



Accumulation fluid in peritoneal cavity

seen with portal hypertension

Normal WBC content  $<500$  WBC  $<250$  neutrophils

formation of ascites marks transition from compensated to decompensated and gives 50% 2 year survival

SBP neutrophils  $> 250$

commonest bugs gram negative E coli Klebsiella

Measure	1 point	2 points	3 points	units
<i>Bilirubin (total)</i>	<34	34-50	>50	μmol/l
<i>Serum albumin</i>	>35	28-35	<28	g/L
<i>INR</i>	<1.7	1.71-2.20	> 2.20	<i>no unit</i>
<i>Ascites</i>	None	Suppressed with medication	Refractory	<i>no unit</i>
<i>Hepatic encephalopathy</i>	None	Grade I-II (or suppressed with medication)	Grade III-IV (or refractory)	<i>no unit</i>

## Interpretation

Chronic liver disease is classified into Child-Pugh class A to C, employing the added score from above.

Points	Class	One year survival	Two year survival
5-6	A	100%	85%
7-9	B	81%	57%
10-15	C	45%	35%

Portal pressures increases because portal flow obstructed.  
areas of portosystemic anastomosis develop collateral supply.  
Gastro-oesophageal = varices  
anal  
retroperitoneal  
umbilical

Varices  
seen about 50% cirrhotics  
1/3 varices will bleed  
50 % mortality first bleed

## Management

Iv access x 2 large bore

blood FBC U&E CS X match

iv fluids

drugs terlipressin 2mg qds/vasopressin reduce portal blood flow collateral flow and variceal pressure ( better evidence)

octreotide selective splenic vasoconstriction decreases portal blood flow ( evidence weak)

### (1) RESUSCITATION

xSite: Where haemodynamic monitoring is possible.

xMethods:

x16 gauge peripheral cannulae, at least 2.

xCross match 6 units of blood.

xCorrect prothrombin time, platelet count.

xCentral venous access.

xProtection of the airway by elective intubation:

(i) severe uncontrolled variceal bleeding;

(ii) severe encephalopathy;

(iii) inability to maintain oxygen saturation above 90%;

(iv) aspiration pneumonia. (Recommendation grade BIII.)

### (2) TIMING OF UPPER GASTROINTESTINAL ENDOSCOPY

xAs soon as the patient is haemodynamically stable. (Recommendation grade BIII.)

### (3) CONTROL OF BLEEDING

xVariceal band ligation is the method of first choice. (Recommendation grade AI.)

xIf banding is difficult because of continued bleeding or this technique is not available, endoscopic variceal sclerotherapy should be performed. (Recommendation grade AI.)

xIf endoscopy is unavailable, vasoconstrictors such as octreotide (unlicensed) or terlipressin, or a Sengstaken tube inserted (with adequate provision for airways protection) maybe used while more definitive therapy is arranged. (Recommendation grade AI.)

### (4) FAILURE TO CONTROL ACTIVE BLEEDING

xIn case of bleeding that is difficult to control, a Sengstaken tube should be inserted until further endoscopic treatment, TIPSS, or surgical treatment. (Recommendation grade BI.)

xSpecialist help should be sought at this time and transfer to a specialist centre should be considered. (Recommendation grade BII.)

xThe mode of treatment—that is, surgical interventions such as oesophageal transection or TIPSS—is decided by which of these techniques is routinely used by the centre in which this patient is being managed. (Recommendation grade BII.)