

“Emergency Management of Severe Thrombocytopenia and Bleeding in Patients with ITP”

Siraj Mithoowani, MD, FRCP(C) and Donald Arnold, MD, MSc, FRCP(C)

McMaster University

Severe bleeding in ITP is rare; but when it occurs it is a medical emergency. Currently, there is no standard protocol for treating severe bleeding episodes in patients with ITP. This research study addresses an urgent unmet need by understanding current practice patterns with a view to establish and implement a standard treatment protocol for ITP patients who experience severe bleeding.

A detailed chart review was completed for ITP patients presenting to one of four Emergency Departments in Hamilton, Ontario, Canada with bleeding and a platelet count less than 20,000/ μ l during an 8 year period (2008-2016). Demographic data, outcomes, and all ITP treatments received in hospital were recorded and analyzed.

A total of 110 patients were included encompassing 139 hospital visits. Patients had a median age of 59 years and 57% were female. Most patients had primary ITP (69%) and had received a median of 3 (range 1-7) different ITP treatments in the past.

An analysis was completed on the 39 hospital visits where patients presented with the most severe bleeding (intracranial bleeding, severe gastrointestinal bleeding or pulmonary bleeding). Of these visits, 5 were for intracranial hemorrhage at presentation. Median platelet count at presentation was 3,000/ μ l (range 1,000-18,000/ μ l). Thirty-six visits (92%) resulted in hospital admission with a median length of stay of 6 days (range 2-69 days). The first ITP treatment was administered at a median of 8 hours after ED presentation (range 0-46 hours). There were a median of 3 (range 1-7) different ITP therapies prescribed, most commonly IVIG (90%), corticosteroids (77%) and platelet transfusions (69%). The specific combination of treatments prescribed, along with their timing and dose varied widely between patients. A Hematologist was consulted in 37 (95%) of visits. Most initial treatments were ordered by Internal Medicine physicians or Hematologists, not by Emergency Department physicians. There were 3 deaths (2 from bleeding) and 2 arterial thrombotic events recorded in-hospital.

We found that the sequence and timing of ITP therapies varied widely between patients, confirming that a standardized treatment protocol for managing severe bleeding is urgently needed.

PDSA has designed our research program specifically to prioritize patient priorities and know these two studies will make a significant impact on ITP diagnosis, therapies, and quality of life. If you'd like to make a donation to our research fund, please visit <https://www.pdsa.org/pdsa-donation.html>.



8751 BRECKSVILLE RD | SUITE 150 | CLEVELAND | OH | 44141
1-877-528-3538 | pdsa@pdsa.org | www.PDSA.org



Dr. Siraj Mithoowani presenting his PDSA funded research “Emergency Management of Severe Thrombocytopenia and Bleeding in Patients with ITP” at ITP Conference 2018