**Category 1: Sepsis: biomarkers**

**Category 2: Sepsis: basic mechanisms**

**A209 - Change of adams-13 during sepsis is associated with outcome**

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**Introduction:**
Reduced ADAMTS-13 and increased von Willebrand Factor (vWF)/ADAMTS-13 ratio have been observed in sepsis and are associated with the severity of the disease [1,2]. However, their change during the septic episode and in the event of a change in the clinical status of the septic patients has not been investigated. The aim of the study was to assess the variation of these hemostatic parameters in critically ill patients during the course of a septic episode.

**Methods:**
We monitored 34 septic patients admitted in the Intensive Care Unit (ICU). 23 improved (group A) while 11 deteriorated (group B). We assessed vWF, ADAMTS-13 and the vWF/ADAMTS-13 ratio on admission in ICU (time point 0) and at the time of a change in patients’ clinical condition (remission or deterioration, time point 1).

**Results:**
In group A, ADAMTS-13 and the vWF/ADAMTS-13 ratio did not significantly change (567.0±296.0 vs 670.7±534.5 ng/ml, p=0.238 and 0.709±0.588 vs 0.876±0.687, p=0.34 respectively) while vWF increased (326.2±122.7 vs 407.0±157.6 % of norm., p=0.028) at time point 1 compared to time point 0. In group B, ADAMTS-13 decreased (831.4±586.1 vs 482.0±277.8 ng/ml, p=0.026) while vWF and the vWF/ADAMTS-13 ratio increased (389.5±170.5 vs 525.3±141.0 % of norm., p=0.02 and 0.779±0.851 vs 1.490±1.060, p=0.002) at time point 1 compared to time point 0. There was a non-statistical greater increase (% change) of vWF (53±63 versus 35±63%, p=0.4) in group B patients compared to group A patients. ADAMTS-13 percentage difference (>or≤ 22%) was associated with sepsis outcome (χ² =8.7; HR:5.86; 95% CI:1.6-22.1; p=0.009).

**Conclusion:**
Hemostatic disorders, as assessed by vWF and ADAMTS-13 levels were detected in septic patients, while their changes differed according to the evolution of the septic episode. ADAMTS-13 changes may be associated with outcome.

**References:**