Coagulopathy in Acute Kidney Injury

Editorial

Acute kidney injury (AKI) is a severe case of kidney failure that is caused by the build-up of waste products in your blood making it impossible for your kidneys to maintain adequate fluid balance in your body. AKI is caused by reduced blood flow to the kidneys as it is evident that kidneys have the highest blood flow because they are the body's natural filtration system. This reduced blood flow could be caused by low blood volume after bleeding, excessive vomiting or diarrhoea, or severe dehydration ultimately blood coagulation disorders. Coagulopathy is a disorder in which the capacity of blood to clot is diminished. It may cause impulsive internal or external bleeding when left untreated.

Research demonstrated that patients with acute kidney injury can also suffer from coagulation system disorders due to uraemia or anticoagulation during renal replacement therapy. The results revealed that patients with AKI showed endothelial dysfunctions and elevated coagulation. Thromboelastography can effectively evaluate the integrated coagulation function in patients with AKI. The chances for developing kidney disease and kidney failure increase every time AKI occurs.

Satoh S et al. in their letter to the Editor demonstrated about the methods used to identify alloantibodies and how they have become increasingly more sensitive and specific over time evolving from complement-dependent cytotoxicity crossmatch (CDCXM), flow cytometry crossmatch (FCXM), and solid phase assays performed using Luminex platforms [1].

The state-of-the-art and first of its kind research by Alfaki et al. reported a case of a 62-year-old non-diabetic male with end-stage kidney disease secondary to hypertensive nephropathy who developed hyperglycemia after infected with COVID-19 disease and concluded that COVID-19 induced hyperglycemia in non-diabetic patient have developed in ESKD treated with hemodialysis modality [2].

Pourafshar et al. in their review article on Congestion provided an overview of emerging hypotheses regarding pathophysiological implications of fluid overload in heart failure. They also discussed about newer techniques and methods for objective evaluation of congestion as it is a dynamic state that is related to both cardiac failure and renal dysfunction capable of changing the effect of these two factors on outcomes [3].

Huang L in his Editorial on Management of Chronic Kidney Disorders focused on the management of kidney problems and emphasized about the achievement and the success of the journal in terms of quality and punctuality [4].

Abe et al. in their Letter to the Editor on Oral Alkalizing agents prevent renal damage in chronic kidney disease manifested the importance of taking oral alkalizing agents for the treatment of patients with early and moderate CKD stages [5].

References


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