

# A Case Series of Comorbid Catatonia and Functional Neurologic Disorder with Impaired Awareness

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## INTRODUCTION

### BACKGROUND

Functional neurologic disorders encompass a spectrum of conditions characterized by disturbances in awareness, here termed functionally impaired awareness disorders (FIAD) after recently proposed nomenclature (Milano et al., 2023).

Accurate diagnosis of FIAD is complicated by the rarity of cases and inconsistent terminology, including functional coma, psychogenic coma, resignation syndrome, Grisi siknis, and non-epileptic seizure disorder (Baxter & White, 2003; Ryznar & Wilcox, 2019).

FIAD share overlapping symptoms with catatonia such as stupor, mutism, and reduced ability to initiate voluntary movements. Thus, accurately diagnosing a functional neurologic disorder (FND) in patients with a history of catatonia is challenging.

### OBJECTIVE

This case series aims to contribute to the understanding of patients with a mixed presentation of catatonia and FIAD, highlighting the importance of methodical diagnostic approaches and a multidisciplinary team approach.

### CASE SERIES

We present two cases of patients with catatonia complicated by FIAD. Both patients presented with stupor and mutism prompting concern for catatonia.

Throughout their prolonged hospital stays, these patients had varying responses to ECT and medication changes. Limited response to gold standard catatonia treatment in combination with lack of exam findings specific to catatonia raised concern for functional etiologies.

After shifting to psychotherapeutic approaches as an adjunct to ongoing somatic treatments, the patients had positive responses and were ultimately discharged.

## CASE SERIES

	Patient #1	Patient #2
<b>Presenting Problem</b>	A 22-year-old female with a past psychiatric history of major depressive disorder, unspecified anxiety, eating disorder, and catatonia presented to the ED for withdrawal and unresponsiveness.	A 32-year-old male with a past psychiatric history of schizoaffective disorder, obsessive-compulsive disorder, generalized anxiety disorder, and recurrent catatonia presented to the ED for progressively decreased responsiveness.
<b>Pertinent Exam Findings</b>	<ul style="list-style-type: none"> <li><b>Immobility/Stupor:</b> Lying in bed with eyes closed, unresponsive to questions or commands</li> <li><b>Mutism:</b> No speech</li> <li><b>Gegenhalten:</b> Actively resisted passive manipulation of her extremities commensurate with the force applied</li> <li><b>Forced eyelid closure</b></li> </ul>	<ul style="list-style-type: none"> <li><b>Immobility/Stupor, Staring:</b> Lying in bed and staring for prolonged periods of time</li> <li><b>Mutism:</b> Does not respond to questions verbally, interacted with others via writing</li> <li><b>Grimacing:</b> Repetitive twitches in left cheek (present prior to presentation)</li> <li><b>Withdrawal:</b> Minimal interaction for &lt;1 day</li> </ul>
<b>Treatment Response</b>	<p>⚠️ <b>18 Bitemporal ECT Treatments</b> → Increased PO intake and ambulatory immediately after treatments but continued to be nonverbal &amp; minimally interactive</p> <p>💬 <b>16 Psychotherapy Sessions</b> → Gradually became more interactive to the environment and was able to discharge to outpatient care</p> <p><b>Hospital Length of Stay:</b> 58 days</p>	<p>⚠️ <b>5 Bitemporal ECT Treatments</b> → Initially became more confused, anxious, and paranoid</p> <p>💬 <b>4 Psychotherapy Sessions (in conjunction with ECT)</b> → Symptoms gradually resolved and at the time of discharge he was verbally interactive with the environment</p> <p><b>Hospital Length of Stay:</b> 19 days</p>

## DISCUSSION

- Catatonia and FND often mimic each other but require different treatment approaches.
- The pathophysiology of both these disorders is not fully understood; they may involve disturbances in brain networks responsible for consciousness, motor control, and autonomic regulation. Thus, there may be a role for functional or structural imaging in diagnostic workup.
- Physical exam can elucidate helpful differentiating features such as catalepsy, echopraxia, stereotypy, or mannerisms.

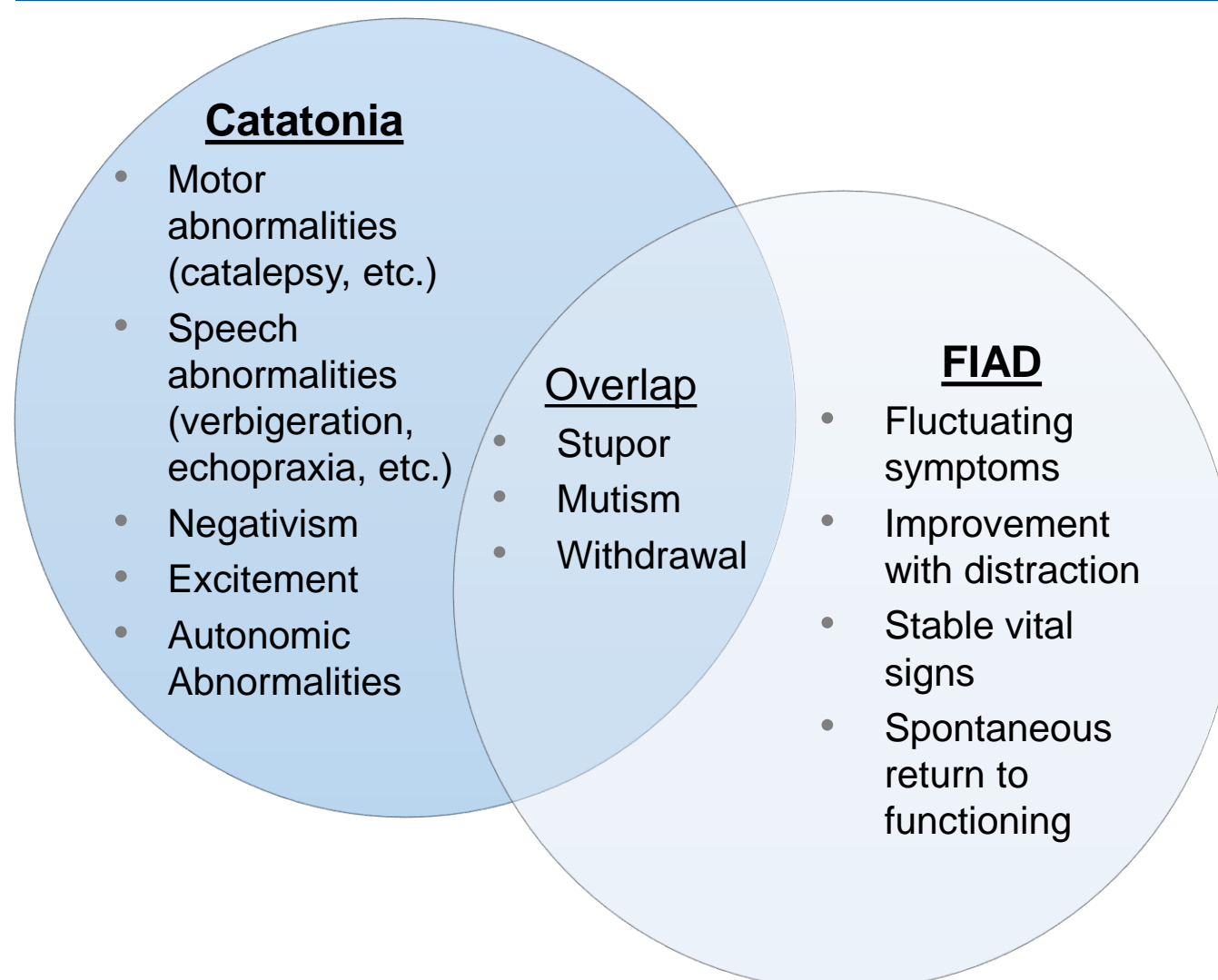
## CONCLUSIONS

- FIAD and catatonia can be differentiated via attentive physical examination observations.
- Early diagnosis and interdisciplinary management of comorbid catatonia and FIAD are essential to improving outcomes via preventing unnecessary treatments and prolonged hospital stays.
- Further research is needed to investigate the underlying mechanisms and develop evidence-based treatment strategies for patients with this complex comorbidity

## REFERENCES

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## OVERLAPPING CHARACTERISTICS



## SIGNS

### Possible Clinical Signs Differentiating FIAD from Other Organic Etiologies<sup>4</sup>

- Forced eyelid closure
- Reaction to or withdrawal from painful stimuli (sternal rubbing, nail bed, etc.)
- Avoidance of self-injury during hand-drop test
- Intact reflexes (oculocephalic, oculo-vestibular, etc.)
- Spontaneous eye movements when turning/rolling the patient