A522 - Compliance with 3-6h sepsis resuscitation bundle of surviving sepsis campaign in an emergency department

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Introduction:
Surviving sepsis campaign recommends 3h and 6 h sepsis resuscitation bundle for sepsis. The study was done to assess the feasibility of the guideline and the compliance to sepsis-3 recommendations at an emergency department.

Methods:
Prospective interventional study was conducted during one year. Were involved in the study all sepsis cases with a qSOFA ≥ 2. Were assessed a composite of six components (Measurement of serum lactate, Obtaining blood culture before antibiotic Administration and Provision of broad-spectrum antibiotic before the end of H3 and Provision of fluid bolus in hypotension, Attainment of target central venous pressure assessed by cardiac ultrasonography, Target lactate to normal level before the end of H6). Time base line was the first medical contact at triage zone. Secondary outcomes of study were the mortality rate and length of stay at Intensive care unit (ICU).

Results:
Were involved in the study, 128 patients (mean age 54±17 years, sex ration 2,3). Pulmonary infections were the main cause of sepsis (37%) and urinary tracts infections (22%). At H3 components were achieved in 79% of cases [lactates (100%), blood culture (82%) and provision of antibiotics (79%)]. At H6 components were executed in 64% of cases (fluid provision achievement in 89%, ultrasonography Assessment in 64% and normal lactate target achieved in 71%). The reliability-adjusted rate for completion of the 3 hours and 6 hours Bundle was at 68%. Patients compliant to composite bundle got the mortality benefit (odds ratios = 0.31, 95% [confidence interval, 0.11-0.72]). The study, however, did not show any benefits of mean Intensive Care Unit (ICU) length of stay.

Conclusion:
Faisability of 3-6h Bundle ratio was at 68%. It has shown a significant improvement in adaptation and mortality benefit without reducing mean hospital/ICU length of stay. More adapted procedures are needed to improve results targeting full compliance of patients to the 3-6h Bundle sepsis management.

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