Utility of Routine Head Ultrasounds in Screening for Intracranial Hemorrhage in Infants on Extracorporeal Life Support

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Introduction

Infants on ECLS are at risk for intracranial hemorrhage (ICH) and routinely get frequent head ultrasounds to screen for ICH. Timing of ICH while on ECLS has not been studied in over two decades.

Hypothesis

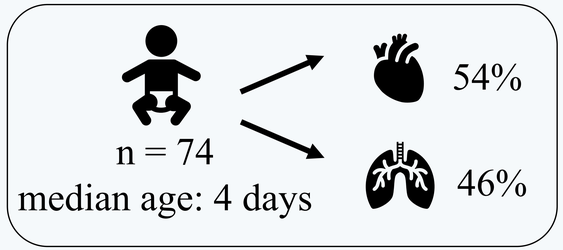
Most ICH will occur within 5 days of ECLS cannulation.

Methods

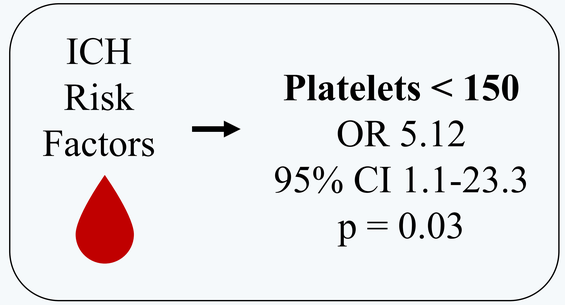
- Retrospective chart review
- Patients < 6 months old on ECLS (2011-2020)
- Timing of ICH and risk factors assessed

In a single center review of 74 infants on ECLS, all ICH occurred in the **first 4 days** of cannulation. Pre-ECLS **thrombocytopenia**, was associated with ICH.

Results



ICH occurred in **21.6%** of infants and all within the first **4 days** of ECLS



Discussion

Routine surveillance head imaging after four days of ECLS may not be warranted in all infants. Optimizing pre-ECLS coagulopathy may improve outcomes.

Although our sample size was small, our primary outcome (timing of ICH) is not available in larger databases.