Patient details

CUH
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Decompensated Cirrhosis Care Bundle - First 24 Hours

Decompensated cirrhosis is a medical emergency with a high mortality. Effective early interventions can save lives and reduce hospital stay. This checklist should be completed for all patients admitted with decompensated cirrhosis within the first 6 hours of admission.

1. Investigations

a)	INEWS ❑	FBC ❑	U&E ❑	LFT ❑	Coag ❑	Gluc ❑	$Ca/PO_4/Mg$ ❑
b)	Blood cultures ❑			Urine Dip/ MSU ❑	CXR ❑	Request USS abdo ❑	CRP ❑
c)	Perform ascitic tap in **all patients with ascites** using green needle **irrespective of clotting parameters** and send for ascitic PMN/WCC, culture and fluid albumin					Done **Y N**	N/A ❑
d)	**Record recent daily alcohol intake**			..... Units			

Initials:
Time:

2. Alcohol - if the patient has a history of current excess alcohol consumption

(>8 units/day Males or >6 units/day Females) **N/A** ❑

a)	Give IV Pabrinex (1-2 pairs of vials three times daily) per hospital protocol	**Y N**
b)	Commence CIWA score if evidence of alcohol withdrawal	**Y N N/A**

Initials:
Time:

3. Infections - if sepsis or infection is suspected **N/A** ❑

a)	What was the suspected source?.....	
b)	Treat with antibiotics in accordance with hospital protocol	**Y N**
c)	If the ascitic neutrophils >0.25 x 10^9/L (>250/mm^3)(i.e. SBP) then give:	**Y N**
I)	Treat with antibiotics as per hospital protocol	**Y N NA**
II)	IV albumin (20% Human Albumin solution) 1.5g/kg (20g of albumin in 100ml of 20% Human Albumin Solution)	**Y N NA**

Initials:
Time:

4. Acute kidney injury and/or hyponatraemia (Na <125 mmol/L) **N/A** ❑

AKI defined by modified RIFLE criteria	1: Increase in serum creatinine ≥ 26µmol/L within 48hrs ***or***
	2: ≥50% rise in serum creatinine over the last 7 days ***or***
	3: Urine output (UO) <0.5mls/kg/hr for more than 6 hrs based on dry weight ***or***
	4: Clinically dehydrated

a)	Suspend all diuretics and nephrotoxic drugs	**Y N NA**
b)	Fluid resuscitate with 5% Human Albumin Solution or 0.9% Sodium Chloride (250ml boluses with regular reassessment: 1-2L will correct most losses)	**Y N**
c)	Initiate fluid balance chart/daily weights	**Y N**
d)	Aim for MAP>80mmHg to achieve UO>0.5ml/kg/hr based on dry weight	**Y N**
e)	At 6 hrs, if target not achieved or EWS worsening then consider escalation to higher level of care	**Y N NA**

Initials:
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5. GI bleeding – if the patient has evidence of GI bleeding and varices are suspected **N/A** ❑

a)	Fluid resuscitate according to BP, pulse and venous pressure (aim MAP >65 mmHg)	**Y N**
b)	Prescribe IV terlipressin 2mg every four to six hours (caution if known ischaemic heart disease or peripheral vascular disease; perform ECG in >65yrs)	**Y N NA**
c)	Prescribe prophylactic antibiotics as per hospital protocol (usually ceftriaxone unless contraindicated)	**Y N**
d)	If prothrombin time (PT) prolonged give IV vitamin K 10mg stat	**Y N NA**
e)	If PT> 20 seconds (or INR >2.0) – give Octaplas®	**Y N NA**
f)	If platelets <50 – give IV platelets	**Y N NA**
g)	Transfuse blood if Hb <7.0g/dL or massive bleeding (aim for Hb >8g/dL)	**Y N NA**
h)	Early endoscopy **after** resuscitation (ideally within 12 hours)	**Y N**

Initials:
Time:

Continues overleaf..→

Please place in medical notes

6. Encephalopathy			**N/A ❑**
a)	Look for precipitant (GI bleed, constipation, dehydration, sepsis etc.)		**Y N**
b)	Encephalopathy – lactulose 15-30ml TDS or phosphate enema (aiming for 2-3 soft stools/day)		**Y N**
c)	If in clinical doubt in a confused patient request CT head to exclude subdural haematoma	**Y N**	**N/A**
7. Other			
a)	Venous thromboembolism prophylaxis – prescribe prophylactic LMWH (patients with liver disease are at a high risk of thromboembolism even with a prolonged prothrombin time; withhold if patient is actively bleeding or platelets <50)		**Y N NA**
b)	GI/Liver review at earliest opportunity (ideally within 24 hrs)		❑

Initials:

Time:

Initials:

Time:

Name……..Grade……Date……Time…….

Decompensated Cirrhosis Care Bundle - First 24 Hours[1]

The recent NCEPOD report 2013 on alcohol related liver disease highlighted that the management of some patients admitted with decompensated cirrhosis in the UK was suboptimal. Admission with decompensated cirrhosis is a common medical presentation and carries a high mortality (10-20% in hospital mortality). Early intervention with evidence-based treatments for patients with the complications of cirrhosis can save lives. This checklist aims to provide a guide to help ensure that the necessary early investigations are completed in a timely manner and appropriate treatments are given at the earliest opportunity.

- Decompensated cirrhosis is defined as a patient with cirrhosis who presents with an acute deterioration in liver function that can manifest with the following symptoms:
  - Jaundice
  - Increasing ascites
  - Hepatic encephalopathy
  - Renal impairment
  - GI bleeding
  - Signs of sepsis/hypovolaemia
- Frequently, there is a precipitant that leads to the decompensation of cirrhosis. Common causes are:
  - GI bleeding (variceal and non-variceal)
  - Infection/sepsis (spontaneous bacterial peritonitis, urine, chest, cholangitis, etc)
  - Alcoholic hepatitis
  - Acute portal vein thrombosis
  - Development of hepatocellular carcinoma
  - Drugs (Alcohol, opiates, NSAIDs, etc.)
  - Ischaemic liver injury (sepsis or hypotension)
  - Dehydration
  - Constipation

When assessing patients who present with decompensated cirrhosis please look for the precipitating causes and treat accordingly. The checklist shown overleaf gives a guide on the necessary investigations and early management of these patients admitted with decompensated cirrhosis and should be completed on all patients who present with this condition. The checklist is designed to optimize a patient's management in the first 24 hours when specialist liver/gastro input might not be available. Please arrange for a review of the patient by the gastro/liver team at the earliest opportunity. Escalation of care to higher level should be considered in patients not responding to treatment when reviewed after 6 hours, particularly in those with first presentation and those with good underlying performance status prior to the recent illness.

1. McPherson S, Dyson J, Austin A, Hudson M. BASL decompensated cirrhosis care bundle – first 24 hours. Frontline Gastroenterology. 2014;0:1-8.

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