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Longitudinal Surveillance and Care Coordination in Rapid Eye Movement (REM) Sleep Behavior Disorder



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Introduction

REM Sleep Behavior Disorder (RBD) has a strong association with neurodegenerative disorders with the majority of patients phenoconverting to an alpha-synucleinopathy when monitored longitudinally. While yearly surveillance is recommended, there is a lack of an interdisciplinary approach to counseling and management. The aim of this project is to study the counseling and referral patterns of patients diagnosed with RBD at the Minnesota Regional Sleep Disorders Center (MRSDC).

Methods

Retrospective chart review of patients diagnosed with RBD was conducted at MRSDC. N=21 participants with RBD were identified based on ICD-10 diagnostic code (G47.52), elicited from electronic health record through analytical tools for the year 2017. Initial evaluation, polysomnography results, and subsequent visits were reviewed in order to ascertain referral source, methods of counselling and long term follow up patterns.

$21_{\rm patients\ with\ RBD\ identified\ through\ chart\ review}$ All received counseling on bedroom safety and the association between RBD and neurodegenerative disorders

15 patients followed longitudinally at MSRDC

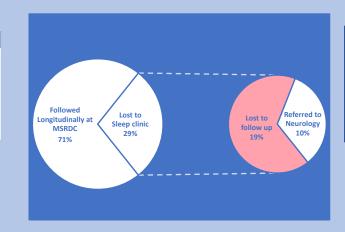
- 2 of which referred for neurological evaluation
- $6_{
 m patients}$ were lost to follow up in sleep clinic
- 2 of which were referred to neurology and were followed there

Results

Mean age at the time of RBD diagnosis was 58 years with preponderance for male gender (71%). Twenty cases had history of dream enactment behavior and one had a history of falling out of bed. Antidepressants were used in 57% of cases (12/21). All of the patients received counseling regarding risk of phenoconversion to neurodegenerative disorders and safety measures. Pharmacotherapy for dream enactment, with melatonin being the most common agent, was started in 90% of cases. Only seven patients had primary care visits following PSG where RBD was documented in visit diagnoses. 71% of the patients (15/21) were followed longitudinally at the MRSDC. Two of the 6 cases who were not followed in the sleep clinic were referred for neurologic evaluation and subsequently maintained follow up in neurology clinic. However, discussion about sleep related complaints was not documented in neurology clinic notes. Of the patients who maintained longitudinal follow up at MRSDC, two were referred for neurological evaluation.

Patient Characteristics			
Sex	71% male	15 of 21	
		Range 32	
		to 81	
Mean age	58 years	years	
Antidepressant use			
(at time of documented			
RSWA)	57%		
History of dream enactment	95%		
Subsequently prescribed			
pharmacotherapy for dream		74%	
enactment behavior	90%	melatonin	

Referral Source		
Primary care	12	
Psychiatry	4	
Neurology	1	
Self-referred	2	
Established patient	2	



Conclusion

Despite counselling of patients in the sleep clinic, 29% of patients with RBD were lost to follow up. Patient attrition from yearly surveillance and the low percentage of RBD patients with follow up in primary care, identifies an unmet need for improved coordination between sleep, neurology and primary care teams to ensure patient safety and timely early detection and management of neurological outcomes.