

Alcohol related admissions outcome and complications audit

DR DENNIS NYUK FUNG LIM, GASTROENTEROLOGY SPECIALTY TRAINING REGISTRAR, DR TOBY DELAHOKE CONSULTANT HEPATOLOGIST, DR ALLISTER J GRANT CONSULTANT HEPATOLOGIST
DIGESTIVE DISEASE CENTRE, LEICESTER ROYAL INFIRMARY, INFIRMARY SQUARE LE1 5WW

INTRODUCTION/RATIONALE

The aim and objectives of the audit is to compare alcohol-related liver disease admissions of outcomes and complications at University Hospital of Leicester NHS Trust since the introduction of daily in-reach Gastroenterology and out of hours and weekend GI bleed services, Liver and Medical High Dependency Units within the University Hospital of Leicester NHS Trust against the key recommendations of the National Confidential Enquiry into Patient Outcome and Death (NCEPOD) 2013 report.

METHODOLOGY/DATA SOURCE

Patients were identified from clinical coding on HISS. Altogether there were 90 patients identified to be suitable for auditing. These were patients admitted to UHL with a diagnosis of alcohol-related liver disease. There were 54 case notes examined between 1st July 2012 – October 2012 and 36 case notes examined between 1st July 2013 – October 2013 respectively. Health care records, laboratory, radiological and clinical management were data utilised in the clinical audit. The National Confidential Enquiry into Patient Outcome and Death (NCEPOD) Data Collection Tool were used for data collection. Data analysis was carried out using MS Excel

RESULTS (NCEPOD 2013 recommendations)

1. Time between admission to UHL and Liver ward transfer
Mean time = 9days, Median time = 10days

2. Advice sought from specialist Gastroenterology/Hepatology

ADVISED SORT FROM SPECIALIST	NUMBER OF PATIENTS
YES	44 (49%)
NO	46 (51%)
	TOTAL = 90

3. In patients with decompensated ALD, blood culture included as initial investigations on admission to hospital

Blood cultures included as initial investigations on admission	Number of patients	Comments
Yes	4 (5.9%)	2 patients with ascites had blood culture after initial assessment and 2 patients with ascites had blood culture after initial assessment
NO	64 (94%)	45 patients with ascites +/-HE 18 patients with suspected variceal bleed 1 patient with HE (no ascites/variceal bleed)
	Total number of patients identified = 68	

RESULTS (NCEPOD 2013 recommendations)

4. Ascetic tap performed as initial assessment if ascites present: Coagulopathy is not a contra-indications

Ascetic tap performed as initial assessment	Ascetic tap performed after initial assessment	Comments: Reasons why ascetic tap not performed after initial assessment
22 (45%)	27 (55%)	18 = coagulopathy 4 = unclear reasons 5 = failed attempts

5. Liver screen performed as soon as possible after admission to hospital

Liver screen performed as soon as possible after hospital admission	Number of patients
Yes	90 (100%)
No	0

6. Adequate alcohol history documentation on admission

Alcohol history documentation on admission	Number of patients
Yes	82 (91%)
No	8 (9%)
	Total number of patients = 90

7. Appropriate location where patient was first admitted into hospital according to Level 0, 1, 2 and 3

Inappropriate Level 1 admissions	Appropriate level 2	Appropriate level 3	Appropriate Level 1
N = 19 1 ?VARICEAL BLEED 1 SEVERE PNEUMONIA 14 AKI + ALC HEPATITIS 1 SEVERE ALC HEP + HE 1 ACUTE CHRONIC KD 1 AKI + HE ?SBP	N = 20 17?VARICEAL BLEED 2 PNEUMONIA 1 SEVERE ALC HEPATITIS +AKI	N = 1 ACUTE LVF/?INFECTIVE ENDOCARDITIS	N = 50

8. All patients with alcohol-related liver disease who presented with GI bleed should be offered antibiotics and terlipressin until the outcome of their endoscopy is known

No of patients	Variceal bleed	Non variceal bleed	Non variceal and variceal bleed	No cause found	Did not have endoscopy	Antibiotic prophylaxis/terlipressin	Place of endoscopy
18	7	7	1	2	1	18 (100%)	16 endoscopy unit, 1 ITU

RESULTS (NCEPOD 2013 recommendations)

9. In patients with decompensated alcohol-related liver disease and deteriorating renal function, diuretics should be stopped and intravenous fluid administered to improve renal function even if the patient has ascites and peripheral oedema

Abnormal renal function on admission	Deteriorating renal function after admission	Diuretic stopped & iv fluid administered
17	12	16 had diuretic stopped & iv fluid administered. 1 of the patient had diuretics continued and iv fluid administered (94%)
0	14	14 had diuretic stopped & iv fluid administered. (100%)

10. Deterioration in renal function in patients with liver disease should not be assumed to be due to HRS, as other potential causes are often present and should be actively excluded.

Deterioration in renal function after admission	Iatrogenic cause (diuretics not stopped)	HRS	Death
14	1	13	11

11. Escalation of care should be actively pursued for patients with alcohol-related liver disease who deteriorate acutely and whose background functional status is good. There should be close liaison between the medical and critical care teams when making escalation decision

Escalation of care	Reasons	Timely	?Declined/?by who
Level 1 – level 2 N= 32	AKI, ALC HEP, HE, SEPSIS	YES	NO
Level 1 – level 3 N = 1	Upper GI bleed requiring airway protection	Yes	No
Level 2 – Level 3 N = 5	1 = acute LVF/?IE 3 = declined by ITU & Hepatology consultants 1 = ?variceal bleed	Yes	ITU & HEPATOLOGY CONSULTANTS
LEVEL 1 ONLY CARE N = 5	1 = Not escalated by medical Spr 1 = Not escalated by A&E consultant 3 = ?variceal bleed (2 = non variceal & 1 no source of UGIB found)	n/a	Not escalated
Level 2 only care N = 10	2 = declined by ITU consultant 8 = not escalated	Yes	2 declined by ITU consultant

RESULTS (NCEPOD 2013 recommendations)

12. A decision not to escalate or to actively withdraw treatment for a patient with alcohol-related liver disease should be made by a Consultant with specialist training to identify what interventions are likely of benefit to the patient.

Person who made decision to withdraw or not to escalate treatment	End of life care	Discussion with patient or patient representatives	Doubt or disagreement and 2 nd consultant opinion sought
Consultant hepatologist only = 15 Consultant hepatologist + ITU consultant = 5 Consultant hepatologist + Consultant surgeon = 1 Consultant hepatologist + acute medical consultant = 1 Gastro Spr + ITU consultant = 3 Gastro Spr only = 1 Consultant ITU only = 1 Medical SpR only = 1 Consultant A&E = 1	Yes = 20 No (limited treatment) = 9	Family members = 29	ITU consultant, Consultant Surgeon, Acute Medical Consultant

CONCLUSIONS

Patients admitted with alcohol-related liver disease are a group of people who are difficult to help. But they are still entitled to be treated on their clinical merits and given the care that would bring benefits. The illness may be self-inflicted, like so many of the lifestyle diseases that bring patients to their doctors in modern society, and the prospects of a cure for many of these people may not have been propitious for some years. But the present concern about the quality of care delivered in our hospitals is as valid for them as it is for any other group of patients: no decent healthcare system should write people off or deem them less worthy of the best care available to them.

For additional information, please contact:

DR DENNIS NYUK FUNG LIM

DIGESTIVE DISEASE CENTRE, UNIVERSITY
[Name]
HOSPITAL OF LEICESTER NHS TRUST
[Institution or organization]
E-mail address: dennis2020@yahoo.com