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| **Arterial Blood Gas Analysis in Patients of Sepsis**  |
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| Abstract:  | Acid-base disturbance is very common in critically ill patients including patient of sepsis. Pathophysiological sequel and sequential organ failure assessment can be determined by Arterial Blood Gas (ABG) analysis; an only clinical applicable method of assessing patients acid base status. This cross-sectional observational study is of 36 adult patients (>18 years) of sepsis who were selected according to 2001 sepsis criteria of SCCM/ESICM/ACCP/ATS/SIS. ABG analysis was carried out on admission and also on follow up. Microbiological and other supportive investigations were done to find out the cause of sepsis. Apart from studying clinical characteristics of the patients and their outcome, ABG analysis was done in relation to blood pH, PCO2 level, HCO3 level, electrolytes, anionic gap and delta gap. Patients were classified into tropical and non-tropical sepsis as per our study definition. Acid base disturbance was found in all the patients of sepsis. Acidemia was the commonest finding. Of 36 patients, 35 had mixed acid-base disturbance and 1 had primary respiratory acidosis on admission. One of the most common core abnormalities was metabolic acidosis coupled with other acid-base disorders. Electrolyte disturbances were also commonly noted in sepsis patients. There were 10 patients of tropical sepsis of which 7 had malaria, 2 had dengue and 1 had enteric fever. Subtle differences were noted in profile and ABG abnormality in tropical versus non tropical sepsis.4 patients died and 5 patients either remained same or worsened which was reflected on clinical and ABG analysis.  |
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