

Vertigo severity, comorbidity burden, and hearing status can influence treatment response among patients with Meniere's disease

Identifying Predictors of Treatment Response in Meniere's Disease: A Clinical Severity Staging System

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INTRODUCTION

- Meniere's disease (MD) negatively impacts quality of life¹⁻³
- Treatment recommendations are often heterogeneous and treatment response is difficult to predict^{4,5}
- Objective:** Identify predictors of response to conservative treatments and integrate this information into a clinical severity staging system

METHODS

- Design: Retrospective cohort study
- Population: Patients newly-diagnosed with MD in 2016-2019
- Primary Outcome: Response to conservative treatment
- Disease-related and comorbid factors were compared between treatment responders and nonresponders
- Clinically important factors were identified and integrated into a clinical severity staging system through conjunctive consolidation⁶⁻⁸

RESULTS

Clinical Characteristics of Treatment Responders and Nonresponders

Characteristics	No. (%)	
	Treatment Responders (n=49)	Treatment Nonresponders (n=29)
Age, mean (SD), years	55 (11)	56 (13)
Sex		
Female	28 (57)	15 (52)
Male	21 (43)	14 (48)
Vertigo Severity		
None/Mild	26 (53)	8 (28)
Moderate	13 (27)	10 (34)
Severe	10 (20)	11 (38)
Comorbidity Burden		
None/Mild	47 (96)	20 (69)
Moderate/severe	2 (4)	9 (31)
Hearing Loss		
Present	38 (78)	28 (97)
Absent	11 (22)	1 (3)

- Overall, 49 of 78 (63%) patients were responsive to conservative treatment

CONCLUSIONS

- Patients with less severe vertigo, few comorbidities, and no subjective hearing loss may be more likely to respond to conservative treatments**
- The development of a clinical severity staging system provides patient-level insight into therapeutic response
- This staging system can be used as a tool to help guide treatment selection and in provider-patient counseling and decision-making

Development of Otovestibular Severity Staging System (OSSS)

Vertigo Severity	Hearing Loss		Total
	Absent	Present	
None/Mild	7/7 (100)	19/27 (70)	26/34 (76)
Moderate	2/2 (100)	11/21 (50)	13/23 (58)
Severe	2/3 (67)	8/18 (44)	10/21 (48)
Total	11/12 (92)	38/66 (58)	49/78 (63)

Otovestibular Staging System (OSSS)

Alpha	11/12 (92)
Beta	19/27 (70)
Gamma	19/39 (49)

Development of the Clinical Severity Staging System (CSSS)

OSSS	Comorbidity Burden		Total
	None/Mild	Moderate/Severe	
Alpha	11/11 (100)	0/1 (0)	11/12 (92)
Beta	18/25 (72)	1/2 (50)	19/27 (70)
Gamma	18/31 (58)	1/8 (12)	19/39 (49)
Total	47/67 (70)	2/11 (18)	49/78 (63)

Clinical Severity Staging System (CSSS)

Stage 1	11/11 (100)
Stage 2	36/56 (64)
Stage 3	2/11 (18)

