Urine Diagnostics



Prevention and Management of COVID-19 associated Acute Kidney Injury by monitoring kidney function using Urine output

Acute Kidney Injury (AKI) is common among patients hospitalized with COVID-19 and is associated with high mortality [1]. The measurement of kidney function is necessary for precise clinical assessment of risk and stage of AKI. Urine output and serum creatinine values are the current gold standards for the evaluation of the kidney function. Previous studies have shown that almost all COVID-19 related AKI patients have urinary abnormalities such as proteinuria, hematuria, leukocyturia and albuminuria whereas routine blood biochemistry parameters such as eGFR, Scr, Serum Uric Acid and BUN do not correlate with COVID-19 related AKI [2, 3]

Taking into consideration, that COVID-19 related AKI is multifactorial and is not comparable to known AKI pathogenesis an adaption/recommendation of international guidelines in regards of diagnosis, prevention and management of COVID-19 related AKI is essential and is addressed by Acute Disease Quality Initiative (ADQI) Working group, which was published in October 2020 in Nature Review Nephrology.



Recommended stage-based management of COVID-19 AKI by ADQI - 2020

Fig. 1 | Stage-based management of COVID-19 AKI (modified from reference [1])





The Urinalysis is an essential diagnostic tool for the detection and the monitoring of COVID-19 related AKI. Thus, CombiScreen® 11SYS PLUS & CombiScreen® mALB/CREA urine test strips in combination with Urilyzer® instruments support the detection and monitoring of urinary abnormalities such as Proteinuria, Hematuria, Leukocyturia and Albuminuria in urine samples. Contact Sales.Team@Analyticon-Diagnostics.com to receive more information.

References:

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