

## Editorial

The current issue of *Annals* comprises of one review article, two interesting case reports and three original articles. The opening article by Dikshit *et al* is on a very common yet incompletely understood entity – vasovagal syncope (VVS). This review article deals in depth with the pathophysiology, evaluation and management of VVS. Despite the extensive research, the exact mechanism leading to syncope is still unclear. However, among the various theories postulated, the authors are of the opinion that blunting of cardiovascular sensitivity to orthostatic stress, inability of peripheral circulation to respond to autonomic vasoconstrictors and excessive local production of nitric oxide seem to be the most plausible explanations at present. In addition to these factors, dehydration, psychological factors may contribute to syncope by altering the normal regulatory physiological response. The authors have emphasised the importance of meticulous history taking to ascertain the cause of syncope. Quiet standing and head-up tilt table (HUT) test were the most commonly used investigations. Management options were increased salt and fluid intake, and drugs like corticosteroids, Nitric Oxide synthase inhibitors.

The next article by Balyan *et al* gives a new insight on the development of end-stage renal disease (ESRD) in patients with type 2 diabetes mellitus. Urinary albumin to creatinine ratio (ACR) is an established marker for early detection of microalbuminuria. Increased oxidative stress has been postulated as one of the contributors in the pathogenesis of diabetic nephropathy and its progression to ESRD. However, literature regarding their association is limited. In order to understand an inter-relationship between oxidative markers and microalbuminuria the authors have compared the level of oxidative stress in patients of diabetes mellitus with and without microalbuminuria by using various oxidative markers. A positive correlation was found between microalbuminuria and malondialdehyde (MDA) levels, and significantly reduced superoxide dismutase (SOD) and glutathione levels were observed in subjects of microalbuminuria.

Parveen *et al* from Jamia Hamdard University, New Delhi, have analysed the effect of individual antiepileptic drugs (AEDs) – carbamazepine, sodium valproate and levetiracetam on modulation of *Wnt* inhibitors in Indian women with epilepsy. The authors inferred that AEDs deteriorate bone health through enhanced sclerostin levels. The deleterious effect may or may not be related to receptor activator of nuclear factor kappaB ligand (RANKL) subject to type of AED used.

The fourth article by Bhethanabhotla *et al* from AIIMS, New Delhi is an attempt to address the unmet need in the management of pediatric Hodgkin disease. As the response to salvage chemotherapy before stem cell transplant is an independent predictor of survival, this retrospective study was done in an attempt to identify predictors of poor response to salvage chemotherapy in relapsed/refractory cases. The authors conclude that Stage 4 and bulky disease at relapse are high risk factors to predict incomplete response in these patients.

To conclude, we are presenting two intriguing case reports. One of them is regarding an atypical MRI finding. The classical hot cross bun sign is a well-known entity seen in neurodegenerative conditions

like multiple system atrophy- cerebellar type, secondary Parkinson's disease, spino-cerebellar ataxia type 1 and 2, etc. Reverse hot cross bun sign has been described earlier in patients with Wilson disease and pontine infarct. Jain *et al* report an unusual case of a 78-year-old male presenting with insidious onset progressive speech difficulty, who was clinically diagnosed as primary progressive aphasia (PPA). The MRI brain showed an atypical finding of reverse “hot cross bun” sign in pons, which has not been reported earlier in patients with PPA.

The next case report by Madhusudhan *et al* from AIIMS, New Delhi, is about a 26-year-old male who was diagnosed as acute cholecystitis with cholelithiasis. MRI showed a rare congenital anomaly of duplication of gall bladder which were united at the neck region. In the era of laparoscopic cholecystectomy, pre-operative detection of biliary anomalies is important to prevent unintended injuries and its associated morbidities.

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