

Reliability of Patient Self-Assessment for Modified Mallampati Score

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Studies show that there is a correlation between Modified Mallampati Score (MMS) and presence and severity of obstructive sleep apnea (OSA), this measurement being a common part of patient examinations.^{1,2} As a screening method sleep clinics and primary care centres can use questionnaires, as this method has been shown to predict OSA prior to full polysomnography.^{3,4} We asked whether patients could assess their own score as part of a service-improvement audit, with the aim of validating a home-scoring system that could be added to pre-outpatient sleep clinic questionnaires, or used as a screening method in primary care.

We assessed 50 patients (age range 28-76 years, mean age 52.14 years, 17 female, 33 male), referred for suspected OSA. MMS scores were taken by an experienced clinical physiologist. Once the observer had taken the measurement, standardized verbal instructions were given and patients were invited to assess their own score using a mirror in a well-lit room, comparing their view to a large MMS chart. They were instructed on posture, head position and asked not to phonate in order to standardize the view of the oropharyngeal structures.⁵ Once instructions were issued, no further intervention was made.

Thirty-eight patients agreed with the physiologist. Seven answered within one classification, and 3 were greater than 1 classification from the physiologist. Two patients did not answer. Agreement between physiologist and patients was analyzed using Cohen's kappa and Spearman's correlation coefficient using the 95% confidence interval. Spearman's correlation showed good correlation between physiologist and patient assessments ($\rho = 0.836$). Both standard kappa ($\kappa = 0.717$) and weighted kappa ($\kappa = 0.768$, crediting patients who scored within 1 classification of the physiologist) show good strength of agreement between physiologist and patients.

Our results show that following standardized spoken instructions, 76% of our 50 patients were able to assess their own MMS, and the majority of the remain-

der were able to score within one classification of an experienced observer. Statistical analysis shows good correlation and strength of agreement between physiologist and patients. Although further investigation using written instructions for the patient at home and subsequent comparison with the physiologist's scores are required to further evaluate its predictive value, self-assessed MMS score could be a valid addition to screening questionnaires as a predictor of OSA.

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DISCLOSURE STATEMENT

The authors have indicated no financial conflicts of interest.