

CLINICAL GUIDELINES ID TAG

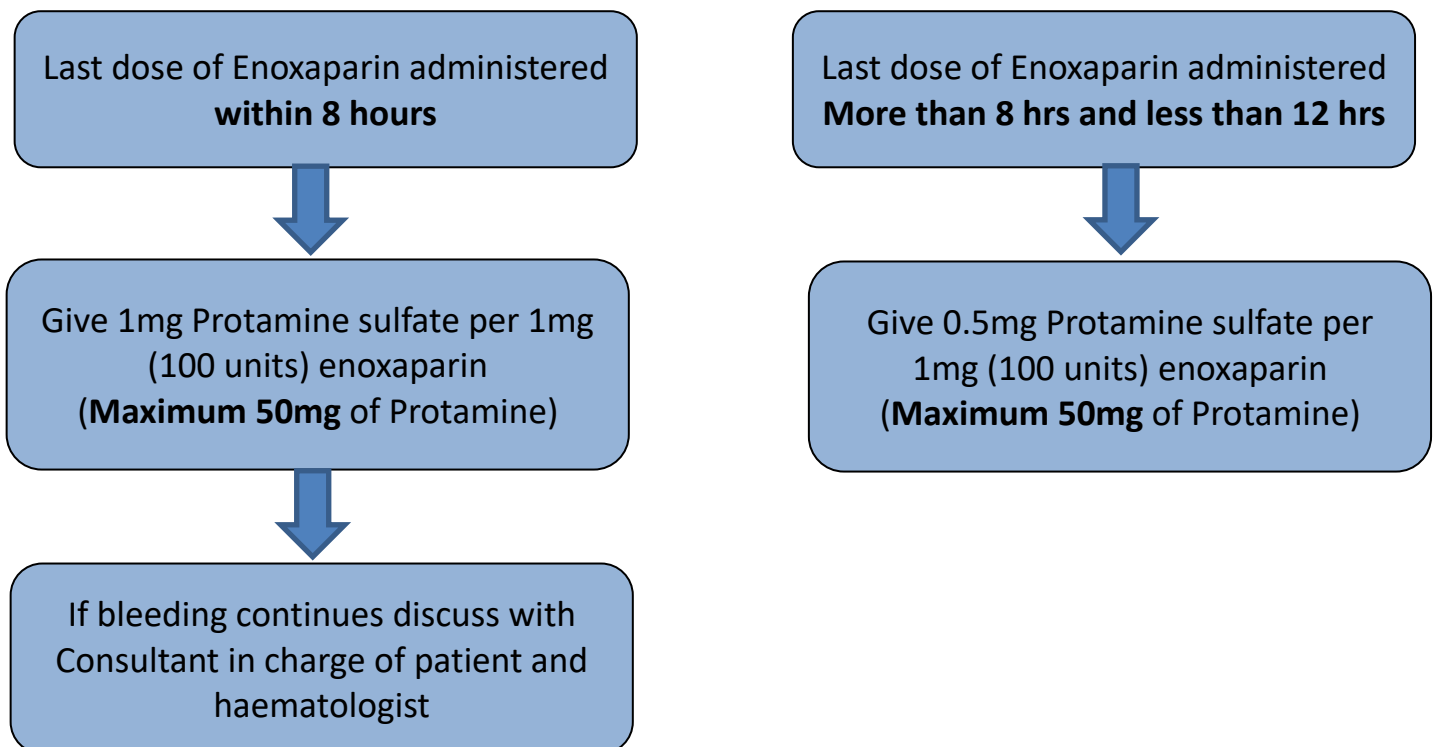
<u>Title:</u>	Anticoagulation: Emergency Management- Guideline on the use of Protamine to reverse Enoxaparin
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Guideline on the use of Protamine to reverse a therapeutic dose of Enoxaparin

Protamine has weak anticoagulating properties and if given in the absence of heparin, or at doses in excess of those required to neutralise the anticoagulant effect of heparin, exerts its own anticoagulant effect which can exacerbate bleeding. **Use with caution and after consultation with Haematologist.**

When to use: Protamine sulphate is not fully effective in reversal of Enoxaparin and **should only be used in severe bleeding**- within 12 hours of patient receiving a therapeutic dose of Enoxaparin.

- Administer by slow IV injection over approx. 10 minutes. Rapid infusion can cause hypotension and anaphylactoid reaction. **No more than 50mg of protamine sulphate should be given in any one dose.**
- After 12 hours of the enoxaparin sodium injection, protamine administration may not be required. However, even with high doses of protamine, the anti-Xa activity of enoxaparin sodium is never completely neutralised (maximum about 60%).
- Caution should be observed when administering protamine sulfate to patients who may be at increased risk of allergic reaction to protamine (includes previous treatment with protamine or protamine insulin, **allergy to fish, men who have had a vasectomy or are infertile** and may have antibodies to protamine).



References:

BJH Guideline on the management of bleeding in patients on antithrombotic agents, 2012
 SPC Clexane pre-filled syringes, last updated 28/04/17, accessed 24/01/18