

Esophageal Variceal Banding , The Local Experience

Pages with reference to book, From 245 To 246

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Abstract

Banding of esophageal varices was done in 29 patients suffering from acute variceal bleeding. In 13 patients this was the first bleed while in 16 it was recurrent. Five patients had large grade III (polypoid) varices while others had grade II varices. Banding was done using multi band ligator and 4-6 bands were fired per session. Repeat endoscopy at 3 weeks revealed persistence of varices requiring second session of banding in 11 cases and small varices (difficult to band) in 9 cases. Two patients expired due to persistent bleeding and 2 bled from esophageal ulcers. Both patients settled with conservative treatment. A third session of banding was required in 5 cases only. None of the cases developed any major complication. In our setting where expertise for sclerotherapy is scarce and cost of sclerosants is high; banding appears to be a cost effective modality for the management of variceal bleeding with a low complication rate (JPMA 48:245,1998).

Introduction

Variceal bleeding has a high morbidity and mortality¹. For almost a decade sclerotherapy was the only option available for the control of acute bleeding² and prevention of a rebleed, but the procedure had major complications³. Introduction of banding by Steigmann⁴ led to a revolution in the management of variceal bleeding. Various workers have reported banding to be an easy and complication free procedure when compared with sclerotherapy⁵. We report our experience of banding using a locally produced multiband device (Ali's seven shooter) and by recharging bands on a previously used device.

Patients and Methods

All patients referred to our department with acute haematemesis or those who had similar history within the past week were endoscoped to determine their cause of bleeding. Only patients with oesophageal varices who were actively bleeding at the time of endoscopy or those with red colour sign over the varices or those showing blood in the stomach were included in the study. Esophageal varices were graded⁶ and associated gastric varices or portal hypertensive gastropathy (PHO) or peptic ulcer were noted. After complete endoscopy, endoscope was withdrawn and banding device was loaded following the technique described in the leaflet. No over tube was used. Banding was done about 2 cms above the cardiooesophageal junction. Saeed's six shooter was used in initial few cases, then this was replaced by a similar device Ali's seven shooter (AA7) produced locally. Ali's seven shooter has color coding on the wheel with each color identifying a band, there are total seven bands loaded on it and all plastic material is used in the wheel. Finally, to further reduce the cost, rubber bands were recharged at our centre, on an already used device. Endoscopy was repeated at 2-3 weeks interval and during these visits a history of 0.1. bleeding, dysphagia or chest complications were inquired and entered in the proforma. During endoscopy grade of oesophageal varices and any ulceration at the previous banding site were noted. Banding was not done if there were ulcers at the previous site or the variceal size was too small for banding. Banding was continued till varices reduced to a size which was difficult to band. Post banding suspension sucralfate was given 3-4 times/day for 7-10 days to prevent any bleed.

Results

Banding of oesophageal varices was done in 29 cases (18 males, 11 females) whose ages ranged from 14-70 years;(mean 46 years). Twenty five patients had portal hypertension secondary to cirrhosis and 4 due to idiopathic portal hypertension. In 13 patients this was the first bleed while 16 had experienced haematemesis in the past too.

On endoscopy 24 patients had large polypoid grade III esophageal varices while 5 had grade II varices. Associated gastric varices in fundus or on lesser curve of the stomach were seen in 13 cases.

Table. Comparison of banding with sclerotherapy.

	Banding (30 cases)	Sclerotherapy (57 cases)
Mean sessions	3	5
Pyrexia	Nil	75%
Chest pain	4	All
Ulcers	7%	30%
Dysphagia	Nil	14%
Stricture	Nil	4%
<u>Cost per session</u>		
Foreign device	Rs.9000	Rs.2500
Local device	Rs.4000	Rs.1500
Recharge bands	Rs.150	Rs.120

At the first session 6,5 and 4 rubber bands were fired in 6 cases each, 3 bands in 9 and 2 in 2 cases. Endoscopy was repeated after 3 weeks to see the status of varices and re banding. Eleven cases required rebanding while in 9 the size of varices was reduced to grade I therefore it was difficult to band them. Two patients continued to bleed and expired, while two rebled on 5th post banding day. Endoscopy in these cases revealed a large ulcer over the mucosa; both cases settled on conservative therapy. Five cases were lost to follow up, A third session of banding was done in 5 cases only. End point of banding was small varices (difficult to band) which was achieved in all 22 cases. None of the patients developed fever, dysphagia or chest complications. In some cases difficulty was encountered in intubation of the scope because of the tunnel vision produced due to the mounting of the device and the rough surface of the device. No difficulty was encountered in firing the Saeed's six shooter but in some cases where the local device was used or rubber bands were recharged on an old device, difficulty was experienced after firing the first or 2nd band after which the firing failed despite applying traction on the thread via pulley. This resulted in distortion of the endoscope. The procedure in such circumstances was

abandoned. Distal end of the local device got dislodged in one case which was retrieved using a basket

Comments

Most workers reported a high frequency of chest pain, fever and other complications with sclerotherapy⁶⁻⁸ but since the reintroduction of bandiAg for oesophageal varices, the frequency of these complications has gone down^{5,9}. Comparing our previous results of sclerotherapy¹⁰ with present results of banding (Table) one can appreciate better results with banding. Similar results are reported by others¹¹⁻¹³. Most varices were reduced to very small size with 3 or less banding sessions vs a mean of 4-5 sclerotherapy sessions. Similarly complications were also less (ulcers only) in banding group when compared to stricture and pyrexia in the other group^{6-8,10}. Prophylactic use of sucralfate has been found effective in preventing a stricture and a bleed from the ulcer¹⁴, therefore the drug was used in all cases after experiencing a rebleed from ulcer in 2 cases and since then none had a bleed. The cost of local device is approx. Rs.4500 while that of Saeed six shooter is Rs. 12,000-15,000. With recharging of bands the cost goes down to approx. Rs. 1501=. This study shows banding to be a better alternate to sclerotherapy for the management of bleeding esophageal varices but sufficient expertise has to be developed locally on charging of rubber bands on a multiband shooter to have fool proof firing and thus avoid damage to the endoscope.

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