

“Measuring the Units” need not be Challenging - Using NCEPOD criteria to Improve the Management of Patients with Alcohol-related Liver Disease in a District General Hospital

Ibrahim Al Bakir, Huw Richards, Maria Papanikolaou, Sam Curtis, Susan Arasaretnam, Mohamed Shariff
Gastroenterology Department, Watford General Hospital, United Kingdom

West Hertfordshire Hospitals 
NHS Trust

CONTEXT:

In 2013 the NCEPOD published the results of an audit¹ of the care of hospitalised patients with alcohol-related liver disease (ALD), as prompted by the 2009 National Plan for Liver Services². This damning report concluded that despite the increasing incidence of ALD, and the relatively young (and falling) average age of death from ALD, these patients were repeatedly failed throughout their care pathway at even the most basic levels of care. While members of the gastroenterology department could recall instances where patients with ALD were managed sub-optimally, we had never formally assessed our own performance.

METHODS AND STANDARDS:

In response, we utilised this NCEPOD report to analyse and improve on our local performance. The audit benchmarks used are listed below and include: mortality, performing blood cultures and ascitic taps on admission, adequate use of thiamine replacement and appropriate use of alcohol withdrawal regimens. Patients with ALD were identified prospectively by daily review of the acute admission unit and gastroenterology ward patient lists, as well as the gastroenterology inpatient referrals. The first audit round ran from January to April 2014. Following our interventions, we performed a re-audit from May to July 2014.

	Round 1	Round 2
Audit round duration	4 months	3 months
Number of patients	48	38
Mean age (range)	57 (37-77)	50 (28-76)
Percentage of male patients	65% (31/48)	66% (25/38)

STANDARD	ROUND 1	INTERVENTIONS	ROUND 2	OUTCOME
GLOBAL OUTCOMES				
1. Mortality	21% (10/48)	1. Local Guidelines We created local guidelines on the management of decompensated liver disease using NCEPOD criteria	8% (3/38)	Unable to comment
2. Median age of mortality (range)	59 (45-77)		59 (40-63)	(Age as a confounding factor)
3. Median length of stay in days (range)	6 (1-52)		8 (2-81)	
BLOOD CULTURES		An A4 summary sheet of the guidelines were uploaded to the trust intranet, emailed to all relevant doctors and displayed throughout A&E and the acute admission unit		
4. All patients with decompensated ALD should have a blood culture on admission	25% (12/48)		39% (15/38)	Improvement
5. Proportion of patients with decompensated ALD and symptoms, signs or investigations in keeping with infection that are having blood cultures	33% (11/33)		67% (14/21)	Improvement
ASCITIC TAP		2. Staff Education Regular and targeted training sessions of: •A&E doctors and nurses •Acute medical admissions unit doctors •All FY1 doctors •All Core Medical Trainees		
6. Percentage of patients with ascites on admission	52% (25/48)		47% (18/38)	N/A
7. If ascites is present on admission, a diagnostic tap should be performed	76% (19/25)		94% (17/18)	Improvement
8. If an ascitic tap is performed, average time from admission to ascitic tap	41 hours	25 hours	Improvement	
THIAMINE REPLACEMENT		3. Gastroenterology Team Involvement Presentation of audit findings at clinical governance meeting Institution of monthly gastroenterology department morbidity & mortality review Improved communication and coordination between doctors, ward charge nurses and alcohol liaison team		
9. Proportion of patients drinking up to, or near to admission	69% (33/48)		72% (28/38)	N/A
10. All patients at risk of re-feeding syndrome, or with ongoing or recent alcohol abuse should be commenced on Pabrinex®	94% (31/33)		93% (26/28)	Unchanged
ALCOHOL WITHDRAWAL				
11. Appropriate alcohol withdrawal regimen prescribed	62% (18/29)		62% (13/21)	Unchanged
12. Referral to alcohol liaison team if drinking up to, or near to admission	58% (19/33)		82% (23/28)	Improvement
13. Average time from referral to review by alcohol liaison team	1.62 days		0.88 days	Improvement

DISSEMINATION, ACTION PLAN AND LESSONS LEARNT:

While there remains scope for significant improvement, our audit has resulted in a positive outcome for patients with ALD.

We have continued offering regular teaching sessions and presented our audit findings at the both the local grand round and the medical clinical governance meetings. In response to staff feedback, we have created dedicated local guidelines for the management of alcohol withdrawal.

Finally, we are in the process of re-auditing our performance over the period of September to December 2014 (4 months).

REFERENCES:

- NCEPOD ‘Measuring the Units’: A review of Patients who Died with Alcohol Related Liver Disease. June 2013. <http://www.ncepod.org.uk/2013arld.htm>
- The National Plan for Liver Services UK 2009. A Time to Act: Improving liver health and outcomes in liver disease. http://www.bsg.org.uk/attachments/1004_National%20Liver%20Plan%202009.pdf