An Epidemiological Profile of Chronic Hepatitis B Patients Attending an Irish Tertiary Centre with Subset Analysis of Adherence to EASL Treatment Guidelines

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Introduction

Chronic hepatitis B (CHB) virus infection is a globally prevalent disease that can result in significant life-altering sequelae[1]. Epidemiological data published by multiple regulatory bodies have identified that a significant proportion of Irish CHB prevalence is attributable to migrant populations[2]. The European Association for the study of the Liver (EASL) publish guidelines regarding the recommended treatment of CHB patients based on viral load, alanine aminotransferase levels, and liver biopsy results[3].
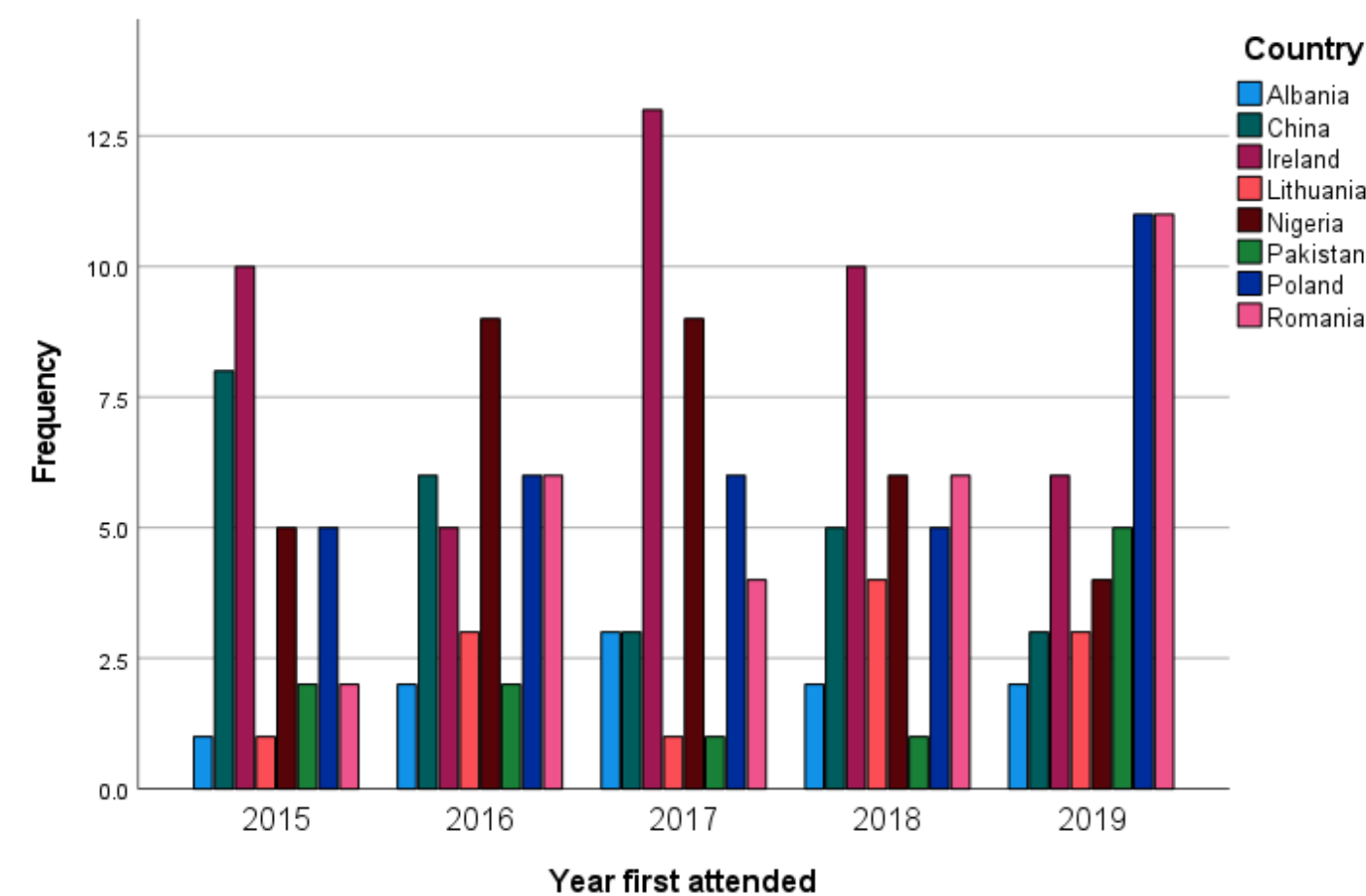
Aims

To evaluate the epidemiological profile of patients attending a tertiary centre in Ireland over a 5-year period to identify trends or anomalies. To examine local adherence to EASL treatment guidelines in a subset of patients who had a liver biopsy performed over a 7-year period.

Methods

A retrospective cross-sectional study in which demographic details of 299 patients were extracted from a local database to create an epidemiological profile of those who attended for primary assessment during a 5-year period. A retrospective chart review was conducted to collect demographic information pertaining to liver biopsy cases and to identify if patients had commenced anti-viral treatment. The EASL guidelines were used to assign patients to a group based on whether treatment was indicated or not based on strict adherence to the guidelines. This was compared against whether treatment had commenced in clinical practice. Statistical analysis was conducted using SPSS v28.0 software. This included descriptive statistics, Fisher's exact test, chi-square test of independence, and binomial logistic regression.
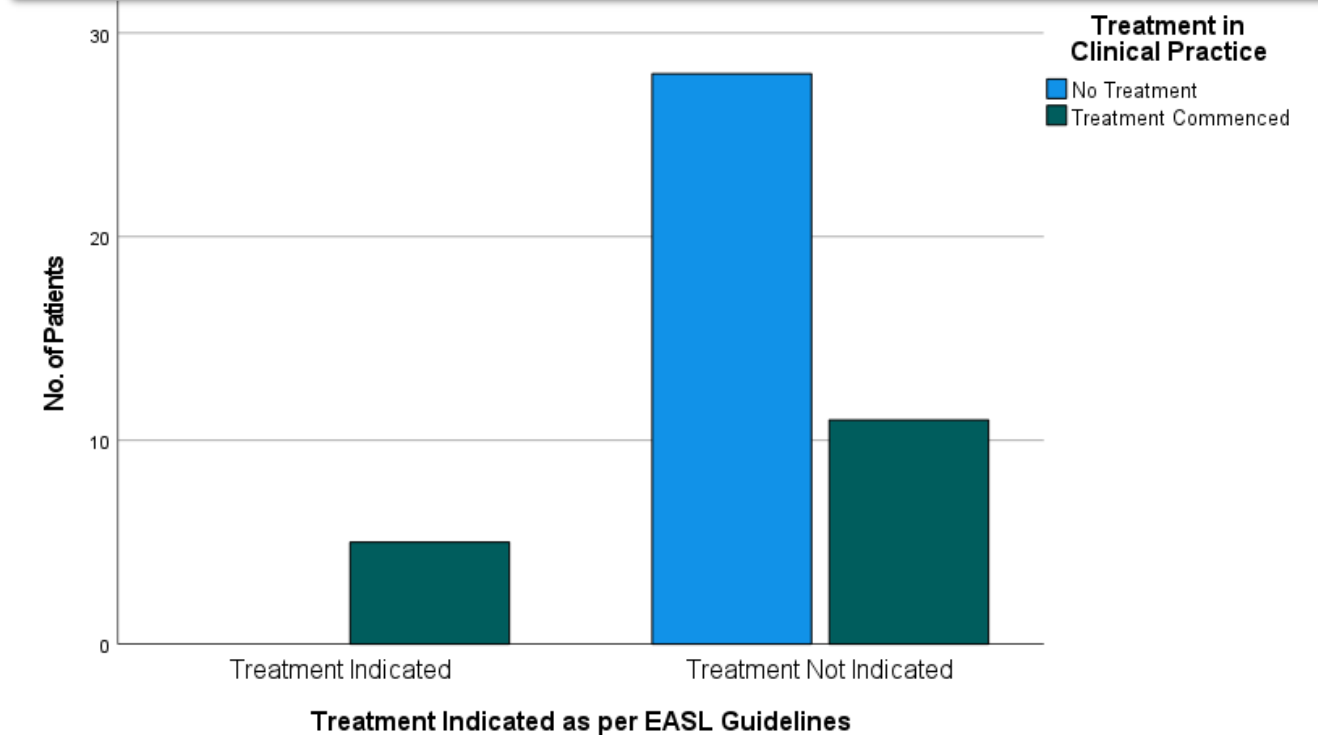
Results

The patient population (n=299) had the following characteristics: 63.5% were male, with 84% in the age range of 25-55, 98.3% were chronically infected, and 85.3% of cases were associated with migrant populations with no significant annual variation over the 5-year period. The liver biopsy subpopulation (n=44) demonstrated a similar demographic profile. Strict adherence to EASL guidelines indicates treatment in 11.4% (n=5) of cases. In practice, 36.4% (n=16) had commenced antiviral therapy. This was a statistically significant difference based on Fisher's exact test (p = 0.004)

Results Continued

Conclusion

The demographic results highlight the importance of intensive screening within migrant populations from high prevalence areas to identify those who will need to be appropriately managed within Ireland to prevent progressive disease and complications. There is not strict adherence to treatment by the EASL guidelines within our centre and this will require further study to evaluate the clinical reasoning behind this.

Acknowledgements

References

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