

Charlson Comorbidity Index and Length of Hospitalization in Catatonia Subtypes

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BACKGROUND

- Catatonia is a significant epidemiological and clinical concern, manifesting across both medical and psychiatric conditions.
- It represents one of the most severe psychiatric presentations often leading to significant morbidity and mortality.
- The influence of medical comorbidities on catatonia outcomes remains uncertain.
- Catatonia can be classified into two distinct categories: catatonia associated with psychiatric diagnoses (C-APD) and catatonia due to another medical condition (C-AMC).
- The Charlson Comorbidity Index (CCI) assess 19 comorbidities and has been used to assess prognosis, clinical outcomes, and health risks.

OBJECTIVES

- To elucidate disparities in medical comorbidities as assessed by the CCI, between catatonia subtypes (C-APD vs C-AMC).
- To investigate how these medical comorbidities impact the length of hospitalization (LOH) for the catatonia subtypes.

METHODS

- Retrospective cohort (2001-2021) of adult patients hospitalized at Mayo Clinic in Rochester, MN.
- Individuals diagnosed with Catatonia based on International Classification of Diseases (ICD) codes.
- Data extraction from electronic medical records.
- IRB approved. Only patients with consent to use medical records for research were included.

STATISTICAL ANALYSIS

- Means and Standard Deviations (SD) for continuous variables.
- Frequencies and percentages for categorical variables.
- T-test for continuous variables and Fisher's exact test for categorical variables.
- Logistic regression model to adjust for confounders.

RESULTS

Characteristics	C-APD (N=190)	C-AMC (N=59)	p value
Age			
Mean (SD)	47.9 (20.9)	49.3 (18.5)	
Gender			
Female	103 (54.2%)	35 (59.3%)	
Male	87 (45.8%)	24 (40.7%)	
Race			
White	160 (84.2%)	54 (91.5%)	
Black or African American	19 (10.0%)	3 (5.1%)	
Asian	9 (4.7%)	2 (3.4%)	
Other	2 (1.1%)	0 (0.0%)	
History of Stroke	27.5% (5)	13.8% (8)	0.003
Bush-Francis Catatonia Rating Scale - severity score			
Mean (SD)	11.2 (5.5)	13.7 (5.6)	0.002
Length of hospital stay			0.02
Mean (SD)	25.7 (24.2)	35.3 (41.0)	
Mean CCI score	2.5	2.9	0.34
Mild CCI	56.1% (105)	53.4% (31)	
Moderate CCI	19.8% (37)	25.9% (15)	
Severe CCI	24.1% (45)	20.7% (12)	
Treatment			
No Treatment	1 (0.5%)	1 (1.7%)	
Lorazepam	177 (93.2%)	56 (94.9%)	
ECT	104 (54.7%)	23 (39.0%)	
Other	6 (3.2%)	6 (10.2%)	

Table 1. Demographic and clinical characteristics

Ninety-five percent of patients had a history of mental illness: depression (44%), schizophrenia (36.8%), and bipolar disorder (17.6%) were the most common.

RESULTS

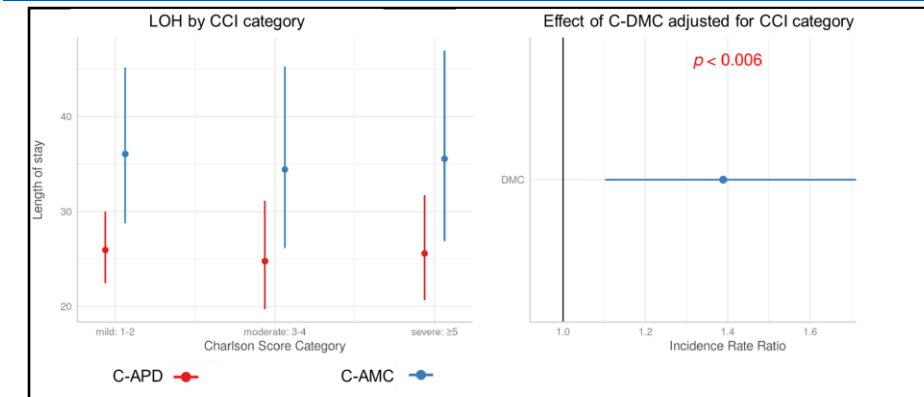


Figure 1. LOH and CCI

- When adjusting for CCI score, individuals with C-AMC had a hospital stay 1.39 (p=.006) longer than these with C-APD.
- The most frequent comorbidities were diabetes (11.8%), heart failure (11.4%), dementia (8.6%) and cancer (8.6%) with no significant differences among catatonia phenotypes except for history of stroke.

DISCUSSION

- In both groups, C-APD and C-AMC, almost 50% of individuals had considerable comorbid conditions, categorized as moderate or severe on the CCI, with no significant differences among subtypes.
- Those individuals with C-AMC showed a tendency to higher comorbidities and longer hospital stays.

CONCLUSIONS

- The etiology of catatonia and its comorbidity profile may influence the requirements of inpatient care.
- It is relevant to properly approach comorbid conditions in patients with catatonia regardless of the underlying cause.

REFERENCES

