

The Impact of Admission Service on Catatonia Treatment: A Cross-sectional Analysis of Inpatient Catatonia Treatment at a Tertiary Care, Academic Hospital Adam Mullet, MD;¹ Mathew Gregoski; PhD, MS;² Benjamin Kalivas, MD^{1,3}



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Introduction

- First line treatment for catatonia is benzodiazepines (1).
- If unresponsive to benzodiazepines or in cases of medical emergency, electroconvulsive therapy (ECT) is treatment of choice (2)
- Purpose to determine any potential difference with dosing of benzodiazepines and ECT delivery with patients originally admitted to medsurg unit versus inpatient psychiatry.

METHOD

- Cross-sectional study of hospitalized patients at a 740-bed, tertiary care, academic hospital.
- Inclusion criteria all inpatient encounters from January 2013 through February 2023 with any admission with any diagnosis of 'catatonia' involving treatment with ECT.
- Independent variable: admission service (psych v med-surg)
- Dependent variables: dosing of lorazepam (max and on dc) and parameters of ECT treatment (number of sessions, average seizure duration, frequency of sessions, LOS prior to ECT)
- Manual chart review to record demographics and details of catatonia treatment with ECT and lorazepam

RESULTS

44 admissions representing 22 distinct patients

Table 1. Patient Demographics.

	# of Admissions	Average Age	%Male	Average Length of Stay (Days)
Med-surg	14	48.14	50	52.71
Psych	30	58.8	16.67	61.17
Total	44	55.41	27.27	58.48

Table 2. Max Lorazepam dosing

	Max dose (median)	Max dose (mean, SD)	Max dose (range)
Med-surg	10	13.43 + 8.28	6, 30
Psych	6	7.68 + 5.86	0, 24
Total	8	10.16 + 7.28	0, 30

 Table 3. Discharge Lorazepam Dosing

	Dc dose (median)	Dc dose (mean, SD)	Dc dose (range)
Med-surg	3	5.93 + 6.39	0, 24
Psych	3	3.01 + 1.72	0, 6
Total	3	4.16 + 3.00	0, 24

 All comparisons not significantly different (psych admission service compared to non psych admission service)

Figure 1. LOS Prior to ECT

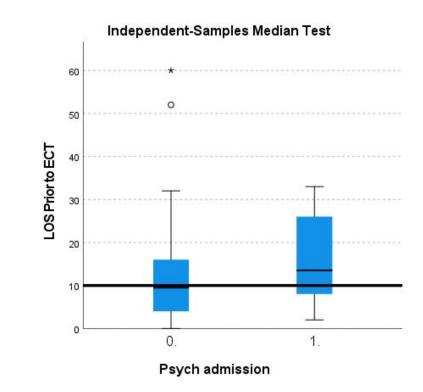


Figure 3. Average Seizure Duration

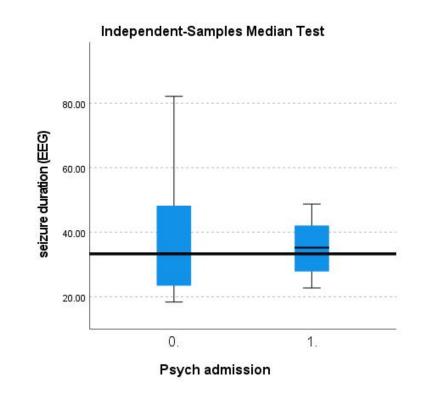


Figure 2. #ECT Sessions

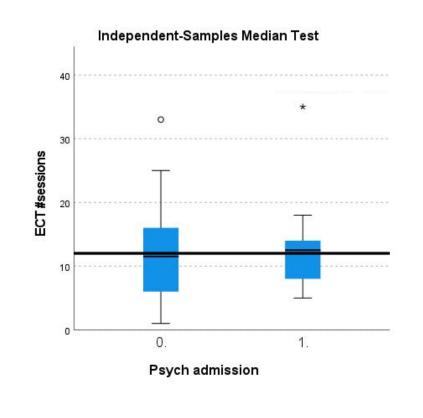
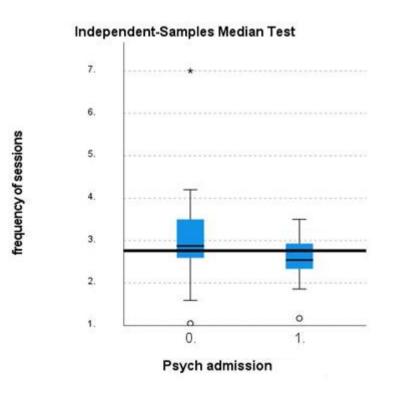


Figure 4. Sessions per week



CONCLUSIONS

- Admission service impact on Lorazepam dosing (both max and at dc) not statistically significant
- Admission service impact on ECT delivery (LOS prior to ECT, #ECT sessions, average seizure duration, and sessions per week) not statistically significant

SUMMARY

- A large case series of patients with catatonia treated in both psychiatric and medical hospitals
- Similarities in lorazepam and ECT delivery suggest that admissions for catatonia at this hospital are treated similarly regardless of admission service

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