CONDITION

Catatonia

Learn how catatonia affects movement, speech, and behavior, what can cause it, how clinicians diagnose it, and why prompt treatment matters.

WHAT IT IS
Syndrome affecting movement, speech, behavior, and responsiveness

BODY SYSTEM
Nervous system

MAIN SYMPTOMS
Very little movement, mutism, unusual postures, severe agitation

WHAT CAUSES IT
Psychiatric, neurological, medical, or medication-related factors

HOW IT IS DIAGNOSED
Clinical assessment of characteristic signs

MAIN TREATMENT
Benzodiazepines, electroconvulsive therapy, and underlying-cause treatment

CAN IT BE CURED?
Sometimes - prompt treatment can bring recovery

IS IT AN EMERGENCY?
Sometimes - fever, severe stiffness, or unstable vital signs

LONG-TERM OUTLOOK
Often treatable, but recurrence and serious complications are possible

Overview

Catatonia is a condition that affects movement, speech, behavior, and a person's response to the world around them. Someone may become nearly motionless and stop speaking. Others develop unusual postures, repetitive movements, or severe agitation that does not appear connected to what is happening around them.

Catatonia is not limited to schizophrenia. It can occur with mood disorders, other psychiatric conditions, neurological illnesses, infections, autoimmune disease, medication effects, and substance withdrawal. In some cases, more than one factor may be involved.

The condition matters because it can interfere with eating, drinking, movement, communication, and basic medical care. Remaining still for long periods can also cause blood clots, pressure injuries, muscle damage, and other complications. A severe form called

malignant catatonia can involve fever and unstable blood pressure, heart rate, or breathing.

Catatonia is often treatable. Prompt recognition is important because a person who appears unresponsive, resistant, or agitated may be unable to explain what they are experiencing. Symptoms should not be assumed to be intentional behavior.

Symptoms

Catatonia can look different from one person to another. Symptoms may begin suddenly or develop over days or longer. They may also change over time.

Clinicians look for a pattern of characteristic features, including:

A person may also stare, withdraw, refuse food or fluids, or have difficulty completing everyday activities. Some people later remember what happened and describe intense fear, confusion, or a sense that they could not move or speak.

Catatonia requires prompt medical assessment. Seek emergency help if someone becomes difficult to wake or barely responsive, stops eating or drinking, develops new severe agitation, or cannot safely care for basic needs.

Fever, marked muscle stiffness, heavy sweating, rapid breathing, or major changes in blood pressure or heart rate require emergency care. These findings may indicate malignant catatonia or another serious condition with similar symptoms.

- Stupor: very little movement or response to the environment despite being awake
- Mutism: speaking very little or not at all
- Posturing: holding a position against gravity for an unusually long time
- Catalepsy: maintaining a position after someone else places the body in it
- Waxy flexibility: mild, even resistance when another person moves a limb, as if bending soft wax
- Negativism: resisting instructions or doing the opposite without a clear reason
- Agitation: excessive movement that is not explained by outside events
- Stereotypy: repeated, non-purposeful movements
- Mannerisms: exaggerated or unusual versions of ordinary actions
- Grimacing: repeated or sustained unusual facial expressions
- Echolalia: repeating another person's words

- Echopraxia: copying another person's movements

Causes and risk factors

Catatonia is a syndrome, meaning it is a recognizable group of symptoms rather than one disease with a single cause. It is most often associated with an underlying psychiatric, neurological, or medical condition.

Mood disorders, including bipolar disorder and severe depression, are important psychiatric causes. Catatonia may also occur with schizophrenia-spectrum disorders, autism spectrum disorder, and other mental health conditions.

Medical and neurological causes include seizures, encephalitis, stroke, brain injury, metabolic disturbances, and certain autoimmune conditions. Encephalitis means inflammation of the brain and may result from infection or an immune system disorder. Anti-NMDA receptor encephalitis is one autoimmune illness that can produce psychiatric symptoms, movement changes, seizures, and catatonia.

Medicines and substances may contribute as well. Catatonia has been reported after withdrawal from benzodiazepines like diazepam or lorazepam , which are sedating medicines used for conditions such as anxiety and seizures. Other medication changes, intoxication, or withdrawal may need to be considered based on the circumstances.

People who have had catatonia before may be at risk of another episode, especially if the underlying condition returns or treatment is stopped abruptly. However, catatonia can also occur in someone with no previous episode. Symptoms alone do not reveal the cause, so a medical evaluation is essential.

Diagnosis

There is no single blood test or scan that confirms catatonia. Diagnosis is based mainly on observed symptoms, examination, medical history, and information from family members or caregivers.

The Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition, Text Revision describes 12 characteristic signs. At least three are required for the syndrome to meet its diagnostic criteria. Clinicians may use a structured assessment tool, such as the Bush-Francis Catatonia Rating Scale, to record symptoms and monitor changes.

The evaluation often includes questions about when the symptoms began, recent infections, medication changes, substance use, sleep, mood symptoms, seizures, and previous episodes.

Because the person may not be able to answer, observations from people who know them can be especially valuable.

A physical and neurological examination helps identify fever, rigidity, abnormal reflexes, dehydration, injuries, or signs of another illness. Tests are selected for the individual situation and may include blood or urine studies, brain imaging, an electroencephalogram, or a lumbar puncture. An electroencephalogram , or EEG, records electrical activity in the brain and can help detect seizures. A lumbar puncture collects fluid from around the spinal cord to look for infection or inflammation.

Clinicians must also consider conditions that can resemble catatonia. These include delirium, nonconvulsive seizures, severe Parkinsonism, medication-induced movement disorders, and locked-in syndrome. Delirium is a sudden disturbance in attention and awareness, usually caused by a medical problem.

Neuroleptic malignant syndrome can cause fever, muscle rigidity, confusion, and unstable vital signs, often after exposure to certain antipsychotic medicines. Serotonin syndrome is another medication-related condition that can cause agitation, fever, abnormal movements, and overactive reflexes. Distinguishing among these conditions affects treatment.

A clinician may use a monitored benzodiazepine challenge, often with lorazepam, to support the diagnosis. A clear improvement in movement, speech, or responsiveness can strengthen the suspicion of catatonia. A limited response does not completely rule it out.

Treatment and management

Treatment generally has three parts: addressing catatonia itself, treating the underlying cause, and preventing complications. The setting depends on symptom severity and the person's ability to eat, drink, move, and remain medically stable. Hospital care is often needed when symptoms are significant.

Benzodiazepines are commonly used as initial treatment. Lorazepam is the most studied option. These medicines affect signaling in the brain and may produce a noticeable improvement in movement or communication. Treatment must be supervised because benzodiazepines can cause sedation and affect breathing, especially in people with certain medical conditions or when combined with other sedating substances.

Electroconvulsive therapy, or ECT , is another established treatment. During ECT, a controlled electrical stimulus produces a brief seizure while the person is under anesthesia and receiving a muscle relaxant. ECT may be considered when benzodiazepines do not provide enough improvement, when symptoms are severe, or when malignant catatonia is suspected. It may

also be selected earlier based on the underlying illness and clinical situation.

ECT is not the same as an uncontrolled seizure. Before treatment, the medical team reviews anesthesia risks, explains expected benefits and possible effects such as short-term confusion or memory problems, and follows an informed-consent process appropriate to the person's condition and local law.

The underlying cause also needs attention. This may involve treating an infection, seizure disorder, autoimmune illness, metabolic problem, or mood episode. Medication changes should be managed by a clinician rather than made abruptly.

Antipsychotic medicines require careful consideration. In some situations they may worsen catatonia or increase the risk of neuroleptic malignant syndrome, particularly before catatonia has improved. If an antipsychotic like olanzapine or risperidone is needed for an underlying psychotic disorder, specialists weigh the risks, timing, and monitoring needs.

Supportive care is a central part of treatment. The care team may monitor food and fluid intake, vital signs, kidney function, and skin condition. Assistance with repositioning and mobility can help prevent pressure injuries and blood clots. Some people require temporary nutritional or intravenous support when they cannot safely eat or drink.

Complications

Untreated or prolonged catatonia can affect several body systems. Reduced fluid intake may cause dehydration and kidney problems. Poor nutrition can lead to weakness and delayed recovery.

Immobility raises the risk of pressure injuries, joint stiffness, muscle loss, and blood clots in the legs. A clot can travel to the lungs and interfere with breathing. Difficulty swallowing may allow food, fluid, or saliva to enter the lungs, causing aspiration pneumonia.

Severe agitation may lead to exhaustion or accidental injury. Muscle breakdown can release substances that damage the kidneys. Malignant catatonia can cause fever and dangerous changes in blood pressure, heart rate, breathing, and consciousness.

These risks are reasons for timely medical care, but they do not occur in every case. Monitoring, supportive care, and treatment of the catatonia can lower the chance of complications.

Follow up

Follow-up focuses on recovery, recurrence prevention, and treatment of the underlying condition. The care plan may involve psychiatry, neurology, primary care, or another specialty depending on the suspected cause.

After symptoms improve, clinicians may track speech, movement, food and fluid intake, sleep, and the ability to manage daily activities. Rehabilitation or physical therapy may help if a person became weak or stiff during a prolonged episode.

Medicines should be changed only with professional guidance. Abruptly stopping a benzodiazepine can cause withdrawal and may contribute to recurrent symptoms. If ECT was used, the treatment team will explain whether additional sessions or maintenance treatment should be considered.

Routine follow-up is appropriate for reviewing recovery, medication effects, test results, and early warning signs. Families and caregivers may be asked to watch for renewed withdrawal, reduced speech, prolonged staring, unusual postures, repetitive movements, or unexplained agitation.

Emergency assessment is needed if symptoms return and the person becomes unresponsive, cannot eat or drink, develops fever or severe stiffness, has trouble breathing, or shows rapidly worsening agitation or confusion.

Sources

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