A case of REM Behaviour Disorder (RBD) in Primary Biliary Cirrhosis (PBC), is this an unrecognised sleep disorder in this group of patients?

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A 54 year old Iranian lady with untreated Primary Biliary Cirrhosis (PBC) who has lived in the UK for more than 20 years, presented to the sleep clinic with a six year history of vocalisations, multiple limb/head movements and violent movements towards her husband during the night. Polysomnography showed loss of REM atonia occurring in REM sleep at the time of these abnormal movements. She has now been treated with clonazepam for RBD.

Primary biliary cirrhosis is an autoimmune progressive cholestatic liver disease. It also has the sleep sequelae of fatigue symptoms. Patients also complain of cognitive dysfunction. The relationship in PBC between fatigue, cognitive deficits, the role of cholestasis and inflammatory cytokines is as yet unclear.(1) The fatigue could also be in part due to an increased incidence of restless legs syndrome(RLS). Anderson (2013) showed an increased incidence of RLS in PBC patients measured by actigraphy compared with age matched controls(2).

A recent literature search has not as yet found a reported link between PBC and REM behaviour disorder.

1. <u>Cognitive impairment in primary biliary cirrhosis: Symptom impact and potential etiology</u>. Newton JL, Hollingsworth KG, Taylor R, El-Sharkawy AM, Khan ZU, Pearce R, Sutcliffe K, Okonkwo O, Davidson A, Burt J, Blamire AM, Jones DEJ. Hepatology 2008, 48(2), 541-549.

2 Restless leg syndrome is a treatable cause of sleep disturbance and fatigue in primary biliary cirrhosis. Anderson K, Jones DEJ, Wilton K, Newton J. Liver International 2013,33 (2). 239-243.