Psychogenic Unresponsiveness

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KEYWORDS

• Stupor • Coma • Catatonia • Psychogenic

PSYCHOGENIC UNRESPONSIVENESS

Psychiatric illness most commonly presents as a disturbance in the form and content of consciousness. Psychiatric illness may, however, present to the neurologist as an unresponsive state suggesting a disturbance in the level of consciousness, thereby creating diagnostic challenges with specific implications for treatment.

From a neurologic perspective, stupor and coma are organic impairments in the level of consciousness during which the patient has a complete or partial absence of awareness of self and the environment.[1] Organic stupors (OSs) and comas are caused by a variety of biological insults to the integrity and/or electrochemical functioning of the neural structures that support wakefulness: the ascending reticular activating system (ARAS) and its thalamic connections or widely distributed cortical and subcortical networks.[2–4] Stupor and coma are part of a continuum in the pathology of wakefulness. At the normal end is the awake and alert patient. With escalating severity of disruption, the patient passes through the stages of drowsiness (obtundation), then stupor, and finally coma. These and other terminologies in use have, however, created confusion with uncertain boundaries between the categories of implied severity. Pathologic degradations in the level of consciousness are better defined by observable and elicitable behaviors at the bedside, which have been operationalized in the most commonly used assessment tool, the Glasgow Coma Scale (GCS) (**Table 1**).

Psychiatric illness may also present cross-sectionally as an unresponsive state and may additionally feature characteristic and specific motor disturbances. These motor disturbances include catalepsy/waxy flexibility (in which the patient allows a body part to be placed into fixed even bizarre positions by the examiner), posturing (the patient holds self-initiated persistent positions), and rigidity (a motiveless maintenance of

This work was supported by the ERIN Fund, BC Neuropsychiatry Program.
The author has nothing to disclose.
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Neurol Clin 29 (2011) 995–1006
doi:10.1016/j.ncl.2011.07.006 **neurologic.theclinics.com**
0733-8619/11/$ – see front matter

Table 1
The GCS

Eye Opening		Best Verbal Response		Best Motor Response	
Observation	**Score**	**Observation**	**Score**	**Observation**	**Score**
Spontaneous	4	Orientated	5	Obeying	6
To speech	3	Confused	4	Localizing to pain	5
To pain	2	Inappropriate words	3	Withdrawal response	4
None	1	Incomprehensible sounds	2	Flexor decorticate response	3
—		None	1	Extensor decerebrate response	2
—				None	1

From Teasdale G, Jennett B. Assessment of coma and impaired consciousness: a practical scale. Lancet 1974;2(7872):81–4; with permission.

a rigid position despite efforts to be moved).[5,6] Unlike the mechanisms in OSs and coma, the unresponsive component of these psychiatric states is caused by varying degrees of muteness and immobility linked to the underlying primary psychiatric condition. At its extreme, a psychiatrically mute and immobile patient may be easily mistaken for an organically comatose patient with no verbal output and no motor responses, both patients scoring 1 on each of the relevant GCS subscales. Here, however, the resemblance with typical stupor and coma ends, although, rarely, such patients do present with flaccid coma.[7–9] Most patients with psychiatrically linked hyporesponsive states do not appear drowsy or asleep.[10] They typically display eyes open staring[5,10] (a form of oculomotor posturing[6]). If closed, the eyes resist being pried open. To an external observer, this resistance to passive movement, similar to the patient's failure to initiate movement on command, appears motiveless, a phenomenon known as negativism. Negativism must be distinguished from an identifiably angry, defiant, and uncooperative patient. Such consciously motivated behavior is labeled as oppositional and is not part of the catatonic syndrome. Negativism is also reflected in gegenhalten (a seemingly motiveless resistance to passive movement, which is proportional to the strength of the stimulus) and rigidity (a seemingly motiveless maintenance of a rigid position) when attempting to move a patient's limbs. By contrast, unless there is underlying intrinsic central nervous system (CNS) injury, decorticate, and decerebrate posturing, spasticity and extensor plantar responses are not seen. Some of these psychogenically driven motor abnormalities, such as gegenhalten and rigidity, may also be seen in various organic brain pathologic conditions and can only then be correctly attributed by the company they keep.

The most common diagnostic label applied to such psychiatrically based presentations is catatonia or the catatonic syndrome, with mutism and immobility as its most consistent features.[5,11] This term is, however, confusing because it is used to describe unresponsiveness alone, unresponsiveness with typical motor disturbances, or motor disturbances alone.[7,9,11,12]

Catatonia can be separated into 2 factors: one that identifies mutism, negativism, and stupor and correlates to the syndrome of negativistic stupor and the other identifying stereotypy, catalepsy, and automatic obedience.[13,14] The separation of catatonic inhibition, that is, mutism, motor inhibition, rigidity, gegenhalten, and parakinesias (bizarre awkward or disconnected voluntary movements), from other catatonic motor symptoms was also found in another more recent factor analysis of patients presenting with a catatonic syndrome.[15] Catatonia is thus best reserved as a specifier of the characteristic motor disturbances but using existing neurologic