# Prescribing Protocol
# Intravenous Aspirin

| | |
|---|---|
| **Title** | IV Aspirin in Neurointerventional Procedures and Intensive Care Areas |
| **Areas where Protocol/Guideline applicable e.g. District, Hospital, ITU, Ward** | Radiology, ICU and HDU areas |
| **Areas where Protocol/Guideline not applicable** | Outside of the above settings, paediatrics |
| **Authorised Prescribers** | Neurointerventionalists<br>ICU Consultants<br>Other prescribers under the supervision of an ICU Consultant or Neurointerventionalist |
| **Indication for use** | Anti-platelet therapy |
| **Clinical condition** | 1. Intra-operative treatment of platelet aggregation/ intravascular thrombus<br>2. Patients requiring ultra-rapid platelet blockade e.g. hyperacute carotid stenting<br>3. Urgent requirement for aspirin for anti-platelet therapy in patients without nasogastric access who are not suitable for oral administration, including patients who cannot swallow safely. Includes patients with acute ischaemic stroke, arterial dissection, acute MI, and endovascular stent placement with bare metal or drug eluting stents. |
| **Place in Therapy** | First-line |
| **If part of combination therapy list other drugs** | Commonly used with other antiplatelet agents such as ticagrelor or clopidogrel depending on clinical condition<br>Intraprocedurally other agents such as heparin, tirofiban and abciximab may be used. |
| **Contra-indications** | Allergy to aspirin or excipients (aminoacetic acid) or NSAIDs<br>Aspirin-sensitive asthma |
| **Precautions** | Risk of bleeding<br>Contraindicated in severe active bleeding or disease states with an increased risk of severe bleeding, eg bleeding disorders, erosive gastritis or peptic ulcer disease, severe hepatic disease.<br>Other drugs that can affect the clotting process may increase the risk of bleeding; avoid combinations or monitor closely.<br>Spinal injection or puncture<br>Seek specialist advice before considering intrathecal or epidural analgesia or anaesthesia, or lumbar puncture (risk of epidural haematoma, which may cause paralysis).<br>Renal - Use with caution in severe impairment because of increased risk of bleeding and of further deterioration of renal function.<br>Elderly - People >75 years taking aspirin have an increased risk of major bleeding (especially upper GI) which can be |

| | |
|---|---|
| | fatal; consider prophylaxis with a PPI (see Prevention in NSAID-induced ulcers). |
| **Dosage** | Intraprocedurally: 250-500mg IV stat<br>Maintenance: 100mg IV daily or as directed by interventional neuroradiology team |
| **Duration of therapy** | Until oral or nasogastric aspirin can be safely initiated |
| **Important Drug Interactions** | NSAIDs - Increased risk of gastric ulceration.<br>NSAIDS - non-selective NSAIDs may reduce the antiplatelet activity of low-dose aspirin and may reduce or negate its cardioprotective effect.<br>Anticoagulants - Combination increases risk of bleeding |
| **Administration Instructions** | Reconstitute ONE 500mg vial with supplied 5mL diluent (=100mg/mL). Then dilute the required volume of the resulting solution in 100mL sodium chloride 0.9% and give by IV infusion over 60 minutes.<br>The reconstituted solution is for single use only and unused solution must be discarded. Supplied diluent contains water for injection and aminoacetic acid. If supplied diluent unavailable, can use 5mL water for injection for reconstitution.<br>Compatible solutions: Sodium chloride 0.9%, Glucose 5%, Glucose 10%, Hartmann's. |
| **Monitoring requirements** | Usual ICU/procedural observations (as appropriate), including neuro-observations<br>Signs of bleeding<br>Hypersensitivity reactions |
| **Management of complications** | Management of anaphylaxis |
| **Basis of Protocol/Guideline** (including sources of evidence, references) | Aspergic Product Information<br>IV Aspirin Product Information<br>Australian Medicines Handbook, Last modified by AMH: July 2020<br>International Stroke Trial Collaborative Group, The International Stroke Trial (IST): a randomised trial of aspirin, subcutaneous heparin, both, or neither among 19 435 patients with acute ischaemic stroke, The Lancet, 1997, Vol 349.<br>Society of Hospital Pharmacists of Australia, Australian Injectable Drugs Handbook, 8th Edition, 2020<br>Schoergenhofer C, Hobl EL et. al. Acetylsalicylic acid in critically ill patients: a cross-sectional and a randomized trial, Eur J Clin Invest 2017; 47 (7): 504–512 |
| **Groups consulted in development of this protocol** | ICU Department, POWH<br>Pharmacy Department, POWH<br>Neurosurgery Department, POWH |

| AUTHORISATION | |
|---|---|
| Author (Name) | Dr Sumesh Arora |
| Position | Staff Specialist, Intensive Care Medicine |
| Department | POWH ICU |
| Department Contact (for ongoing maintenance of Protocol/Guideline) | Sumesh.arora@health.nsw.gov.au |
| **GOVERNANCE** | |
| Enactment date | February 2021 |
| Expiry date: (maximum 36 months from date of original approval) | 29 February 2024 |
| Ratification date by SESLHD QUM Committee | 4 February 2021 |
| Chairperson, QUM Committee | Dr John Shephard |
| Version Number | 1.0 |