Abstract

Bachground: Multiple patient series published over the past 10 to 15 years have identified the development of thrombocytopenia in the intensive care unit as a predictor of poor outcome. Although the reason for this association between thrombocytopenia and mortality has not been defined, it has been hypothesized that the link is likely related to the development of micro vascular thrombosis and multiple organ failure (MODS).

Our Aim Is To Identify: Thrombocytopenia as a predictor of bad outcome if associated with multiorgan failure. Study design: This study included 50 patients and 20 control which were classified to:

- Retrospective Group: 20 ICU patients with thrombocytopenia developed during hospital admission.

- Prospective Group: 30 ICU patients admitted to the critical care department during the period from 1Jan 2010 – Jan 2011.

- Control Group: Included 20 ICU patients without thrombocytopenia but with MODS.

Patients might have thrombocytopenia on admission or developed thrombocytopenia later on during hospital stay.

Also patients who were thrombocytopenic since admission but their platelet count were improved during hospital stay. Were also included in our study and so patients were classified to 2 groups:

Group A: patients who were thrombocytopenic and remained thrombocytopenic or patients who developed thrombocytopenia in the follow up.

Group B: patient with thrombocytopenia an admission but improved during follow up.

RESULTS

1- There is significant in **A**ssociation between thrombocytopenia and survival in Retrospective group and prospective group(p value < 0.05 ,p value < 0.01 respictively)

2- There is highly significant p value < 0.01 in Relation of SOFA scores in prospective groups (difference between Group (a) and Group (b) in SOFA).

3- There is highly significant difference between group A and group B in prospective groups' in Duration of MV p- value <0.01.

4- Association between thrombocytopenia at admission and survival in study group: there was increase in mortality in patients who develop thrombocytopenia during hospital stay but thrombocytopenia at admission may be improved or worsened so thrombocytopenia at admission wasn't give a predictor of mortality in our small size study.

5- Patients who developed thrombocytopenia during ICU stay give high predictor of mortality, more stay in ICU, more duration of MV, high SOFA score and the reverse in patients who improved from thrombocytopenia.

Conclusion: Patients who developed thrombocytopenia during ICU stay, thrombocytopenia was a predictor of mortality, more stay in ICU, more duration of MV and high SOFA score.

Key Wards: Thrombocytopenia, Marker, MODS