Alcohol Related Brain Damage in the over 65's: Reliability of the diagnosis and outcomes over time

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Introduction:

The literature suggests that alcohol related brain damage (ARBD) typically presents in the age range 40-60 years (*Victor, et al. 1971*). The rise in ARBD discharges from acute hospitals in NHS GGC , between 2000 and 2010, was driven by an increase in the over 65 age group. (*Smith et al., SSA poster,2015*). This made us wonder if the average age at presentation of ARBD had increased.

Aim:

- To characterise the individual cases underpinning this apparent rise in acute hospital discharges with ARBD among the elderly.
- To clarify if these are new or established cases of ARBD.

Methods:

- A linked data set in Safehaven –a Scottish health data linkage resource-was created around the 66 patients aged over 65 years in 2010 with an SMR 01 diagnosis of: alcohol amnesic syndrome (F10.6), Wernicke's encephalopathy (E51.2) and/or alcohol dementia (F10.7) recorded at discharge from an NHS GGC general hospital.
- Patients' journey was followed from 2010 for 5 years to see if the initial diagnosis of ARBD remained stable and whether these patients attracted any additional diagnoses of dementia using this sample from the single year (2010).This was in order to check on diagnostic consistency and to look at health outcomes over 5 years. We soon discovered many of the diagnoses were historic and looked back 10 years to identify when the diagnosis was first applied.

Results:

- Out of the 66 patients with ARBD - over 65 years -(56 males, 10 females). The average age was 69.2 ± 4.1 years.

- 82% of the group had deprivation index 1.

- 35.5% were admitted from longterm care in 2010 and their ARBD diagnosis was historic.

- Admissions were for a variety of acute medical reasons;

- Only in 21/66 (32%) were these reasons clearly alcohol related and suggestive of a new onset or exacerbation of ARBD.

Prevalence of ARBD and alcohol diagnoses at index episode
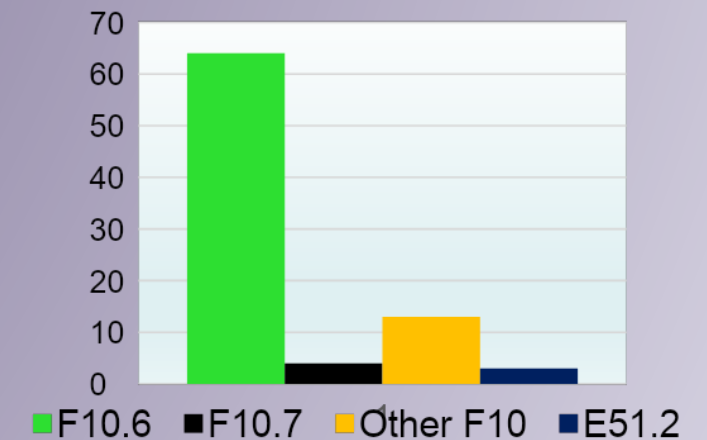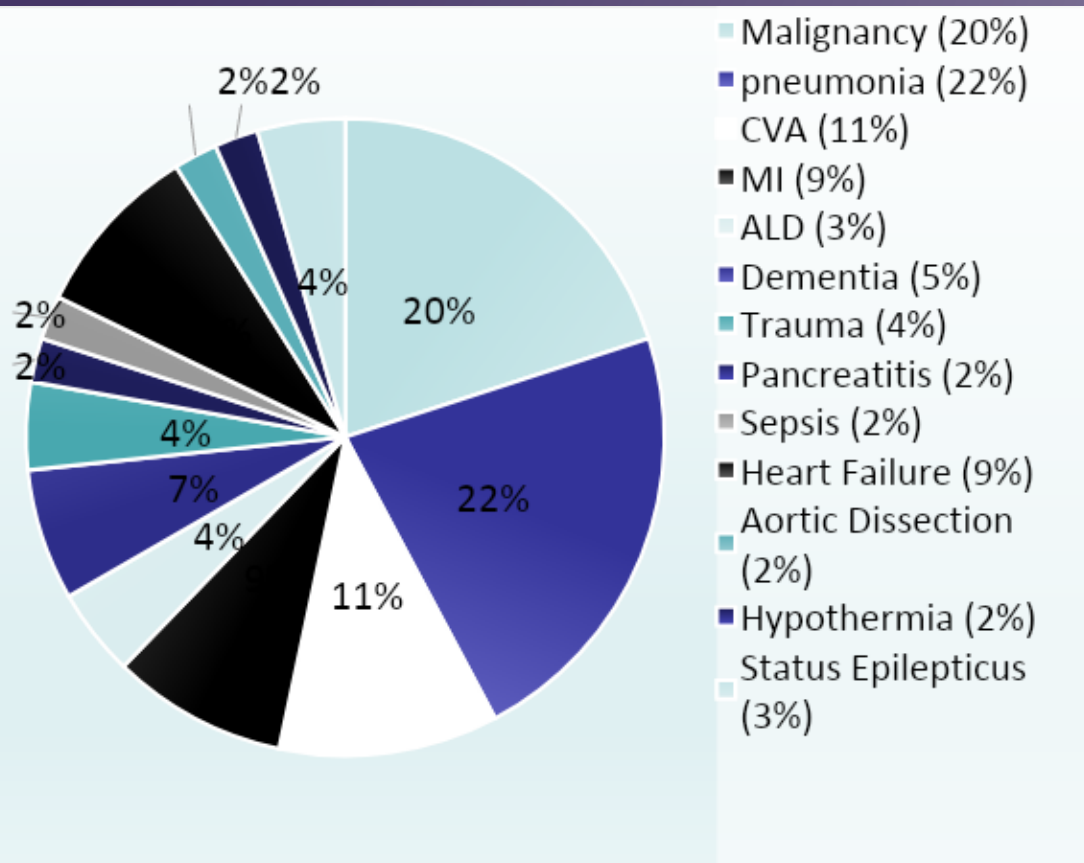

F10.6 - Alcohol Amnestic disorder
F10.7- Alcohol dementia
Other F10- Alcohol intoxication, withdrawal
E51.2 - Wernicke's encephalopathy.

The distribution of the main causes of death

The death rate after five years was 68% (45/66).

Pie chart legend:
- Malignancy (20%)
- pneumonia (22%)
- CVA (11%)
- MI (9%)
- ALD (3%)
- Dementia (5%)
- Trauma (4%)
- Pancreatitis (2%)
- Sepsis (2%)
- Heart Failure (9%)
- Aortic Dissection (2%)
- Hypothermia (2%)
- Status Epilepticus (3%)

Pie chart values shown: 2% 2%, 4%, 2%, 2%, 4%, 7%, 4%, 11%, 22%, 20%

Conclusion:

•ARBD rates are significantly higher in socially deprived areas.

•High death rate in this patients group after five years (68%) and high levels of physical co-morbidity were found; most prevalent diagnoses are smoking related cancers and lung disease.

•The data is strongly suggestive that in this older age group most have established ARBD and show up in epidemiological data due to a historical diagnosis.

•The apparent increase in elderly admissions is most likely due to repeat admissions of preexisting cases with failing physical health.

•Care is required in interpreting acute hospital discharge data and media headlines such as "Alcohol-Related Brain Damage at 10 Year High" (2018) need to be viewed with scepticism.(See:https://www.bbc.co.uk/news/uk-scotland-44791463).

No conflicts of interest exist.