Abstract P047 Table 2 Utility of PSQI-SRBD questionnaire in predicting obstructive apnoea/hypopnoea index (oAHI) ≥ 1 /hr on polysomnography in children with epilepsy. Results presented as number(%).

	oAHI ≥ 1 /hr	oAHI < 1 /hr	
PSQ-SRBD ≥ 0.33	3 (10%)	14 (48%)	17
PSQ-SRBD < 0.33	2 (7%)	10 (35%)	12
	5	24	

Sensitivity = 60%

Specificity = 42%

Positive predictive value = 18%

Negative predictive value = 83%

versus 7% of controls.³ This study assessed symptoms of OSA in CWE and typically-developing children using subjective questionnaires, and compared these with objective level I polysomnography.

Methods Ethical approval was granted. Written informed consent/assent was obtained from participants/caregivers. CWE aged 5–18 years were recruited from an NHS epilepsy clinic during 2017–2019, along with age- and sex-matched typically-developing controls. Children with significant co-morbidities were excluded.

Anthropometric data were collected. OSA symptoms were rated by child/caregiver using the children's Epworth Sleepiness Scale (cESS) and PSQ-SRBD, with PSQ-SRBD ≥ 0.33 indicative of OSA (reported sensitivity 81%, specificity 87%).⁴ Polysomnography (SOMNOScreen plus™, SOMNOMedics, Randersacker, Germany) was conducted in accordance with AASM Version 2.3 (2016) guidelines.⁵ Standard statistical analyses were undertaken using SPSS 25 (IBM Corp., Armonk, NY, USA). Significance was taken as $p < 0.05$.

Results Fifty-two children completed the protocol (35 CWE, 17 controls), with polysomnography data available for 44 children. Table 1 summarises anthropometric, questionnaire and polysomnography data; CWE were significantly sleepier on cESS and more likely to score ≥ 0.33 on PSQ-SRBD. Children with PSQ-SRBD ≥ 0.33 had higher BMI (22.3 ± 6.0 v. 19.1 ± 3.7 kg/m², $p = 0.03$), higher cESS ($8(4-12)$ v. $3(1-5)$, < 0.0001) and lower SpO₂ nadir on polysomnography (92 ± 3 v. 94 ± 2 , $p = 0.039$). The positive predictive value of a score of ≥ 0.33 on the PSQ-SRBD in CWE was low (18%), with sensitivity 60% and specificity 42% noted in predicting OSA (oAHI > 1 /hour); see table 2.

Discussion Study limitations include small study numbers and low (o)AHI. Notwithstanding these limitations, CWE had significantly higher cESS and PSQ-SRBD scores than controls, reflecting previously published data. The utility of PSQ-SRBD in predicting OSA in CWE is low, in contrast to studies performed in healthy children. The study is ongoing.

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EVALUATION OF THE UTILITY OF THE EPWORTH SLEEPINESS SCALE (ESS), FOR TRIAGING INSOMNIA REFERRALS FOR ASSESSMENT AND TREATMENT

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Introduction Excessive daytime sleepiness is generally less prevalent in insomnia when compared with other sleep disorders.¹ As a result of this, the Epworth Sleepiness Scale (ESS)² is currently used by our service to triage patients referred by their GP with symptoms of insomnia for assessment. Patients with an ESS 0–3 are triaged straight to assessment in a joint sleep medicine and clinical psychology clinic. Patients with an ESS 4 + are first triaged for further investigation, using actigraphy, oximetry and full overnight polysomnography to look for other elements of sleep disturbance apart from insomnia. This audit aimed to evaluate the effectiveness of the current triaging process and review patient treatment pathways arising from this.

Methods Data was analysed for 131 patients, 86 females (age 16–87, mean 49.6), and 45 males (age 19–84, mean 52.98), from the joint insomnia clinic between February 2018 and March 2019. ESS of 0–3, 4–10, and 11+, were analysed separately to look for associations between the ESS and diagnoses, in order to evaluate the utility of the current triaging process.

Results Figures 1 and 2 show diagnoses/treatment pathways.

As shown as the ESS increased, there was a shift from psychological to physiological sleep pathology. This is also reflected in the change from psychological to medical intervention, with the exception of drug therapy for delayed sleep in ESS 0–3. Those with an Epworth of 4–10 had more of a

Abstract P048 Figure 1 Diagnosis by Epworth sleepiness score (ESS)

Abstract P048 Figure 2 Treatment pathway for Epworth sleepiness Scores (ESS)

diverse and comorbid presentation, while ESS 11+ was mostly physiological pathology.

Discussion This audit demonstrated our current triaging process using Epworth scores is effective in directing patients to the most appropriate care pathway. The vast majority of those with the lowest Epworth scores accessed psychological treatment in the form of CBT-I, whilst the utility of further

objective investigation in those with ESS 4+ was also demonstrated.

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