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175 (21.3%) and 11(1.3%) were positive for IgM and IgG antibodies respectively.

Conclusions

Our study revealed the high prevalence of dengue cases, so the methods for early diagnosis, steps for awareness of prevention, better case management and faster public health response is must to reduce the disease burden.

doi: 10.1016/j.cca.2022.04.834

W097

Usefulness of urine biomarkers for the prediction of in-hospital mortality in the COVID-19 patients

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Background-aim

Risk factors associated with severity and mortality attributable to COVID-19 have been reported in different cohorts, highlighting the occurrence of acute kidney injury (AKI) in 25% of them. Among other, SARS-CoV-2 targets renal tubular cells and can cause acute renal damage. The aim of the present study was to evaluate the usefulness of urinary parameters in predicting mortality in hospitalized patients with COVID-19.

Methods

A retrospective observational study, in a tertiary care hospital, between March 1st and April 19th, 2020 was done. We recruited adult patients admitted consecutively and positive for SARS-CoV-2. Urinary and serum biomarkers were correlated with in-hospital mortality and evaluated using a logistic regression model and receiver-operating characteristics (ROC) curves.

Result

A total of 199 COVID-19 hospitalized patients were included. Twenty patients died during hospital admission, which represents 10.1% of the number of hospitalized patients. The ROC curve analyses performed on the different clinical variables and biomarkers revealed that the highest area under the curve (AUC) was reached by a model including age above 65 years, presence of blood in urine higher than 0.06 mg/dL of hemoglobin and lactate dehydrogenase levels in serum higher than 400 U/L, with an AUC of 0.923 (95% CI 0.866-0.979; $p < 0.001$). Median time from urinalysis result to death was 8.04 days (IQR: 19.02).

Conclusions

For hospitalized patients with COVID-19, renal involvement and early alterations of urinary and serum parameters on admission are useful as prognostic factors of in-hospital mortality.

doi: 10.1016/j.cca.2022.04.835

W098

Bacterial etiologies, their antimicrobial susceptibility pattern and associated factors among meningitis suspected patients at debre markos comprehensive specialized hospital, Northwest Ethiopia

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Background-aim

Bacterial meningitis a medical emergency that requires quick and aggressive therapy. It is still a public health threat with considerable mortality and morbidity worldwide, especially in low-income countries in particular to the meningitis belt of Africa where Ethiopia is not an exception. This study aimed to assess bacterial etiologies of meningitis, their antimicrobial susceptibility pattern, and associated factors among meningitis suspected patients at Debre Markos Comprehensive Specialized Hospital, Northwest Ethiopia.

Methods

A cross-sectional study was conducted among 152 meningitis suspected patients by using consecutive convenient sampling technique from 1 March to 30 May, 2021. Socio-demographic and clinical data were collected using structured questionnaires. Cerebrospinal fluid was collected aseptically and gram stain, culture and biochemical tests were performed to identify the bacterial etiologies. Antimicrobial susceptibility test was conducted using disc diffusion method on modified Mueller Hinton agar. Data were entered into database (EpiData version 3.1) and exported to SPSS version 23 software for analysis.

Result

A total of 152 bacterial meningitis suspects were enrolled in the study. Half (50%, 76/152) of the participants were males. Overall prevalence of BM was 17 (11.2%) (95% CI = 5.9-16.4) whereas Gram-positive bacteria were responsible for 5.92% (9/152). The most frequent bacterial isolates identified were *Staphylococcus aureus* and *Klebsiella pneumoniae* each accounting for 29.4% (5/17). All Gram-positive and negative isolates were susceptible to imipenem. About 41.2% (7/17) of bacteria isolates were multi-drug resistant where 6 out of 7 were Gram-negative bacteria. No socio-demographic characteristics were significantly associated with BM ($P \leq 0.05$). Stiff neck [AOR, 95% CI, 47.529 (3.2-10.92), $P = 0.023$] and tonsillectomy [AOR, 95% CI, 137.015 (6.25-12.34), $P = 0.02$] were significantly associated factors for bacterial meningitis.