

## Editorial

Vanakkam

I am very happy to be the section editor of this special edition of our journal released on the occasion of the sixth annual conference CHETMEDICON-2019 conducted by the General medicine department of Chettinad Hospital and Research Institute. The theme of this year's conference is Recent Advances in the Medical Intensive Care Units (MICU). In addition to the lecture series in the conference we have selected certain important review articles which may enrich and update our collective knowledge in the management of critically ill patients.

Though the concept of ICU was given shape in 1953, they were not given much importance initially. By late sixties and early seventies they gradually gained importance and now have become a significant and integral part of medical care. The evolution of ICUs in terms of facilities and equipment has positively influenced the mortality and morbidity rate. In the article 'Mortality in Critically Ill Patients' the authors have noted that apart from the ICU design and type of medical care, the individual patient factors are also important in predicting the mortality in ICUs. The article also elucidates the various mortality predictor scores and how the mortality rate has been improving with various guidelines.

In Medical intensive care unit (MICU) the acid base disorders are the most common metabolic challenges the physicians come across. Metabolic acidosis occurring in MICU are not a simple acid base disturbance but complicated, multifactorial and mixed acid base disorders that are most difficult to tackle. In their review article 'Metabolic Acidosis in ICU setting the authors has detailed the diagnosis and management of various types of acidosis. Authors have also stressed the fact that management of acid base disturbance is not just treating the acidosis or alkalosis but addressing their etiology.

Endocrinal disorders in MICU may be the cause or the effect of various metabolic disorders that a physician comes across in emergency setup. The most common condition all of us are aware is Non thyroidal illness syndrome (Sick Euthyroid syndrome). There are other acute syndromes such as acute adrenal insufficiency, pituitary apoplexy which may not be very obvious mimicking other systemic illness. Unless the treating physicians are alert, these conditions may lead on to serious consequences. In the article Endocrinopathies – 'A Trouble Maker in ICU' the authors have discussed the common endocrinopathies and their management.

Atrial fibrillation (AF) is the most common arrhythmia which a practicing physician comes across. One should not view it as only a primary cardiac rhythm disorder since it actually reflects internal milieu of the patient. Abnormalities in electrolytes, acid base, hypoxia, infection, dehydration, toxins, drugs and trauma are few in the list of factors that can precipitate or aggravate AF. The above mentioned lists are found in the critically ill patients and hence they are prone to AF and its complications. The authors of 'Atrial fibrillations in critically ill patients' discuss the causes and the treatment strategies of atrial fibrillation in MICU.

The critically ill patients are always at the risk of hematological abnormalities, the Commonest being coagulopathies due to thrombotic or bleeding disorders secondary to organ failures or drug induced hematological abnormalities, and sepsis with disseminated intravascular coagulation. In addition, most of these patients may have primary or secondary anemia. Unless it is promptly recognized and managed, it may lead to 100% mortality. Immediate and essential actions that play a critical role in saving the patients are - replacement of loss of RBC, thrombocytes, Fresh frozen plasma, or coagulation factors. The authors in their article highlight the indication and thresholds of various blood products in critically ill patients.

In addition to the review articles, this issue carries the abstracts of the free posters and papers presented in the CHETMEDICON 2019. Hope this issue will be useful to the physicians involved in handling the critically ill patients. I thank Editor Prof. N. Pandiyan and his team for giving me an opportunity to be the section editor of this issue.

யாதானும் நாடாமால் ஊராமால் என்னொருவன்  
சாந்துணையுங் கல்லாத வாறு - திருக்குறள் 397

(For the learned, every nation is their nation; and every place is their place; why then, does one shun learning till death.)

## NANDRI

Prof. Dr. D. Rajasekaran  
Head of the Department,  
General Medicine

