

Intracranial hemorrhage: Reversal of anticoagulant, antiplatelet and thrombolytic agents

Non traumatic / spontaneous intracranial hemorrhages and intraventricular hemorrhages
Subdural hemorrhages without underlying significant parenchymal traumatic brain injury

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| <p>Warfarin INR known 1.4- 5 Vit K 10 mg IV plus FEIBA 500 units IV once INR >5 Vit K 10 mg IV plus FEIBA 1000 units IV once INR unknown Draw PT/INR Vit K 10 mg IV plus FEIBA 500 units IV once Pre FEIBA INR >1.4 -5no additional FEIBA necessary Pre FEIBA INR >5 additional FEIBA 500 units IV once Repeat INR 15-60 min after infusion complete - if INR >1.4- repeat Vit K 10 mg IV once . Consider additional FEIBA 500 units IV once Repeat INR every 6 hours until 2 consecutive values show <1.4</p> | <p>Rivaroxaban / Apixaban / Edoxaban consider activated charcoal if dose within 2 hours Kcentra 50 units /kg once If time since last dose is > 5 elimination half-lives may not reverse, 3-5 half lives reverse with 25 units/kg</p> <p>Dabigatran Praxbind 5 mg IV once. Check Thrombin time</p> |
| <p>Heparin IV IV protamine 1 mg for 100 units of heparin the patient received during previous 3 hours Reduce dose by half if 30-60 minutes have elapsed since heparin given. Max protamine dose 50 mg</p> <p>Fondaparinaux FEIBA 20 units /kg</p> <p>Argatroban Stop infusion. Supportive care. Dialyze of liver failure</p> <p>Bivalirudin Renal consult for dialysis for critical bleeding.</p> | <p>Enoxaparin Anti-Factor Xa levels Administer Protamine slowly 50 mg over 10 min</p> <p><8 hours since last dose with normal renal function- IV protamine 1 mg for every 1 mg of enoxaparin administered.</p> <p>8-24 hours since last dose with normal renal function IV protamine 0.5 mg for every 1 mg of enoxaparin administered</p> <p>8-24 hours since last dose with IMPAIRED renal function IV protamine 1 mg for every 1 mg of enoxaparin administered.</p> <p>>24 hours since last dose with IMPAIRED renal function IV protamine 0.5 mg for every 1 mg of enoxaparin administered</p> |
| <p>Platelet units 1 unit if Aspirin /dipyridamole/cilostazol. 2 units if clopidogrel/Prasugrel/ticlopidine /ticagrelor or dual agents More than 2 units may be needed if ticagrelor</p> | <p>Non surgical bleeds on single antiplatelet agents No action OR ddAVP 0.4 mcg/kg once only.</p> <p>Non surgical bleeds on dual antiplatelet agents No action or ddAVP 0.4 mcg/kg ± plus platelet transfusion 1 unit</p> <p>Surgical bleeds /EVD planned ddAVP 0.4 mcg/kg once only PLUS platelet transfusion.</p> |
| <p>tPA REVERSAL If CT scan shows significant, hemorrhage causing symptomatic decline Cryoprecipitate 0.15 units/kg (or 10 units) , IF fibrinogen < 150 mg/dL. Repeat fibrinogen level 30 minutes after infusion. Repeat cryo Amicar 4-5 gram over 20 minutes</p> | |

Disclaimer: Please refer to latest published literature and guidelines when making decisions for reversal.
This document does NOT replace clinical judgment by a expert clinician.