Screening for oesophageal varices in liver cirrhosis – Full Clinical Guideline

Reference no:CG-GASTRO/1454/22

Gastro-oesophageal varices are present in approximately 50% of patients with cirrhosis - correlates with the severity of liver disease (CP A 40%, CP C 85% or 40% of new cirrhotics and 65% of those with ascites).

Cirrhotic patients without varices develop them at a rate of 8%/ year and a similar proportion of patients with small varices will progress to large varices over the same period.

Variceal haemorrhage occurs at a yearly rate of 5-15%. Variceal size, Red wale signs and Child Pugh score predict risk of bleeding.

Patients with suspected liver cirrhosis should be assessed re the need for an OGD as screening for varices providing they are fit enough for the procedure.

Patients with a liver stiffness <20 kPa and with a platelet count >150,000 have a very low risk of having varices requiring treatment, and do not require screening endoscopy. Patients with suspected severe fibrosis/ cirrhosis can be followed up by yearly repetition of Liver stiffness and platelet count.

Screening and primary prophylaxis

Figure 2 outlines when primary prophylaxis is indicated and the recommended endoscopic interval following the initial OGD. If there is no contraindication (e.g asthma) then primary prophylaxis should be with Carvedilol - start at 6.25mg od and the dose increased to 12.5mg od after a week if tolerated or once a heart rate of < 50-55bpm reached. Once Carvedilol is initiated further OGD is not indicated unless there are signs of bleeding. If Carvedilol is not tolerated, cannot be given or there are concerns re compliance then band ligation should be performed. If the varices are too small for band ligation then the patient should have annual surveillance. In primary prophylaxis band ligation should be performed at an interval of 4-6 weeks until eradication complete. Patients having band ligation should receive Sucralfate 1g qds for 14 days post band ligation to reduce band induced ulcer bleeding. Once varices eradicated initial surveillance OGD should be at 6 months and then annually (see surveillance post variceal haemorrhage).

There is no indication for nitrates either alone or in combination with beta-blockers in the primary prophylaxis of variceal haemorrhage

Derby Liver team is currently recruiting to BOPPP – Beta blockers or Placebo for Primary Prophylaxis of oesophageal varices (this study is looking at Carvedilol in patients with small grade 1 varices)

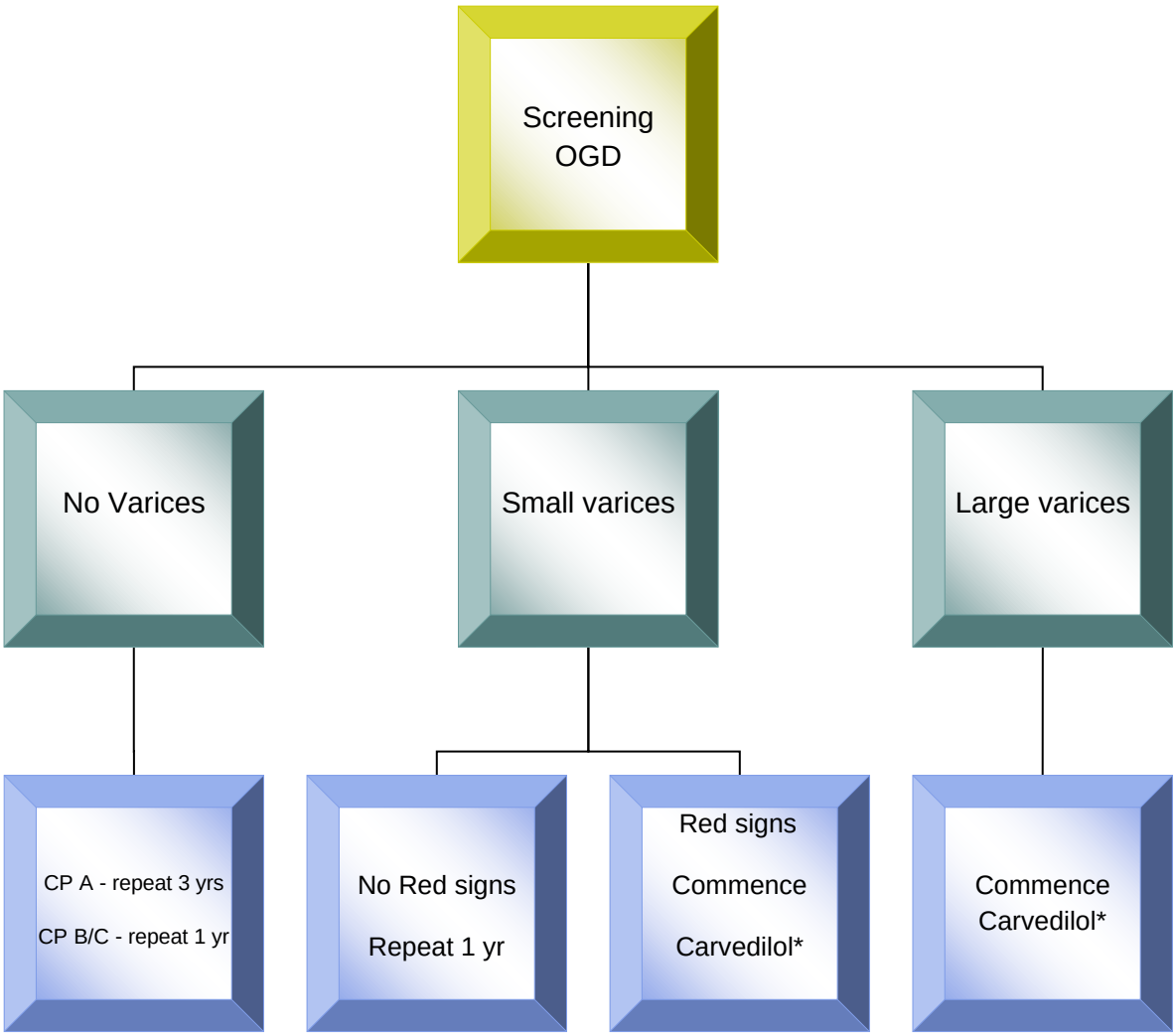
Management of patients with non-cirrhotic portal hypertension

There is limited evidence on the natural history of gastroeosophageal varices in patients with non-cirrhotic portal hypertension, but what there is supports following the same management strategy as for patients with cirrhosis.

Management of patients with gastric varices (GV)

Lowering HVPG may be less effective in preventing bleeding from GV. 35% of patients with GV bleed have HVPG < 12 mmHg as spontaneous splenorenal and gastrorenal shunts seen in up to 60% of patients with GV. Nevertheless primary prophylaxis with Carvedilol is indicated in those patients in whom it is not contraindicated. There is no role endoscopic treatment (glue/ thrombin) in primary prophylaxis.

Figure 1: Recommended screening interval for varices in patients with cirrhosis and indications for primary prophylaxis



CP = Childs Pugh

* Once Carvedilol initiated no routine follow-up OGD required unless signs of bleeding

Risk/ benefit of beta-blocker in patients with advanced liver disease

This is an area of continued controversy. At present Carvedilol should be reduced/ discontinued if a patient with refractory ascites develops:

- Systolic blood pressure <90 mmHg
- Hyponatremia (<130 mEq/L)*
- Acute kidney injury (Create > 132.6umol/l)*

*This presumes that diuretics/ NSAIDs etc have been stopped

Secondary prophylaxis and requirement for surveillance OGD post variceal haemorrhage

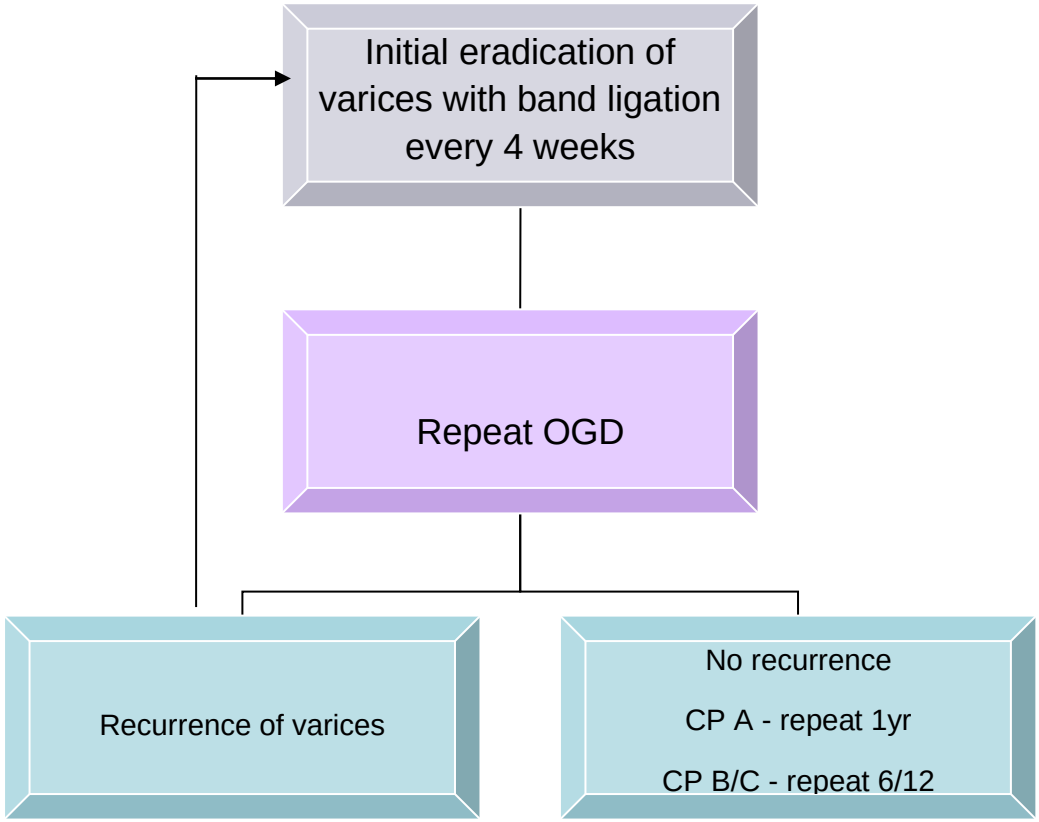
Patients admitted with variceal haemorrhage will have been treated while in hospital with vasoactive drugs (usually Terlipressin) and had initial endoscopic therapy with band ligation.

On discontinuing vasoactive drugs, start Carvedilol at 6.25mg od and increase the dose to 12.5mg od after a week if tolerated or once a heart rate of < 50-55bpm.

A follow-up OGD should be arranged for 4 weeks after the initial procedure. Further sessions for band ligation should be performed at 4 week intervals until variceal obliteration achieved.

Following variceal eradication, OGD should be repeated at 3 then 6 month to check for variceal recurrence and then 6-12 monthly, depending on whether the patient has recompensated.

Figure 2: Surveillance OGD and secondary prophylaxis post variceal haemorrhage



Further Reading:

UK guidelines on the management of variceal haemorrhage in cirrhotic patients. Tripathi et al. GUT 2015
Baveno VII – Renewing consensus in portal hypertension 2022

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

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CG-GASTRO/1454/22</td><td colspan="2">Version:

4</td><td colspan="2">Status

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<tr><td rowspan="3">Version / Amendment History</td><td>Version</td><td>Date</td><td>Author</td><td colspan="2">Reason</td></tr>
<tr><td>4</td><td>2022</td><td>Liver Management Group (Cross-site teams)</td><td colspan="2">Previous guideline expired</td></tr>
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<tr><td colspan="6">Intended Recipients: All clinicians managing patients with liver disease</td></tr>
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