









## Editorial

## Progress of IJCDW in 2021

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Despite the challenges posed by coronavirus disease 2019 (COVID-19) on all fields of life including healthcare and academics, Indian Journal of Cardiovascular Disease in Women(IJCDW) has successfully completed its 6th consecutive years with four complete issues. Each issue brings forth original articles centered on women cardiac health, interesting case reports, and review articles on latest topics of the time. The other interesting sections in the journal include intervention rounds, practice in medicine, short communications, and expert opinions where the appropriate topics have been described at their best.

Velam etal study on lifestyle patterns and well-being status among healthcare employees at their tertiary care hospital showed that the overall well-being was good, with males scoring over female employees. Female employees experienced risks with regard to their physical health. An interesting study by Fatima et al on circadian rhythm as risk factor for cardiovascular disease in shift-working nurses emphasized that work shift in which sleep is disturbed leads to mental stress and is a direct risk factor for cardiovascular disease.<sup>2</sup> Both theses original studies highlight the need to address life style modifications that include regular adequate sleep.

There were several original studies on heart failure patients. The get with the guidelines (GWTG) risk score based on seven parameters was developed to predict inhospital mortality in acute heart failure patients. Bodicherla etal study aimed to clarify its prognostic impact in south Indian patients admitted with acute heart failure, predicted adverse outcomes with higher GWTG score (average score of 39 predicting complications and hospitalization and 45 predicting death). Kishore et al study on prognosis after revascularization in patients with severe left ventricular (LV) dysfunction showed that severe LV dysfunction alone was the cause for mortality with no confounding factors.<sup>4</sup> Presence of minimal coronary artery disease (CAD) is an adverse prognostic marker for morbidity not mortality in dilated cardiomyopathy as shown by Kakroo and Kishore.<sup>5</sup>

There were new insights on CAD with gender differences. According to Swaminathan and Prasath angiographic severity measured by SYNTAX score 1 increased with duration and number of risk factors.<sup>6</sup> Irrespective of gender, recanalized and thrombotic coronaries are common in the young with premature CAD. In a single-center experience by Harini et al, women had higher bleeding incidence following percutaneous coronary intervention (PCI), though there was no difference in mortality.8 Women who underwent PCI tend to be older with higher rates of hypertension diabetes and obesity. E2/T ratio may be used as a predictor of CAD in postmenopausal women according to study by Khanna et al. According to the study by Madaka et al, high white blood cell to mean platelet volume ratio predicted worse outcome and short-term major adverse cardiac events in patients with acute coronary syndrome (ACS), with higher specificity and diagnostic accuracy in females.<sup>10</sup>

Interesting developments in the field of pulmonary hypertension were highlighted. COVID-19 predisposed to pulmonary thromboembolism, according to available literature and was confirmed by the study performed in Nizam's Institute of Medical Sciences, Hyderabad, by Srikanth et al. 11 Akula et al study suggests a high index of suspicion for pulmonary embolism in the emergency department in a female patient with unexplained dyspnea and tachycardia who has an abnormal tricuspid annular plane systolic excursion (<1.8) on bedside echo. <sup>12</sup>BaisyaandDevarasetti in their study showed that certain clusters of autoantibody predisposed to pulmonary arterial hypertension in systemic lupus erythematosus patients. <sup>13</sup>Reddy et al study lend support to use of balloon pulmonary angioplasty in patients with distal chronic thromboembolic pulmonary hypertension with results showing improved 6-minute walk distance.<sup>14</sup>

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Study by Satish etal shows that ambulatory blood pressure monitoring was useful in predicting adverse materno-fetal events in pregnancy. Nighttime diastolic blood pressure and daytime maximum systolic blood pressure were the best predictors of adverse events. <sup>15</sup> Most common antenatal complication was intrauterine growth restriction and most common postnatal complication was persistent of hypertension.

Brucella is a rare and challenging zoonotic disease. Brucella endocarditis especially congestive heart failure accounts for majority of the deaths due to the disease. Antibiotic coverage and surgical intervention remain the mainstay of treatment. Original case series (7 cases) of *Brucella endocarditis* with management strategy was presented by Vasant Kataria et al and a review article with suggested treatment algorithm was contributed by Raju et al. <sup>16</sup>

Interesting case reports of left main coronary artery dissection, left main spasm, malignant subtle electrocardiogram (ECG) to look out for, myocardial infarction with non-obstructive coronary artery, Takotsubo cardiomyopathy, and Ortner's syndrome are worth mentioning. 17–22 Bhambhaniand Joshi describes an interesting case of central vein stenosis in hemodialysis patient that yielded to percutaneous mitral valvuloplasty balloon. 23

Rheumatic fever is a common problem in India especially parenteral administration of benzathine penicillin. Lalchandani etal present a review articles on rheumatic fever prophylaxis and (ARMOR) azithromycin for prophylaxis.<sup>24</sup> The new cardiopulmonary resuscitation guidelines during the COVID-19 period were discussed in a review article by the critical care team headed by SharmaandNizami.<sup>25</sup> Profuse thanks to Satpathy et alfor her review and uptodate information regarding management of anemia in ACS.<sup>26</sup>

Antegrade wire escalation remains the predominant strategy for crossing short chronic total occlusions (CTOs) of lower complexity. But in cases of complex CTOs, an antegrade dissection and reentry strategy is a safe and effective alternative. The various tips and tricks of antegrade approach to CTO have been presented in detail by Raghu et al.<sup>27</sup> Retrograde approach for CTO percutaneous intervention is the ultimate technique for success in cases of high Japan-CTO score, ostial locations, long calcific lesions with calcium, and in retry cases retrograde PCI of CTO-step by step has been discussed by Rao. 28 Unique challenges encountered in PCI of SVG are discussed by Rao et al. Distal protection should be considered the standard of care especially in older vein grafts. Liberal use of intragraft vasodilators, avoiding postdilatation, and deployment of undersized but a longer stent length to reduce plaque extrusion through stent struts are preferred.<sup>29</sup>

Profuse thanks to our esteemed professors for explaining students queries in clinical cardiology. Parasternal heave (sustained lift >50% of systole) is a feature of right ventricle (RV) pressure overload, while RV lift (nonsustained) is seen in RV volume overload. The rare causes such as LA enlargement in severe mitral regurgitation, dilated LV in severe aortic regurgitation, aortic aneurysm, and dilated aorta in congenitally corrected transposition of the great arteries as

causes of the same have been explained by Patnaik and Vala and Raju.<sup>30,31</sup> Concept of hangout interval and its effect on seconds heart sound in both physiological and pathological states was explained in detail by Raju.<sup>31</sup>Balachanderexplained why pericardial knock doesnot change with respiration unlike LV s3.<sup>32</sup> During expiration, the filling pressure of the RA is still high; hence, the filling occurs in the same way to the RV, causing no change in the pericardial knock. S3 is the result of altered dynamics of LV relaxation during diastole, such that the ventricles vibrate on sudden cessation of early filling. This concept was explained in detail by Behera.<sup>33</sup> In answer to the effect of cycle length in atrial fibrillation on the S2 split, he has strongly opined that S2 split and intensity donot change when there is no change in hangout interval.

There are conflicting reports about obesity paradox following PCI. The risk of cardiac death following any intervention be it PCI or surgery could be reduced by the long-term follow-up and guideline-based management of patients, irrespective of the body mass index (Meenakshi and Rameshwar—short communications).<sup>34</sup>

Interesting recommendations and differential diagnosis have been highlighted when presented with dilemma in clinical practice. We are highlighting the few of cases discussed in Practice in Medicine and Expert's opinion here. Infiltrative cardiomyopathy is an important differential diagnosis when dilated cardiomyopathy is associated with atrioventricular blocks.35 In the setting of inferolateral STelevation myocardial infarction(STEMI), atrial tachycardia, arising from lower crista or coronary sinus, is rare and could mimic dextrocardia. 36 Takotsubo cardiomyopathy should be in the consideration when a young women presents with ECG suggestive of STEMI.<sup>37</sup> Fascicular tachycardia should be considered in the differential diagnosis of supraventricular tachycardia with aberrancy, which responds well to calcium channel blockers.<sup>38,39</sup> Multiple linear filling defects in the coronaries on angiogram are a feature of spontaneous recanalization, confirmed by optical coherence tomography.<sup>40</sup>

Heartful thanks to all the authors for their contribution. We look forward to many more articles on women cardiac health in the upcoming issues.

Conflict of Interest None declared.

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