezetimibe added to statin therapy after acute coronary syndromes. *N Engl J Med*, 2015, 372, s. 2387–2397.
- Robinson, J. G. – Farnier, M. – Krempf, M., et al.: ODYSSEY LONG TERM Investigators. Efficacy and safety of alirocumb in reducing lipids and cardiovascular events. *N Engl J Med*, 2015, 372, s. 1489–1499.
- Zinman, B. – Wanner, C. – Lachin, J. M., et al.: EMPA-REG OUTCOME Investigators. Empagliflozin, cardiovascular outcomes, and mortality in type 2 diabetes. *N Engl J Med*, 2015, Epub před tiskem.
- Green, J. B. – Betel, M. A. – Armstrong, P. W., et al.: TECOS Study Group. Effect of sitagliptin on cardiovascular outcomes in type 2 diabetes. *N Engl J Med*, 2015, 373, s. 232–242.
- Scirica, B. M. – Bhatt, D. L. – Braunwald, E., et al.: SAVOR-TIMI 53 Steering Committee and Investigators. Saxagliptin and cardiovascular outcomes in patients with type 2 diabetes mellitus. *N Engl J Med*, 2013, 369, s. 1317–1326.
- ORIGIN Trial Investigators. Gerstein, H. C. – Bosch, J. – Dagenais, G. R., et al.: Basal insulin and cardiovascular and other outcomes in dysglycemia. *N Engl J Med*, 2012, 367, s. 319–328.
- Collins, R. – Armitage, J. – Parish, S., et al.: Heart Protection Study Collaborative Group. MRC/BHF Heart Protection Study of cholesterol-lowering with simvastatin in 5963 people with diabetes: a randomized placebo-controlled trial. *Lancet*, 2003, 361, s. 2005–2016.
- NAVIGATOR Study Group: Effect of nateglinide on the incidence of diabetes and cardiovascular events. *N Engl J Med*, 2010, 362, s. 1463–1476.
- Normandy, J. A. – Charbonnel, B. – Eckland, D. J., et al.: PROactive investigators. Secondary prevention of macrovascular events in patients with type 2 diabetes in the PROactive Study (PROspective pioglitazone Clinical Trial In macroVascular Events): a randomised controlled trial. *Lancet*, 2005, 366, s. 1279–1289.
- ADVANCE Collaborative Group: Patel, A. – MacMahon, S. – Chalmers, J., et al.: Intensive blood glucose control and vascular outcomes in patients with type 2 diabetes. *N Engl J Med*, 2008, 358, s. 2560–2572.

Bolest dolních končetin – žilní příčiny

prof. MUDr. Alena Pospíšilová, CSc. Dermatovenerologická klinika LF MU a FN, Brno
MUDr. Marek Hakl, Ph.D. Centrum pro léčbu bolesti, Anesteziologická klinika LF MU
a FN u svaté Anny, Brno

- 1 Hakl, M., et al.: *Léčba bolesti*. Mladá Fronta, 2011, s. 211.
- 2 Boisseau, M. R.: How are leukocytes involved in the symptoms of chronic venous disease? *Medicographia*, 2006, 28, s. 128–136.
- 3 Rabe, E. – Guex, J. J. – Paska, A., et al.: Epidemiology of chronic venous disorders in geographically diverse populations: Results from the Vein Consult Program. *Int Angiol*, 2012, 31, s. 105–115.
- 4 Bergan, J.: Leukocytes and venous valve damage in chronic disease. *Medicographia*, 2006, 28, s. 101–103.
- 5 Vital, A. – Charles, D. – Series, J. M., et al.: Evidence for unmyelinated C fibers and inflammatory cells in human varicose saphenous. *Int J Angiol*, 2010, 19, s. 73–77.
- 6 Danzinger, N.: Pathophysiology of pain in venous disease. *Phlebolympology*, 2008, 15, 107–114.
- 7 Vincent, J. R. – Jones, G. T. – Hill, G. B., et al.: Failure of microvenous valves in small superficial veins is a key to the skin changes of venous insufficiency. *J Vasc Surg*, 2011, 54, dopl., s. 62–69.
- 8 Danzinger, N.: *Žilní bolest v klinické praxi: Paradoxy a falešné představy*. Servier, 2012.
- 9 Brandbury, A. – Evans, C. – Allan, P. et al.: What are the symptoms of varicose veins? Edinburgh vein study cross sectional population survey. *BMJ*, 1999, 318, s. 353–356.
- 10 Perrin, M. – Ramelet, A. A.: Pharmacological treatment of primary chronic venous disease: rationale results and unanswered questions. *Eur J Vasc Endovasc Surg*, 2011, 41, s. 117–125.
- 11 Jantet, G.: Chronic venous insufficiency: Worldwide results of the RELIEF study. Reflux assessment and quality of life improvement with micronized flavonoids. *Angiology*, 2002, 53, s. 245–256.
- 12 Perrin, M. – Nicolaides, A.: The updated international guidelines on „The Management of Chronic Venous Disorders of the Lower Limbs“ and the place of venoactive drugs. *Int Angiol*, 2013, 32 (dopl. 1), s. 106–107.
- 13 Tsoukanov, Y. T. – Tsoukanov, A. Y. – Nikolaychuk, A.: Great saphenous vein transitory reflux in patients with symptoms related to chronic venous disorders but without visible signs (COs), and its correction with MPFF treatment. *Phlebolympology*, 2015, 22, s. 18–24.

Idiopatická plicní fibróza – základy pro interní praxi

MUDr. Martina Plačková Klinika plicních nemocí a tuberkulózy, FN Ostrava, LF UK, Plzeň

- 1 Vašáková, M. – Polák, J. – Matěj, R.: *Intersticiální plicní procesy*. Maxdorf, 2011.
- 2 Doubková, M. – Skříčková, J.: Idiopatická plicní fibróza. *Vnitřní lékařství*, 2005, 51, s. 1375–1384.
- 3 Nalysnyk, L. – Ruzafa, J. C. – Rotella, P. – Esser, D.: Incidence and prevalence of idiopathic pulmonary fibrosis: review of the literature, doi: 10.1183/09059180.00002512, publikováno 1. 12. 2012, 21, s. 355–361.
- 4 Interstitial lung diseases. *European lung white book*.
- 5 Noble, P. W. – Homer, J. R.: Back to the future. Historical perspective on the pathogenesis of idiopathic pulmonary fibrosis. *American Journal of Respiratory Cell and Molecular Biology*, 2005, 33, s. 113–120.
- 6 American Thoracic Society Documents An Official ATS/ERS/JRS/ALAT Statement: Idiopathic Pulmonary Fibrosis: Evidence-based Guidelines for Diagnosis and Management. *Am J Respir Crit Care Med*, 2011, 183, s. 788–824.
- 7 Griff, S. – Schönfeld, N. – Ammenwerth, W., et al.: Diagnostic yield of transbronchial cryobiopsy in non-neoplastic lung disease: a retrospective case series. *BMC Pulmonary Medicine*, 2014, 14, s. 171, doi:10.1186/1471-2466-14-171.
- 8 Brožík, J.: HRCT vyšetření u plicních onemocnění a možné zdroje omylu. *Medical Tribune*, 2011, 22, s. C3–C4.
- 9 Poletti, V. – Casoni, G. L. – Gurioli, C., et al.: Lung cryobiopsies: a paradigm shift in diagnostic bronchoscopy? *Respirology*, 2014, 19, s. 645–654, doi: 10.1111/resp.12309, Epub 26. 5. 2014.
- 10 Vašáková, M.: Novinky v léčbě idiopatické plicní fibrózy. *Interní medicína pro praxi*, 2014, 16, s. 189–191.
- 11 Šimůnková, M.: Nintedanib přetváří prognózu idiopatické plicní fibrózy. *Medical Tribune*, 2015, 8, s. C4.
- 12 Richeldi, L., et al.: Efficacy and safety of nintedanib in idiopathic pulmonary fibrosis. *N Engl J Med*, 2014, 370, s. 2071–2082.
- 13 Kolb, M. – Shargall, Y.: Lung surgery in interstitial lung disease—a safe and useful procedure? *Journal of Thoracic Disease*, 2015, 4, s. 375–377.

Pokroky v pankreatologii – chronická pankreatitida

prof. MUDr. Petr Dítě, DrSc. | MUDr. Martina Bojková | MUDr. Tomáš Kupka | MUDr. Pavel Svoboda |
MUDr. Arnošt Martínek Akademické centrum gastroenterologie – Interní klinika FN a LF, Ostrava
MUDr. Bohuslav Kianička, Ph.D. | MUDr. Miroslav Souček II. interní klinika FN u sv. Anny, Brno
MUDr. Kateřina Kapounková Katedra podpory zdraví, Fakulta sportovních studií MU, Brno

- 1 Lévy, Ph. – Dominguez-Munoz, E. – Indie, C. – et al.: Epidemiology of chronic pancreatitis: burden of the disease and consequences. *UEG Journal*, 2014, 2, s. 345–354.
- 2 Dítě, P. – Starý, K. – Novotný, I. – et al.: Incidence of chronic pancreatitis in the Czech Republic. *Eur J Gastroenterol Hepatol*, 2001, 13, s. 749–750.
- 3 Etemad, B. – Whitcomb, D. C.: Chronic pancreatitis: diagnosis, classification, and new genetic etiology 2000 developments. *Gastroenterology*, 2001, 120, s. 682–707.
- 4 Schneider, A. – Lohr, J. M. – Winter, M. W.: The M-ANNHEIM classification of chronic pancreatitis: introduction of unifying classification system based on a review of previous classification of the disease. *J Gastroenterol*, 2007, 42, s. 101–119.
- 5 Lesniak, R. J. – Hohenwarter, M. D. – Tailor, A.: Spectrum of causes of pancreatic calcifications. *AJR*, 2002, 178, s. 79–86.
- 6 Luetmer, P. H. – Stephens, D. H. – Ward, E.: Chronic pancreatitis: reassessment with current CT. *Radiology*, 1989, 171, s. 353–357.
- 7 Hsu, J. T. – Yeh, C. N. – Hung, C. F., et al.: Management and outcome of bleeding pseudoaneurysm associated with chronic pancreatitis. *BMC Gastroenterol*, 2006, 6, s. 3.
- 8 Miller, F. N. – Keppe, A. – Wadhwa, A. – et al.: MRI of pancreatitis and its complications. *AJR*, 183, s. 1645–1652.
- 9 Tamura, R. – Ishibashi, T. – Takahas, S. – et al.: Chronic pancreatitis: MRCP vs. ERCP for quantitative caliber measurement and qualitative evaluation. *Radiology*, 2006, 238, s. 920–928.
- 10 Ceppelliez, O. – Delhaye, M. – Deviere, J. – et al.: Chronic pancreatitis: evaluation of pancreatic exocrine function with MR pancreatography after secretin stimulation. *Radiology*, 2000, 215, s. 358–364.
- 11 Catalano, M. F. – Sahai, A. – Levy, M. – et al.: EUS-based criteria for the diagnosis of chronic pancreatitis: the Rosemont classification. *Gastrointest Endosc*, 2009, 69, s. 1251–1261.
- 12 Vlachou, P. A. – Khalili, K. – Jang, H. J. – et al.: IgG₄ related sclerosing disease: autoimmune pancreatitis and extrapancreatic manifestations. *Radiographics*, 2011, 31, s. 1379–1402.
- 13 Adsay, N. V. – Zamboni, G.: Paraduodenal pancreatitis: a clinico-pathologically distinct entity unifying „cystic dystrophy of heterotopic pancreas“, „paraduodenal wall cyst“ and „groove pancreatitis“. *Semin Diagn Pathol*, 2004, 21, s. 247–254.
- 14 Giovannini, M.: Endoscopic ultrasound elastography. *Pancreatol*, 2011, 11, dopl. 2, s. 34–39.
- 15 Iglesias-Garcia, J. – Larino-Noia, J. – Andulkader, I., et al.: Quantitative endoscopic ultrasound elastography: an accurate method for the differentiation of solid pancreatic masses. *Gastroenterology*, 2010, 139, s. 1172–1180.
- 16 Perez-Johnston, R. – Saunani, N. I. – Sahani, D. V.: Imaging of chronic pancreatitis (including groove and autoimmune pancreatitis). *Radiol Clin N Am*, 2012, 50, s. 447–466.
- 17 Lankisch, P. G. – Schmidt, I.: Fecal elastase 1 is not helpful in diagnosing chronic pancreatitis associated with mild to moderate exocrine pancreatic insufficiency. *Gut*, 1998, 42, s. 551–554.
- 18 Matos, C. – Metens, T.: Pancreatic duct: morphological and functional evaluation with dynamic MR pancreatography and secretin stimulation. *Radiology*, 1997, 203, s. 435–441.
- 19 Braden, B.: 13C breath tests for the assessment of exocrine pancreatic function. *Pancreas*, 2010, 39, s. 955–959.
- 20 Dominguez-Munoz, J. E. – Iglesias-Garcia, J.: 13C mixed triglyceride breath test to assess oral enzyme substitution therapy in patients with chronic pancreatitis. *Clin Gastroenterol Hepatol*, 2007, 5, s. 484–488.
- 21 Lankisch, P. G.: Pankreasfunktionstest – ist der beste gerade gut genug. *Dtsch Arztl*, 1999, 96, s. 344–346.
- 22 Kamisawa, T. – Okamoto, A.: Autoimmune pancreatitis: proposal of IgG₄-related sclerosing disease. *J Gastroenterol*, 2006, 41, s. 613–625.
- 23 Shimosegawa, T. – Chari, S. T., et al.: *International consensus diagnostic criteria for autoimmune pancreatitis: guidelines of the International Association of Pancreatology*. 2011, 40, s. 352–358.
- 24 John, J. A. – Friedman, K. J. – Noone, P. G., et al.: Relation mutations of the cystic fibrosis and idiopathic pancreatitis. *N Engl J Med*, 1998, 339, s. 653–658.
- 25 Witt, H. – Apte, M. – Keim, V., et al.: Chronic pancreatitis: challenges and advances in pathogenesis, genetics, diagnosis, and therapy. *Gastroenterology*, 2007, 132, s. 1557–1573.
- 26 Meier, R. – Ockenga, J. – Pertkiewicz, M., et al.: ESPEN Guidelines on Enteral Nutrition: Pancreas. *Clin Nutr*, 2006, 25, s. 275–284.
- 27 Calari, S. – Benini, L. – Sembenini, C., et al.: Medium-chain triglyceride absorption in patients with pancreatic insufficiency. *Scand J Gastroenterol*, 1996, 31, s. 90–94.
- 28 Layer, P. – Keller, J. – Lankisch, P. G.: Pancreatic enzyme replacement therapy. *Curr Gastroenterol Rep*, 2001, 3, s. 101–108.
- 29 Dominguez-Munoz, J. E.: Pancreatic enzyme therapy for pancreatic exocrine insufficiency. *Curr Gastroenterol Rep*, 2007, 9, s. 116–122.
- 30 Silken, E. C. M. – Cahen, D. L. – Kuipers, E. J. – Bruno, M.: Pancreatic

- enzyme replacement therapy in chronic pancreatitis. *Best Practice Pres Clin Gastroenterol*, 2010, 24, s. 337–347.
- 27 Ferrone, M. – Raimondo, M., et al.: Pancreatic enzyme pharmacotherapy. *Pharmacotherapy*, 2007, 27, s. 910–920.
- 28 Delhaye, M. – Arvanitakis, M. – Verset, G., et al.: Long-term clinical outcome after endoscopic pancreatic ductal drainage for patients with painful chronic pancreatitis. *Clin Gastroenterol Hepatol*, 2004, 2, s. 1096–1106.
- 29 Delhaye, M. – Arvanitakis, M. – Bali, M., et al.: Endoscopic therapy for chronic pancreatitis. *Scand J Surg*, 2005, 94, s. 143–153.
- 30 Tringali, A. – Boskoski, I. – Costamagna, G.: The role of endoscopy in the therapy of chronic pancreatitis. *Best Pract Res Clin Gastroenterol*, 2008, 22, s. 145–165.
- 31 Deviere, J. – Bell, R. H. Jr. – Beger, H. G. – Traverso, L. W.: Treatment of chronic pancreatitis with endotherapy or surgery: critical review of randomized control trials. *J Gastrointest Surg*, 2008, 12, s. 640–644.
- 32 Cahen, D. L. – Gouma, D. J. – Nio, Y., et al.: Endoscopic versus surgical drainage of the pancreatic duct in chronic pancreatitis. *N Engl J Med*, 2007, 356, s. 676–684.
- 33 Dite, P. – Ruzicka, M. – Zboril, V., et al.: A prospective, randomized trial comparing endoscopic and surgical therapy for chronic pancreatitis. *Endoscopy*, 2003, 35, s. 553–558.

Virová hepatitida

prof. MUDr. Petr Husa, CSc. Klinika infekčních chorob LF MU a FN, Brno

- 1 Němeček, V.: Sérologický přehled ČR v roce 2001. *Zprávy CEM*, 2003, 12 (Příloha 1), s. 55–61.
- 2 Bílková-Fránková, H. – Kloudová, A. – Zelená, H., et al.: Víceúčelový sérologický přehled (spalničky, příušnice, pertuse, virová hepatitida B) SP 2013. ČR: Závěrečná zpráva. *Zprávy CEM*, 2014, 23 (Příloha 1), s. 1–152.
- 3 European Association for the Study of the Liver. EASL Clinical Practice Guidelines: Management of chronic hepatitis B. *J Hepatol*, 2012, 57, s. 167–85.
- 4 Husa, P. – Šperl, J. – Urbánek, P. – Plíšek, S. – Kümpel, P. – Rožnovský, L.: Diagnostika a léčba chronické hepatitidy B. Doporučený postup ČHS a SIL ČLS JEP. Datum vydání doporučení: září 2014. *Gastroent Hepatol*, 2014, 68, s. 514–526.
- 5 EASL recommendations on treatment of hepatitis C 2014. Dostupné z: www.easl.eu.
- 6 EASL recommendations on treatment of hepatitis C 2015. Dostupné z: www.easl.eu.
- 7 AASLD recommendation for testing, managing, and treating hepatitis C. Dostupné z: www.hcvguidelines.org.
- 8 University of Liverpool: Drug interactions charts. Dostupné z: www.hep-druginteractions.com.

Příznaky střádavých onemocnění

MUDr. Lubor Golář II. interní klinika – kardiologie a angiologie VFN, Praha

- 1 Linhart, A. – Paleček, T. – Bultas, J., et al.: New insights in cardiac structural changes in patients with Fabry's disease. *American Heart Journal*, 2000, 139, 6, s. 1101–1108.
- 2 Shah, J. S. – Hughes, D. A. – Sachdev, B., et al.: Prevalence and clinical significance of cardiac arrhythmia in Anderson-Fabry disease. *Am J Cardiol*, 2005, 96, s. 842–846.
- 3 Rolfs, A. – Bottche, T. – Zschiesche, M., et al.: Prevalence of Fabry disease in patients with cryptogenic stroke: a prospective study. *Lancet*, 2005, 366, s. 17694–17696.
- 4 Orteu, C. H. – Jansen, T. – Lidove, O., et al.: Fabry disease and the skin: data from FOS, the Fabry outcome survey. *Br J Dermatol*, 2007, 157, s. 331–337.
- 5 Eng, C. M. – Guffon, N. – Wilcox, W. R., et al.: Safety and efficacy of recombinant human alpha-galactosidase A—replacement therapy in Fabry's disease. *N Engl J Med*, 2001, 345, s. 9–16.
- 6 Banikazemi, M. – Bultas, J. – Waldek, S., et al.: Agalsidase-beta therapy for advanced Fabry disease: a randomized trial. *Ann Intern Med*, 2007, 146, s. 77–86.
- 7 Schiffmann, R. – Kopp, J. B. – Austin, 3rd H. A., et al.: Enzyme replacement therapy in Fabry disease: a randomized controlled trial. *JAMA*, 2001, 285, s. 2743–2749.
- 8 Hoffmann, G.: *Stoffwechselerkrankungen in der Neurologie*. Georg Thieme Verlag, 2004.
- 9 Thomas, A. S. – Mehta, A. – Hughes, D. A.: Gaucher disease: haematological presentations and complications. *Br J Haematol*, 2014, 165, s. 427–440.
- 10 Weinreb, N. J. – Deegan, P. – Kacena, K. A., et al.: Life expectancy in Gaucher disease type 1. *Am J Hematol*, 2008, 83, s. 896–900.
- 11 Ausems, M. G. E. M. – Verbiest, J. – Hermans, M. M. P., et al.: Frequency of glycogen storage disease type II in The Netherlands: implications for diagnosis and genetic counseling. *Eur J Hum Genet*, 1999, 7, s. 713–716.
- 12 Menkes, J. H. – Sarnatt, H. B. – Maria, B. L.: *Child neurology. Metabolic diseases of the nervous system. Type II glycogenosis (Pompe disease)*. 2006, Lippincott Williams & Wilkins, s. 68–70.
- 13 Slouková, E. – Ošlejšková, H. – Vohánka, S. – Ješina, P.: Pompeho choroba. *Pediatric pro praxi*, 2009, 10, www.pediatricpropraxi.cz.
- 14 Raben, N. – Fukuda, T. – Gilbert, A. L., et al.: Replacing acid α -glucosidase in Pompe disease: Recombinant and transgenic enzymes are equipotent, but neither completely clears glycogen from type II muscle fibers. *Molecular Therapy*, 2005, 11, s. 48–56.

Dysfagie a výživa

MUDr. Zuzana Kala Grofová

Nutriční a dietologické oddělení NPK, a. s., Pardubická nemocnice, Pardubice

- 1 Logemann, J. A.: *Evaluation and Treatment of Swallowing Disorders*. PRO-ED, Austin, Texas, USA, 1998.
- 2 Grofová, Z.: *Nutriční podpora*. Grada Publishing, Praha, 2007.
- 3 *Doporučené postupy ESPEN pro enterální výživu*. Česká verze, 2007, dostupné z: <http://www.skvimp.cz/?action=changeCategory&value=24>, vyhledáno 14. 10. 2015.
- 4 Cowart, B. J.: Relationships between taste and smell across the adult life span. *Annals of New York Academy of Science*, 1989, 561, s. 31–55.