Liver II

PWE-123 UNDERGRADUATE UNDERSTANDING OF IDENTIFICATION AND BRIEF ADVICE FOR ALCOHOL DISORDERS

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Introduction The number of deaths in England due to liver disease is rising. The North West has the highest rate of alcohol related deaths for men and women.[1] Brief interventions can reduce harmful drinking[2] and therefore have the potential to contribute to reducing the burden of liver disease.

There is a recognition that all health professionals must strive to detect risk factors for liver disease and intervene early to manage them. [3]

Do the next generation of doctors know this?

Methods A short survey was completed by 100 Manchester medical students in clinical placements to assess their knowledge of identification and brief advice (IBA), its effectiveness in comparison to smoking cessation advice and their knowledge of which particular patients benefit most from its use.

Results 96% of the students involved in the survey had not heard of IBA.

Once IBA was explained 21.1% thought that it would be less effective than smoking cessation advice.

Only 47% of the students correctly thought that increasing risk drinkers were the group that would benefit most rather than higher risk or dependent drinkers.

Conclusion The vast majority of the students involved in the survey were not aware of IBA. A significant number underestimated its impact and there was confusion about which patients would benefit.

This is despite the students all being in clinical placements in the North West of England

The unfamiliarity of these students to IBA may well be a reflection of its limited use in day to day practice by their supervising clinicians.

Despite the recognition of its importance there may be a long way to go in making identification and brief advice routine practice for our future doctors.

REFERENCES

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Disclosure of Interest None Declared.

PWE-124 UNDERSTANDING THE MECHANISMS UNDERPINNING TREATMENT NON-RESPONSE IN PRIMARY BILIARY CIRRHOSIS: A TOOL FOR TREATMENT STRATIFICATION

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Introduction The pathogenesis of Primary Biliary Cirrhosis (PBC) is poorly understood. The Th1 $CD4^+$ cell subset has known involvement, however, the Th17 subset demonstrated in autoimmune disease requires further investigation. Ursodeoxycholic acid (UDCA) is the primary treatment and response is measured by liver biochemistry change; suboptimal improvement (non-response) has a poorer prognosis and there remains a lack of effective second-line therapies.

This study aimed to pilot transcriptional investigation of T-cells in PBC, including UDCA response stratification and Th17 polarisation, following recent revelation of demographic associations with non-response.

Methods Affymetrix® GeneChip® Microarray analysis examined the gene expression differences of $CD4^+$ T-cells isolated from PBC responders (n = 3), non-responders (n = 4) and healthy controls (n = 3). The samples studied were taken at baseline and after culture with anti-CD3/28 beads +/- Th17 polarising cytokines.

Results 900 genes were significantly differentially expressed with >2 fold change in patients versus healthy controls and 113 genes in responsive versus non-responsive groups at baseline. Study of CD3/28 activated cells +/-Th17 polarisation revealed no significant differences. In PBC patients, features up-regulated included CD69 (adjusted $p < 0.00005$) and those down-regulated HLA class II transcripts ($p < 0.05$).

Conclusion Despite a small cohort, for the first time using microarray, this project demonstrated differences between PBC patients and healthy individuals and, importantly, between UDCA response groups. This substantiates the view that UDCA non-responsive disease represents a distinct biological entity requiring different clinical management. Up-regulation of the activation marker CD69 implies ongoing T-cell stimulation in PBC. HLA class II transcript down-regulation may imply a role in T cell anergy or regulation.

Disclosure of Interest None Declared.

PWE-125 RIFAXIMIN TREATMENT IN HEPATIC ENCEPHALOPATHY (HE) -– MARKED REDUCTION IN HOSPITAL ADMISSIONS AND HOSPITAL BED DAY OCCUPANCY IN A DISTRICT GENERAL HOSPITAL

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Introduction Rifaximin is a minimally absorbed, gut-selective antibiotic, which is safe and effective in the prevention and treatment of Hepatic Encephalopathy (HE). However, it is expensive and there is debate regarding its cost effectiveness.

Aim The present study examines the impact of Rifaximin treatment on hospital admissions and hospital bed day occupancy in patients with recurrent HE, due to chronic liver disease.

Methods Medical records of all 30 hospital patients with HE, commenced on Rifaximin between November 2011 and May 2013, in a District General Hospital, were evaluated. Data were collected on patient demographics, MELD scores, number of hospital admissions, bed day occupancy for each admission, and concomitant therapy for HE. We compared the clinical features and diagnoses for the number of, and length of each hospital admission for the 6 months before, and 6 months after, commencing Rifaximin treatment.

Results 30 patients with HE (18 men, 12 women), median age 64 (Inter-quartile range (IQR) 51–67), were commenced on Rifaximin. 83% had Alcohol-related liver disease, 10%