

Antiplatelet reversal

[Antiplatelet therapy](#) is common and complicates the operative [management](#) of acute [intracranial hemorrhage](#). Little data exist to guide [antiplatelet reversal](#) strategies.

The use of [antithrombotic](#) agents, including [anticoagulants](#), [antiplatelet](#) agents, and [thrombolytics](#) has increased and is expected to continue to rise. Although antithrombotic-associated [intracranial hemorrhage](#) can be devastating, rapid reversal of [coagulopathy](#) may help limit hematoma expansion and improve outcomes.

Data assessing the relationship between outcome and prehospital [antiplatelet](#) agents in the setting of [ICH](#) is conflicting in both the [trauma](#) and the [stroke literature](#). Only one retrospective review specifically addressed outcomes after attempted reversal with [platelet transfusion](#). Further study is needed to determine whether platelet transfusion ameliorates [hematoma](#) enlargement and/or improves outcome in the setting of acute ICH ¹⁾.

Raimondi et al., recommend discontinuation of the [antiplatelet](#), as well as administration of [platelet transfusions](#) and [desmopressin](#) only in the setting of life-threatening [bleeding](#) ²⁾.

An [online survey](#) detailing antiplatelet reversal strategies in patients presenting with acute operative intracranial hemorrhage ([subdural hematoma](#) (SDH), [epidural hematoma](#) (EDH), and [intracerebral hemorrhage](#) (ICH)) was distributed to board certified [neurosurgeons](#) in the [North America](#).

Of the 2,782 functional email addresses, there were 493 (17.7%) responses to question #1 and 429 (15.4%) completed surveys. Most respondents chose to perform no additional laboratory testing prior to surgical intervention, regardless of hemorrhage type. The most common antiplatelet reversal strategy in the presence of [aspirin](#) was [platelet transfusion](#) (SDH and ICH) or no intervention (EDH). The most common antiplatelet reversal strategy in the presence of an [Adenosine diphosphate receptor inhibitor](#) or [DAPT](#) was [platelet transfusion](#) or platelet transfusion with [DDAVP](#) administration. There was a statistically significant difference in management strategy depending on the antiplatelet therapy ($p < 0.001$).

When patients on antiplatelet medication present with operative intracranial hemorrhage, the majority of neurosurgeons do not perform qualitative [platelet function testing](#). Antiplatelet reversal strategies are significantly influenced by the antiplatelet therapy with more aggressive reversal strategies employed in the presence of [ADP antagonists](#) ³⁾.

References

¹⁾

Campbell PG, Sen A, Yadla S, Jabbour P, Jallo J. Emergency reversal of antiplatelet agents in patients presenting with an intracranial hemorrhage: a clinical review. *World Neurosurg*. 2010 Aug-Sep;74(2-3):279-85. doi: 10.1016/j.wneu.2010.05.030. Review. PubMed PMID: 21492561.

²⁾

Raimondi P, Hylek EM, Aronis KN. Reversal Agents for Oral Antiplatelet and Anticoagulant Treatment During Bleeding Events: Current Strategies. *Curr Pharm Des*. 2017;23(9):1406-1423. doi: 10.2174/1381612822666161205110843. Review. PubMed PMID: 27917717.

3)

Foreman PM, Ilyas A, Mooney J, Schmalz PGR, Walters BC, Griessenauer CJ. Antiplatelet Medication Reversal Strategies in Operative Intracranial Hemorrhage: A Survey of Practicing Neurosurgeons. World Neurosurg. 2018 May 18. pii: S1878-8750(18)31017-9. doi: 10.1016/j.wneu.2018.05.064. [Epub ahead of print] PubMed PMID: 29783009.

From:

<https://neurosurgerywiki.com/wiki/> - **Neurosurgery Wiki**

Permanent link:

https://neurosurgerywiki.com/wiki/doku.php?id=antiplatelet_reversalLast update: **2024/06/07 02:58**