Editorial



From Editor-in-Chief: Our commitments, current and forthcoming jubilee issues, few updates on evidence-based knowledge, pandemics

Dear readers,

We are committed to evaluate by means of independent peer-review your manuscripts and produce evidence-based science and medical knowledge, as well as bring to your attention comprehensive knowledge aimed at improving your clinical practice and provide continued medical education.

In the current March 2022 issue of the journal, we present editorials emphasizing the new guidelines and statement papers ` recommendations from professional societies on management of septic shock, hypertension in pregnancy and nutrition for cardiovascular health. We selected these topics of interest for all intensive surgery specialties, cardiology care and and cardiovascular surgery, internal medicine, family physicians and all. You can also read interesting research article form India on outcomes of endovascular treatment of aorto-iliac lesions; review on mini-invasive aortic valve surgery approaches guided by computed tomography; educational quiz on brain imaging and challenging clinical quiz on thoracic surgery, image with discussion on management of slow coronary flow after stenting for superacute myocardial infarction; articles on education activities - research school and contest on radiology.

This year our journal stepped in 5th year since its first issue publication in June 2017, therefore we will look at what have achieved so far and update goals to move

towards its acceptance in major database and wider recognition in June 2022 issue of the journal.

Recently the new a ACC/AHA/SCAI 2021 guideline on coronary artery revascularization was published (1). The main messages in this document are: surgery revascularization is indicated for significant left main disease to improve survival and percutaneous coronary intervention (PCI) is reasonable to improve survival compared with medical therapy in patients with low-tomedium anatomic complexity of left main disease suitable both for PCI and surgery; for patients with stable triple-vessel coronary artery disease (CAD) and normal ejection fraction, surgery may be reasonable to improve survival as PCI role is not clear, the decision should be made based on complexity of lesions, technical feasibility and by discussion of Heart team; radial artery is preferred as a surgical revascularization conduit over the saphenous vein graft to bypass the second most important target stenotic vessel after left anterior descending artery; radial artery access is recommended for PCI in acute coronary syndromes to reduce bleeding, vascular complications and mortality; staged PCI (in-hospital or after discharge) is recommended for percutaneous revascularization of significantly stenosed non-culprit vessel in ST-elevation myocardial infarction patient after primary PCI for culprit vessel to improve outcomes.

Address for Correspondence: Gulmira Kudaiberdieva, Heart, Vessels and Transplantation, Email: editor@hvt-journal.com Received: 09.03.2022 Accepted: 10.03.2022 Copyright ©2020 Heart, Vessels and Transplantation doi: 10.24969/hvt.2022.312 Role of PCI of non-culprit vessel at the time of primary intervention is not clear, it may be harmful for patients with cardiogenic shock and may be considered in stable patients with uncomplicated revascularization of culprit vessel, low complexity of non-culprit vessel and normal renal function; a short duration dual antiplatelet therapy is recommended in stable CAD patients after PCI – 1-3 months of DAPT, then aspirin can be stopped and continue monotherapy with P2Y12 to reduce bleeding risk; Society of Thoracic Surgeons score is recommended for calculation of surgical risk instead of SYNTAX score.

I recommend also the new AHA/ACC/ASE/CHEST/SAEMSCCT/SCMR 2021 guideline on evaluation and management of chest pain (2). Few of the list of take-home messages are: the recommendation on use of clinical decision pathways in emergence departments and out-of-hospital settings, high-sensitive troponins are preferred to assess myocardial injury; use of term noncardiac chest pain instead of atypical chest pain. Invited Editorial on the what is new in this guideline is being prepared.

Another interesting document from ESC working group on pulmonary circulation and right ventricular function on follow-up after pulmonary embolism deserves your attention (3).

Among recent studies, the meta-analysis on effect of new pharmacological treatment for heart failure with reduced ejection fraction (HFrEF) deserves attention: angiotensin-receptor-neprysilin inhibitor, beta-blockers, mineralcorticoid receptor antagonist and sodiumglucose co-transporter-2 inhibitor reduced all cause death by 61%, composite cardiovascular death and hospitalizations by 64%, provided a life gain of 5 years in >70 years old thus being a treatment that brings higher benefit for patients with HFrEF among other treatment combinations (4).

Another interesting trial demonstrated that patients with intermediate probability of CAD (10-60%) developed by 30% less major adverse cardiovascular events (MACE) (HR-0.70 95% CI 0.46-1.07) and by 74% less procedural complications when underwent computed tomography angiography as compared with coronary angiography. Computed tomography angiography has no difference in MACE as compared to coronary angiography and as it is accompanied by significantly less complications, it may be an initial strategy (5).

The noteworthy steps in pandemics treatment and prevention have been made for past few months; though vaccine equity issues and emergence of new variants continue to be challenges. In addition to vaccines, development of specific antiviral treatment becomes one the most significant steps forward. Two new antiviral medicines received EUA by FDA – paxlovid (Pfizer) and molnupiravir (Merck) (6, 7). Japan also developed the antiviral S-217622 (Shionogi) (8) and on the ay to approve it for clinical use. I hope that we will have more antiviral medicines against COVID at affordable prices in many countries this year.

Infectious disease society of America updated its guidelines on management of COVID (9).

Congratulating with International Women's Day, and applauding colleagues for dedication in providing care for patients and contributing in science and education, working on frontlines, breakthrough achievements in development of vaccines, I would like to draw attention to gender inequalities that deepened during pandemics and remind that more should be done to support women and girls. Recent study published in Lancet demonstrated that more women loss their jobs during pandemic, more women and girls left schools for reasons other than school closure, and violence against women increased (10).

Concluding, I would like to provide support during these harsh days of war to our Editors, reviewers, authors, and collaborators from Ukraine and all people, and wish imminent peace and no more lost lives.

> Gulmira Kudaiberdieva Editor-in-Chief Heart, Vessels and Transplantation

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References

1 Lawton JS, Tamis-Holland JE, Bangalore S, Bates ER, Beckie TM, Bischoff JM. Et al. ACC/AHA/SCAI 2021 guideline on coronary artery revascularization: a report of the American College of Cardiology/American Heart Association Joint Committee on Clinical Practice Guidelines. J Am Coll Cardiol 2021; doi: 10.1016/j.jacc.2021.09.006

2.Gulati M, Levy PD, Birtcher KK, Blankstein R, Boyd j, Bullock-Palmer RP, et al. 2021 AHA/ACC/ASE/CHEST/SAEMSCCT/SCMR guideline for the evaluation and diagnosis of chest pain: a report of the American College of Cardiology/American Heart Association Joint Committee on Clinical Practice Guidelines. J Am Coll Cardiol 2021; doi: 10.1016/j.jacc.2021.07.053

3. Klok FA, Ageno W, Ay C, Back M, Barco S, Bertoletti L, et al. Optimal follow-up after acute pulmonary embolism: a position paperof the Eurpoena Society fo CardiologyWorking Group on Pulmonary Circulation and Right Ventricular Function, in collaboration with the European Society of Cardiology Working Group on Aherosclerosis and Vascular Biology, endorsed by Eurpean respiratory Society. Eur Heart J 2021; doi: 10.1093/eurheart/ehab816

4Tromp J, Ouwerkek W, van VEldhuisen DJ, Hillege HL, Richards AM, van der Meer P, et al. A systematic review and network meta-analysis of pharmacological treatmne tof heart failure with reduced ejection fraction. J Am Coll Cardiol HF 2022; 10; 73-84.

5. The DISCHARGE trial group. CT or invasive coronary angiographyin stable chest pain. New Engl J Med 2022; doi: 10.1056/NEJMoa2200963

6. FDA News Release: Coronavirus (COVID-19) Update: FDA authorizes first oral antiviral for treatment of COVID-19. December 22, 2021. Available at: URL: https://www.fda.gov/news-events/press-

announcements/coronavirus-covid-19-update-fdaauthorizes-first-oral-antiviral-treatment-covid-10certain

7.FDA News Release: Coronavirus (COVID-19) Update: FDA authorizesadditional oral antiviral for treatment of COVID-19 in certain adults. December 23, 2021. Available at: URL: https://www.fda.gov/newsevents/press-announcements/coronavirus-covid-19update-fda-authorizes-additional-oral-antiviral-

treatment-covid-10-certain

8. Reuters. Japan to consider early approval for Shionogi COVID pill. Reuters February 7, 2022. Available at: URL: www.reuters.com

9.IDSA guidelines on the treatment and management of patienst with COVID-19. IDSA, last updated 09.03.2022. gui Available at: URL: www. idsociety.org/practice-guideline/covid-19-guideline-treatment-and-management

10. Flor LS, Friedman J, Spencer CN, Cagney J, Arrietta A, Herbert ME, et al. Quantifying the effects of the COVID-19 pandemic on gender equality, social and economic indicators: a comprehensive review of data from March, 2020, to September, 2021. Lancet 2022; doi: 10.106/S0140-6736(22)00008-3