CATATONIA: NOVEL CLASSIFICATION AND TREATMENT PROPOSAL

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OBJECTIVES

MAIN

- 1) Recognition of catatonia as a separate nosological entity, within psychotic disorders.
- 2) To propose a new classification and treatment.

SECONDARY

To minimize its underdiagnosis to further establish a fast, effective treatment thereby reducing its morbidity and mortality rate.

INTRODUCTION

Catatonia is diagnosed by at least 3 of the following signs:

Stupor, catalepsy, waxy flexibility, mutism, negativism, posturing, mannerisms, stereotypy, agitation not influenced by external stimuli, grimacing, echolalia, and echopraxia.

Some other criteria used in the Bush-Francis rating scale are: automatic obedience, autonomic abnormalities, and the presence of a grasp reflex.

Epidemiology

Mean prevalence 9%, ranging from 48.5% in Uganda to 1.9% in Mexico.

Polymorphic clinical presentation ranging from:

- Marked lack of response (akinesia);
- Marked agitation (hyperkinesia);
- Both simultaneous presentations (akinesia / hyperkinesia)

Physiopathology

Alteration of frontoparietal cortical and subcortical nerve networks
Imbalance in the GABA : Glutamate ratio at the level of cortical columns III and IV

MATERIALS AND METHODS

A retrospective, non-systematic review of scientific literature, including historical and current classification systems in addition to a descriptive analysis of the main author's last 3 years experience.

RESULTS

Catatonia can be secondary to mental disorders, medical conditions, use of substances/medications, or idiopathic causes. Its etiology is varied, and the physiopathology can be the result of triggering factors as psycho-social stress. Accurate diagnosis enables the quick instauration of proper treatment. Authors recommend treating acute catatonia immediately, assuming all can be malignant, as well as the underlying disorder. Epidemiological results are highly heterogeneous, calling for a cautious interpretation. The main author's experience has not been fully validated by medical practice or rigorous clinical investigations yet.

Table 1: Novel Clasification and Treatment Proposal

Evolution	Etiology / Primary Cause	Course	Treatment	n
Acute Catatonia	Multiple. Eg. Congenital malformations during the 1° Trim of pregnancy; Puerperium	Acute, polymorph onset, phasic course with total remission, without defect. It can recur.	1.-Benzodiazepines (Gold standard: Lorazepam) 2.-Electroconvulsive therapy 3.-Atypical antipsychotics (Clozapine, Olanzapine)	40
Periodic Catatonia	Genetic. Eg. 15q15 (SLC30A4); 22q13.33 (MLC1)	Acute onset with cyclic / periodic course and remission with mild progressive defect. With recurrence.	1.-Benzodiazepines (Gold standard: Lorazepam) 2.-Electroconvulsive therapy 3.-Atypical antipsychotics 4.-Antiepileptics and Mood stabilizers	10
Chronic Catatonia	Multiple. E.g. Maternal infections during the 2° Trim of pregnancy; obstetric complications	Chronic, without remission and with great progressive defect. Very similar to schizophrenia.	1.-Atypical antipsychotics 2.-Electroconvulsive therapy 3.-Benzodiazepines???	50

PROGNOSIS

CONCLUSIONS

The new classification proposal based on the results would allow an effective and rapid diagnosis and treatment, aimed at reducing the underdiagnosis, morbidity and mortality of patients. Catatonia should be considered a separate nosological entity, within the psychotic disorder. The validation of this work by other authors is very significant in order to improve the classification system and faithfully reflect the catatonic phenomenon.

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Practice Points

- Initiate appropriate measures to **reduce the risk of medical complications from catatonia**, such as deep vein thrombosis and dehydration.
- A **parenteral lorazepam challenge is considered first-line therapy** for catatonia and is useful in confirming the diagnosis.
- **Implement electroconvulsive therapy** as soon as it is clear that pharmacotherapy is less than fully effective.

Does the patient respond?

YES

Discontinue ECT
Continue treating the underlying disorder

NO

Continue ECT
Restart more aggressive pharmacologic treatment