An audit to assess the use of Addenbrooke's Cognitive Examination III (ACE) in the context of inpatient alcohol detoxification.

Dr Deborah Forbes[1,2], Dr Fiona Watson[1], Dr Rebecca Lawrence[1]
1 The Ritson Clinic, Royal Edinburgh Hospital, Edinburgh   2 The University of Edinburgh, Centre for Clinical Brain Sciences

THE UNIVERSITY of EDINBURGH

NHS Lothian

Introduction

Alcohol dependence is known to negatively impact global cognition, memory, executive function, and results in an increased risk in dementia. NICE recommend using brief measures of cognitive function to assist treatment planning in alcohol dependent patients.

In our inpatient unit, the Addenbrooke's Cognitive Examination – III (ACE) is used to assess cognition. It is performed at the point a patient has completed their detox and are ready to be discharged from the inpatient service.

Aims

We aimed to audit the use of ACE as part of our inpatient alcohol detoxification service. Firstly to see how often it was being used. Secondly, to assess the scope for using the ACE as a tool for stratifying patients and tailoring the post-discharge service and support that they receive.

Methods

Anonymised data was collected prospectively from the clinical records of patients admitted to the Ritson Clinic between the 25th of September 2019 and the 30th of June 2020. Reason for referral, psychiatric history, history of liver disease, details of pharmacological management, and ACE III scores were recorded in a database.

Results

In this period there were 119 admissions for alcohol detoxification, 7 patients had a diagnosis of cognitive impairment on admission.
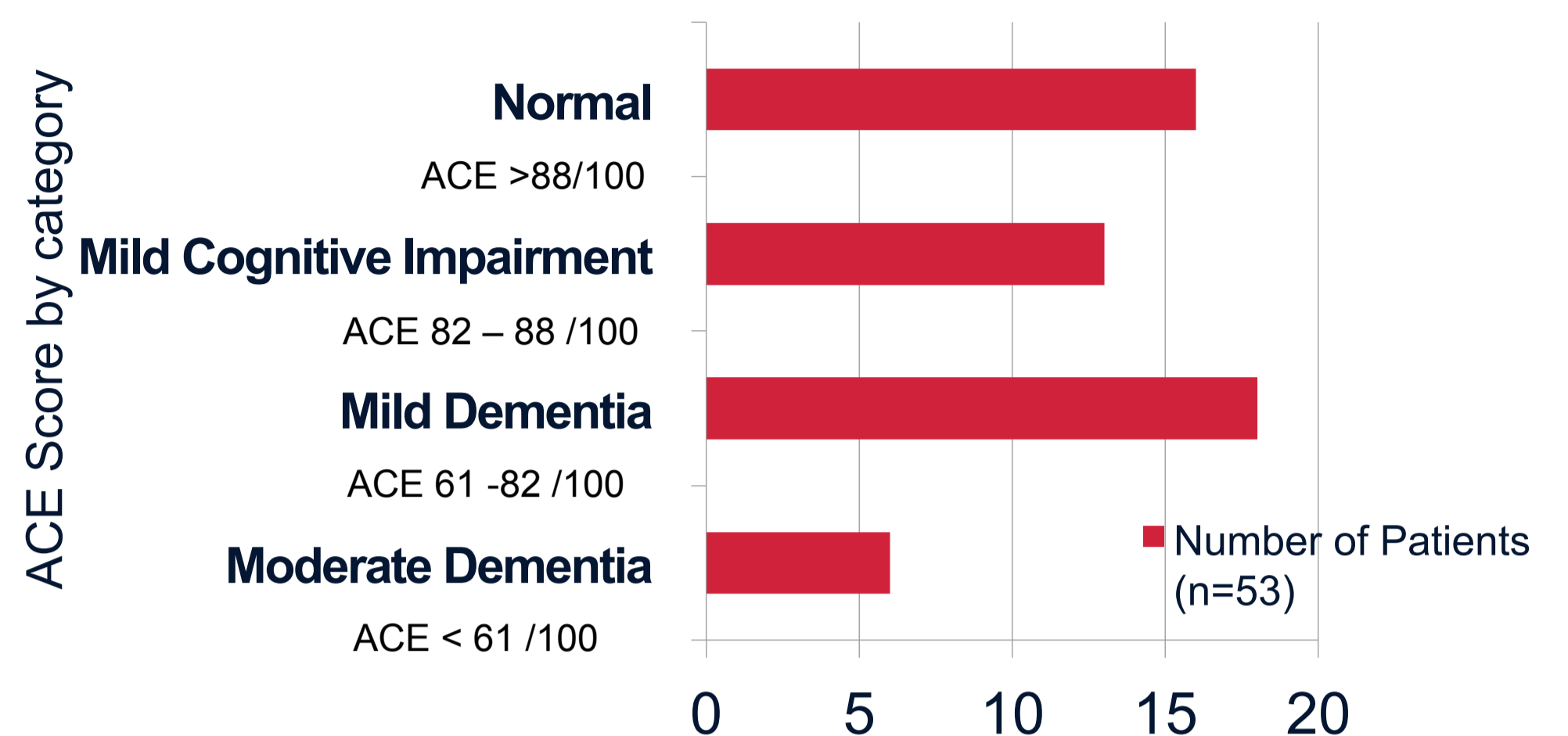
Comorbidities in Patients Admitted for Alcohol Detoxification (n=119)

Opioid Dependence	Benzodiazepine Dependence	Known Cognitive Impairment at admission	Alcoholic Liver Disease
36	15	7	24

Schizophrenia	Bipolar Disorder	Depressive Disorder	Anxiety Disorder	PTSD
10	3	43	24	9

OCD	Eating Disorder	Learning Disability	Personality Disorder	Chronic Pain
1	0	6	0	19

References

NICE Guideline : Alcohol Use Disorders : Diagnosis, assessment, and management of harmful drinking and alcohol dependence.
Beishon LC et al., Addenbrooke's Cognitive Examination III and mini-ACE for the detection of dementia and mild cognitiive impairment. Cochrane Database of Systematic Reviews 2019. DOI: 10.1002/14651858.CD013282.pub22
Piumatti G. et al, The relationship between alcohol use and long-term cognitive decline in middle and late life: a longitudinal analysis using UK Biobank, Journal of Public Health June 2018

ACE-III showed a high burden of cognitive impairment at the time of discharge following inpatient alcohol detoxification

Of the 119 patients admitted in this period, 53 completed the ACE. The maximum score was 100/100, the minimum score was 46/100, the average score was 80.3 (SD 12.6).

Relapse Prevention Prescribing at discharge

Disulfiram	Acamprosate	Naltrexone	Baclofen
30	46	5	5

Discussion

The patients admitted for alcohol detoxification in this period had many comorbidities. Only 7 had a diagnosed cognitive impairment at this point.

At the point of discharge, the majority had evidence of cognitive impairment. The average ACE score (80.3) is in the range suggesting mild dementia.

A range of relapse prevention therapies were used. These are not benign treatments and given the patients' low average ACE scores, additional techniques for communicating risks and obtaining consent may be needed.

At present, patients' discharge follow up has a uniform level of support. The post discharge period is complex and perhaps screening with ACE could determine which patients receive more support.

Conclusion

The rate and extent of cognitive impairment in this patient group at the time of discharge from hospital was high yet rates of screening were low.

Increased use of cognitive screening may be useful in identifying those most at risk, and using targeted support planning for discharge from hospital and relapse prevention strategies.