

References

1. Berezin AE, Panasenko TA, Koretskaya E.Yu. *Ukrainskyi kardiologichnyi zhurnal – Ukrainian Journal of Cardiology* 2010;4:98–102 (in Russ).
2. Gabbasov ZA, Agapov AA, Saburova OS, Rudenko BA, Balahonova TV, Ilina LN, Soboleva EL, Akchurin RS, Smirnov VN. *Kardiologicheskii vestnik – Cardiology vestnik* 2006;1:10–3 (in Russ).
3. Gagarina NV, Sinitsyn VE, Ternovoy SK. *Meditsinskaya vizualizatsiya – Medical imaging* 2000;3:23–8 (in Russ).
4. Zhdanov VS, Veselova SP, Drobkova IP, Cherpachenko NM, Shlyichkova TP. *Terapevticheskii arhiv – Therapeutic Archives* 2010;12(82):16–8 (in Russ).
5. Zemchenkov AYu, Gerasimchuk RP. *Nefrologiya i dializ – Nephrology and Dialysis* 2009;4:276–91 (in Russ).
6. Ivanova MV, Chernyavskiy AM, Ragino YuI, Volkov AM, Kashtanova EV, Polonskaya YaV. *Rossiyskiy kardiologicheskii zhurnal – Russian Journal of Cardiology* 2010;4:20–4 (in Russ).
7. Severgina LO. *Arhiv patologii – Archives of Pathology* 2005;3:51–4 (in Russ).
8. Talaeva TV, Bratus VV. *Zdorovie Ukrainy – Health of Ukraine* 2014;1(32):56–60 (in Russ).
9. Abedin M, Tintut Y, Demer L. Vascular calcification: mechanisms and clinical ramifications. *Arterioscler Thromb Vase Biol* 2004;24(7):1161–70.
10. Agatston AS, Janowitz WR, Hildner FJ, Zusmer NR, Viamonte MJr, Detrano R. Quantification of coronary artery calcium using ultrafast computed tomography. *J Am Coll Cardiol* 1990;15(4):827–32.
11. Ashikaga E, Honda H, Suzuki H, Hosaka N, Hirai Y, Sanada D, Nakamura M, Nagai H, Matsumoto K, Kato N, Mukai M, Watanabe M, Takahashi K, Shishido K, Akizawa T. Impact of Fibroblast Growth Factor 23 on Lipids and Atherosclerosis in Hemodialysis Patients. *Ther Apheresis and Dialysis* 2010;14(3):315–22.
12. Bartel AG, Chen JT, Peter RH, Behar VS, Kong Y, Lester RG. The significance of coronary calcification detected by fluoroscopy. A report of 360 patients. *Circulation* 1974;49(6):1247–53.
13. Blankenhorn DH. Coronary arterial calcification a review. *Am J Med Sci* 1961; 242(2):1–10.
14. Boström K, Watson KE, Horn S, Wortham C, Herman IM, Demer LL. Bone morphogenetic protein expression in human atherosclerotic lesions. *J Clin Invest* 1993;91(4):1800–9.
15. Budoff MJ, Raggi P. Coronary artery disease progression assessed by electron-beam computed tomography. *Am J Cardiol* 2001;88:46E–50E.
16. Callister TQ, Cooil B, Raya SP, Lippolis NJ, Russo DJ, Raggi P. Coronary artery disease: improved reproducibility of calcium scoring with an electron-beam CT volumetric method. *Radiology* 1998;208(3):807–14.

17. Davies MR, Lundt RJ, Hruska KA. BMP-7 Is an Efficacious Treatment of Vascular Calcification in a Murine Model of Atherosclerosis and Chronic Renal Failure. *J Am Soc Nephrol* 2003;14(6):1559–67.
18. Demer LL, Tintut Y. Vascular calcification. Pathobiology of a multifaceted disease. *Circulation* 2008;117:2938–48.
19. Doherty TM, Detrano RC, Mautner SL, Mautner GC, Shavelle RM. Coronary calcium: the good, the bad, and the uncertain. *Am Heart J* 1999;137(5):806–14.
20. Doherty TM, Asotra K, Fitzpatrick LA, Qiao JH, Wilkin DJ, Detrano RC, Dunstan CR, Shah PK, Rajavashisth TB. Calcification in atherosclerosis: Bone biology and chronic inflammation at the arterial crossroads. *PNAS* 2003;100(20):11201–6.
21. Dweck MR, Khaw HJ, Sng GK, Luo EL, Baird A, Williams MC, Makiello P, Mirsadraee S, Joshi NV, van Beek EJ, Boon NA, Rudd JH, Newby DE. Aortic stenosis, atherosclerosis and skeletal bone: is there a common link with calcification and inflammation? *Eur Heart J* 2013;34(21):1567–74.
22. Fitzpatrick LA, Severson A, Edwards WD, Ingram RT. Diffuse Calcification in Human Coronary Arteries. Association of Osteopontin with Atherosclerosis. *J Clin Invest* 1994;94:1597–604.
23. Goel R, Garg P, Achenbach S, Gupta A, Song JJ, Wong ND, Shaw LJ, Narula J. Coronary Artery Calcification and Coronary Atherosclerotic Disease. *Cardiol Clin* 2012;30:19–47.
24. Golledge J, McCann M, Mangan S, Lam A, Karan M. Osteoprotegerin and Osteopontin Are Expressed at High Concentrations Within Symptomatic Carotid Atherosclerosis. *Stroke* 2004;35(7):1636–41.
25. Janowitz WR, Agatston AS, King D. High-resolution ultrafast CT of the coronary arteries: new technique for visualizing coronary artery anatomy. *Radiology* 1988;169:345.
26. Ketteler M, Bongartz P, Westenfeld R, Wildberger JE, Mahnken AH, Böhm R, Metzger T, Wanner C, Jahnke-Dechent W, Floege J. Association of low fetuin-A (AHSG) concentrations in serum with cardiovascular mortality in patients on dialysis: a cross-sectional study. *Lancet* 2003;361:827–33.
27. Leary T. Atherosclerosis: special consideration of aortic lesions. *Arch Pathol* 1936;21:419–58.
28. Margolis JR, Chen JT, Kong Y, Peter RH, Behar VS, Kisslo JA. The diagnostic and prognostic significance of coronary artery calcification. A report of 800 cases. *Radiology* 1980;137(3):609–16.
29. Minoretti P, Falcone C, Calcagnino M, Emanuele E, Buzzi MP, Coen E, Geroldi D. Prognostic significance of plasma osteopontin levels in patients with chronic stable angina. *Eur Heart J* 2006;27:802–7.
30. Momiyama Y, Ohmori R, Fayad ZA, Kihara T, Tanaka N, Kato R, Taniguchi H, Nagata M, Nakamura H, Ohsuzu F. Associations between plasma osteopontin levels and the severities of coronary and aortic atherosclerosis. *Atherosclerosis* 2010;210(2):668–70.

31. Ohmori R, Momiyama Y, Taniguchi H, Takahashi R, Kusuhara M, Nakamura H, Ohsuzu F. Plasma osteopontin levels are associated with the presence and extent of coronary artery disease. *Atherosclerosis* 2003;170(2):333–7.
32. Otsuka F, Finn AV, Virmani R. Do vulnerable and ruptured plaques hide in heavily calcified arteries? *Atherosclerosis* 2013;229(1):34–7.
33. Schoenhagen P. Osteopontin, coronary calcification, and cardiovascular events: future diagnostic and therapeutic targets for disease prevention? *Eur Heart J* 2006;27:766–7.
34. Shao JS, Cai J, Towler DA. Molecular mechanisms of vascular calcification: lessons learned from the aorta. *Arterioscler Thromb Vase Biol* 2006;26 (7):1423–30.
35. Speer MY, Giachelli CM. Regulation of cardiovascular calcification. *Cardiovasc Pathol* 2004;13:63–70.
36. Sary HC. The sequence of cell and matrix changes in atherosclerotic lesions of coronary arteries in the first forty years of life. *Eur Heart J* 1990;11(E):3–19.
37. Thompson RC, Allam AH, Lombardi GP, Wann LS, Sutherland ML, Sutherland JD, Soliman M, Frohlich B, Mininberg DT, Monge JM, Vallodolid CM, Cox SL, el-Maksoud GA, Badr I, Miyamoto MI, el-Halim A, Narula J, Finch CE, Thomas GS. Atherosclerosis across 4000 years of human history: the Horus study of four ancient populations. *Lancet* 2013;381(9873):1211–22.
38. Uz O, Kardeşoğlu E, Yiğiner O, Baş S, Ipçioğlu OM, Ozmen N, Aparci M, Cingözbay BY, Işılak Z, Cebeci BS. The relationship between coronary calcification and the metabolic markers of osteopontin, fetuin-A, and visfatin. *Turk Kardiyol Dern Ars* 2009;37:397–402.
39. Wallin R, Wajih N, Greenwood GT, Sane DC. Arterial calcification: a review of mechanisms, animal models, and the prospects for therapy. *Med Res Rev* 2001;21:274–301.
40. Wexler L, Brundage B, Crouse J, Detrano R, Fuster V, Maddahi J, Rumberger J, Stanford W, White R, Taubert K. Coronary artery calcification: pathophysiology, epidemiology, imaging methods, and clinical implications. A statement for health professionals from the American Heart Association. *Writing Group. Circulation* 1996;94(5):1175–92.