

Endoscopic management of gastric varices – Full clinical guideline

Reference no.: CG-T/2023/198

Glubran®2

Glubran is a comonomer – it contains N Butyl2 cyanoacrylate and a second patented MS monomer. It causes less thermal injury than Histoacryl but the polymerisation time is slower (60-90 secs when in contact with blood).

Equipment (enough for 2 x Glubran injection)

Water for injection (DO NOT USE SALINE)

Endoscopic injection needle – 25G

7 x 2.5ml luer lock syringes

Wire cutter

Preparation

Draw 0.5mls Glubran in a 2.5ml luer lock syringe x 2 (note if necessary the Glubran can be left drawn up in the syringe for up to 2hrs before polymerising)

Draw 2mls water for injection in 2.5ml luer lock syringe x 5

Prime the injection needle with one of the water for injection syringes (2ml)

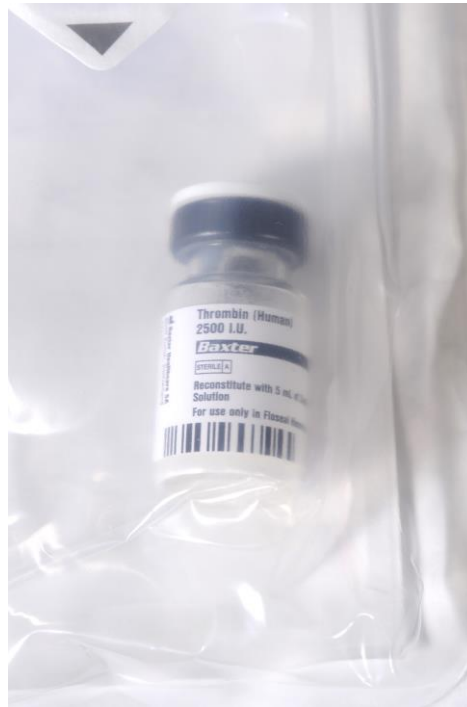
Method

1. Using injecting needle pre-filled with water for injection, puncture the varix
2. Change the syringe and connect the Glubran syringe and inject 0.5ml into the needle
3. Connect a syringe with water for injection and inject 2ml
4. Withdraw the needle from the varix
5. Flush the injection needle with 2ml water for injection
6. Do not use suction for 2 minutes

Repeat the above sequence until the Glubran has the desired effect. Up to 3ml of Glubran can be injected per varix if necessary. Glubran can be used in oesophageal varices – but it is recommended that a maximum of 1ml and only 0.5ml per injection is used.

7. When you have finished, bring the injection needle back into the plastic sheath, but do not pull the injection needle catheter out through the channel as glue may damage the scope. Withdraw the endoscope and then cut the needle catheter above the biopsy channel bung and pull the needle catheter out from the tip of the scope.

THROMBIN



You will need:

Floseal (Baxter) – the box contains thrombin and a syringe containing a gelatin matrix. **We only use the thrombin component (glass vial with white top)**. It is stored in the on-call trolley, which is kept in the clean utility in endoscopy during the day and in main theatres overnight.

- Sodium chloride 0.9% for injection – 10mls
- Standard 22G injection needle

What you do:

- Open the Floseal box and remove the packet containing the vial containing thrombin 2500 IU. Discard the other components within the box.
- Inject 5mls of 0.9% saline for injection into the vial and gently swirl the vial (**DO NOT SHAKE**) until completely dissolved. Ideally use promptly, but if necessary it can be stored at room temperature for up to 4hrs.
- Draw up the solution into a 10ml syringe containing 5mls of 0.9% saline in order that you have 10mls of thrombin solution at a concentration of 250IU/ml.
- Puncture varix using a standard 22G injection needle and rapidly inject up to 2-3ml of the thrombin solution
- Continue to apply some pressure to the varix after injection of thrombin for approx 60 secs (it does not work immediately)
- You may use up to 9ml of the thrombin solution in up to 3 injections. Do not use the last 1ml as this then requires a flush with fluid, which dilutes the effect.
- Ensure endoscopy unit know to re-order Floseal from Pharmacy

Documentation Controls (these go at the end of the document but before any appendices)

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Version / Amendment History	Version	Date	Author	Reason
	4	2022	Liver Management Group	Previous version of guideline expired
Intended Recipients: All clinicians managing patients with liver disease				
Training and Dissemination: Forms part of liver handbook which is disseminated to all clinicians rotating through Hepatology				
Development of Guideline: Job Title: Dr A Austin and Dr A Lawson (Consultant Hepatologist)				
Consultation with: Liver management group				
Linked Documents: State the name(s) of any other relevant documents				
Keywords: Gastric varices, glue injection, thrombin				
Business Unit Sign Off			Group: Liver management group and cross site teams Date: 2022	
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Contact for Review			Dr A Lawson	