Bleeding news

Effect of early administration of fibrinogen replacement therapy in traumatic haemorrhage: a systematic review and meta-analysis of randomised controlled trials with narrative synthesis of observational studies

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The authors present a systematic review of the literature aimed at assessing the efficacy of early administration of fibrinogen. The first piece of data that stands out is that, of the 1906 studies selected, only 12 are included, 5 of which are randomised clinical trials, 3 with fibrinogen concentrate and 2 with cryoprecipitate. Hence, the first conclusion is that further studies are required, particularly to validate the empirical administration versus the goal-directed one.

It must be noted that the authors mention a "bias" risk in 6 of the 7 observational studies considered, including very heterogeneous patients, as befits a real-life trauma patient. Similarly, clinical studies also present confusion factors, such as issues with blinding or patient randomisation. All in all, a study on patients with multiple traumas does not only involve patients with multiple factors and determinants, but also a "hard to control" clinical scenario.

With all the limitations emerging from the search result, the study does not find a better clinical result with the early administration of fibrinogen, as was not found either in the CRYOSTAT-2 study. This means that a decrease has not been found in terms of mortality, transfusion requirements, or incidence of vein thrombosis. Furthermore, this review does not find any differences between the administration of concentrate and cryoprecipitate, pending the results of the FIESTY II study.

All in all, the management of trauma-caused coagulopathy, which should be early and effective, does not have yet the scientific evidence we would like to see.