

Reloading of the Variceal Multiple-Band Ligator Using Haemorrhoidal Banding Apparatus

Madam, Variceal ligation is the endoscopic procedure of choice to prevent recurrent variceal haemorrhage and eradicate varices^{1,2}. Usually it takes 3-4 sessions for the purpose. Multiple band ligators are now available for rapid ligation^{3,4}. These ligators do not require overtube or reloading of bands during the procedure and many bands may be deployed by just rotation of the pulley or handle attached to the endoscope's accessory channel. These devices are intended for single use only and are too expensive and out of reach of cirrhotic patients coming from low socioeconomic classes. We have been reusing the multiple band ligator after reloading the barrel. We use the banding apparatus of haemorrhoids and haemorrhoidal bands for this process.

Procedure: Disinfect the apparatus in glutaraldehyde solution. The plaited string or trigger cord of the multiple band ligator becomes separated into two threads near the barrel. Each thread has six beads at regular intervals starting from the tip of the thread. Pass these threads through the barrel of the multiple bands ligator from its scope-end side and deliver them from the transparent rim side. Now load the banding apparatus of haemorrhoids. Fit the metal cone at the end of the cylinder of the haemorrhoidal banding apparatus and roll the rubber band (ring) from the cone to the cylinder (Figure 1).

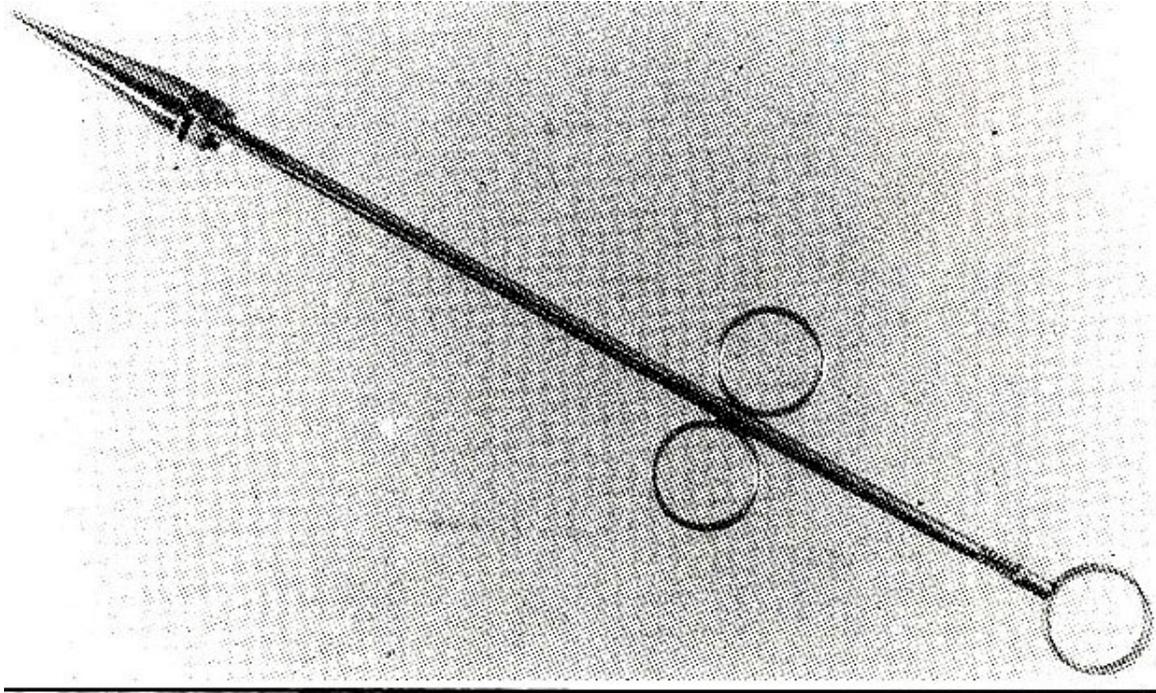


Figure 1. Loading of haemorrhoidal banding apparatus

Remove the cone after charging the cylinder. Now bring the first (tip) bead of each thread at the base of the transparent cap of the barrel and hold these in position. Slide the transparent rim of the barrel into the cylinder of the haemorrhoidal apparatus and close handles of this apparatus to push off the band from cylinder on to the barrel. Position the band to the base of the barrel's transparent portion above first pair of beads. Now bring the next pair of the beads above the first band, wrap the portion of thread between first and second bead on the barrel by repositioning second beads to 180 degree. When two beads are in position above the first band, apply the

second band. In this way all the bands are mounted on the barrel which is now ready for reuse (Figure 2 and 3).

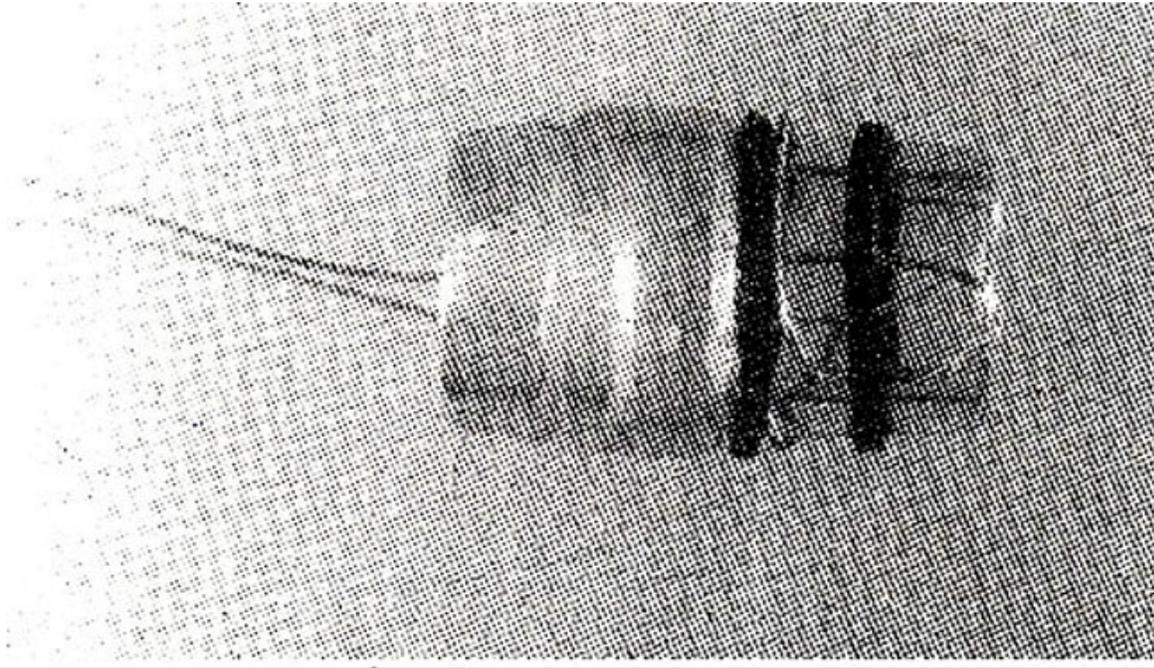


Figure 2. Position of beads and bands on the barrel

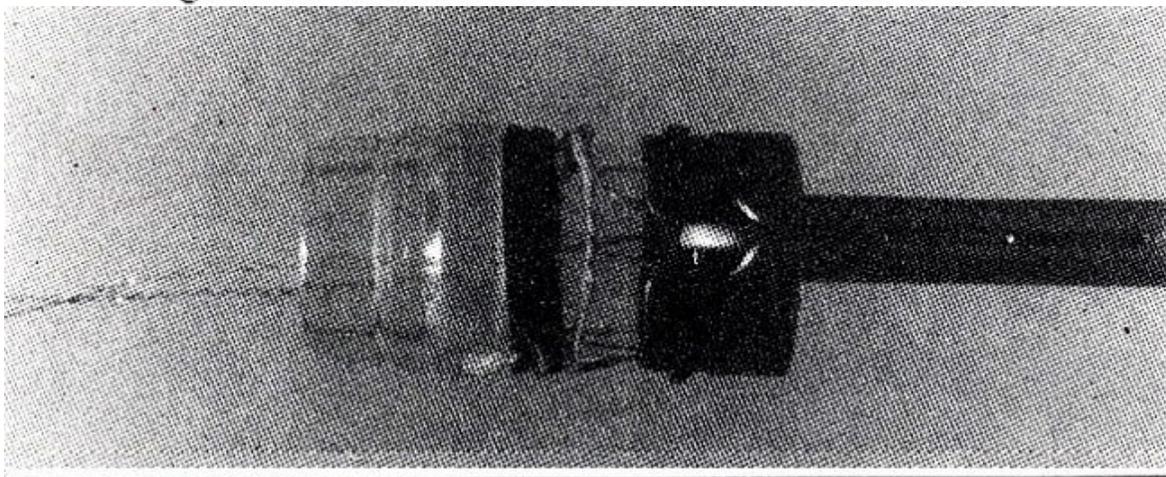


Figure 3. Transfer of bands from haemorrhoidal apparatus on to the barrel.

We recommend that the reloaded barrel should be used only for eradication of varices of the same patient to prevent any risk of infection transmission inspite of disinfection. Reloading reduces the cost of equipment of successive sessions, from eight thousand rupees to just one hundred rupees which is the cost of haemorrhoidal bands.

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References

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