CONDITION

Delirium tremens

Delirium tremens is a severe form of alcohol withdrawal that causes sudden confusion and dangerous nervous system overactivity.

WHAT IT IS
Severe alcohol withdrawal with delirium and nervous system overactivity

BODY SYSTEM
Brain and nervous system

MAIN SYMPTOMS
Confusion, agitation, tremor, hallucinations

WHAT CAUSES IT
Abrupt alcohol reduction after prolonged heavy use

HOW IT IS DIAGNOSED
Clinical assessment; tests rule out other causes

MAIN TREATMENT
Hospital benzodiazepines, close monitoring, and supportive care

CAN IT BE CURED?
Yes - usually resolves with prompt treatment

IS IT AN EMERGENCY?
Yes - immediate hospital treatment is required

LONG-TERM OUTLOOK
Usually full recovery; repeat withdrawal raises recurrence risk

Overview

Delirium tremens, often shortened to DTs, is the most severe form of alcohol withdrawal. It can develop when someone who has been drinking heavily for a long time suddenly stops drinking or sharply reduces how much they drink.

"Delirium" means a sudden disturbance in attention, awareness, and thinking. A person may not know where they are, may struggle to follow a conversation, or may become very agitated. Their alertness and behaviour can change quickly.

DTs also make the body's stress response dangerously overactive. This may cause shaking, sweating, fever, a fast heartbeat, high blood pressure, and hallucinations. Hallucinations are experiences such as seeing or hearing things that are not there.

Delirium tremens is a medical emergency. It requires hospital treatment because symptoms can worsen quickly and may lead to seizures, heart rhythm problems, overheating, or other serious complications.

DTs are not the same as a hangover or ordinary alcohol withdrawal. Most people who experience alcohol withdrawal do not develop delirium tremens. However, it is difficult to predict the course safely without assessing the person's drinking history, previous withdrawals, current symptoms, and general health.

Symptoms

Alcohol withdrawal symptoms can begin within hours after alcohol use stops or drops substantially. Early symptoms may include anxiety, nausea, sweating, headache, poor sleep, a racing heart, and shaking.

Delirium tremens usually develops later, often about two to four days after the last drink. It can begin earlier or later, so timing alone cannot rule it in or out.

Typical features include:

Withdrawal seizures may happen before or during severe withdrawal. They are often full-body seizures with loss of consciousness.

Hallucinations can also occur during alcohol withdrawal while a person remains alert and knows where they are. This is different from DTs, which involve delirium and impaired awareness. Both situations need prompt medical assessment.

- Severe confusion or disorientation
- Difficulty paying attention or following a conversation
- Marked agitation, fear, or restlessness
- Shaking, heavy sweating, and a fast heartbeat
- Hallucinations, often involving vivid sights or sensations
- Fever, raised blood pressure, or rapid breathing
- Symptoms that fluctuate, with brief clearer periods followed by worse confusion

Causes and risk factors

Long-term heavy alcohol use changes how the brain controls alertness and activity. Alcohol slows some brain signals. Over time, the brain adapts by increasing signals that keep it active.

If alcohol is suddenly removed, these activating signals can become unopposed. The brain and nervous system then become excessively active, producing withdrawal symptoms. In severe cases, this leads to delirium tremens.

A person may be at higher risk if they have:

DTs can develop even when alcohol is still detectable in the blood. A rapid fall from a person's usual alcohol level may be enough to trigger withdrawal.

Not everyone with these risk factors will develop DTs. Likewise, a person without a known history of severe withdrawal can still become seriously unwell.

- Had delirium tremens or alcohol withdrawal seizures before
- Gone through repeated episodes of alcohol withdrawal
- Used large amounts of alcohol regularly over a long period
- Developed strong withdrawal symptoms soon after reducing alcohol
- A serious infection, injury, or other acute illness
- Poor nutrition, dehydration, or abnormal body salts
- Significant liver, heart, or other medical problems

Diagnosis

There is no single blood test or scan that confirms delirium tremens. Diagnosis is based on the pattern of symptoms, a history of recent alcohol reduction, and a medical examination.

When possible, the healthcare team may ask the person and someone who knows them about their usual alcohol intake, when they last drank, previous withdrawal episodes, seizures, medicines, and other substance use.

Blood tests may check blood sugar, body salts, kidney and liver function, blood cell counts, and signs of infection. An electrocardiogram, or ECG, checks the heart's electrical activity. Brain imaging or other tests may be needed after a head injury, with unusual neurological symptoms, or when another cause of confusion is possible.

The team must consider other conditions that can look like DTs. These include infection, low blood sugar, head injury, stroke, liver-related brain dysfunction, medication effects, and withdrawal from sedatives.

Wernicke encephalopathy is another important possibility. It is brain injury caused by severe vitamin B1, or thiamine, deficiency and can occur alongside alcohol withdrawal.

Withdrawal scoring tools can help monitor some people. However, tools that rely on answering

questions may be unreliable once someone is delirious or unable to communicate clearly.

Treatment and management

Delirium tremens is treated in hospital. Some people need a high-dependency or intensive care setting so breathing, heart rhythm, blood pressure, temperature, and alertness can be watched closely.

Benzodiazepines like diazepam or lorazepam are the main medicines used. They calm the overactive nervous system and reduce the risk of seizures. The medicine, route, and amount are adjusted by the clinical team according to symptoms, response, age, liver health, breathing, and other medical factors.

In some monitored settings, other sedating medicines may be used when symptoms remain difficult to control. Antipsychotic medicines may occasionally be added for severe agitation or hallucinations, but they do not treat the underlying withdrawal and are not used alone for DTs.

Supportive treatment may include:

Physical restraint is avoided where possible because struggling can increase overheating and injury. If immediate safety measures are needed, they are used with close supervision.

Alcohol itself is not a standard treatment for delirium tremens. Once the emergency has settled, support for alcohol use becomes an important part of preventing another withdrawal episode.

- Thiamine to prevent or treat brain injury from vitamin deficiency
- Fluids and correction of abnormal body salts
- Treatment for low blood sugar, infection, injury, or other illness
- A calm, well-lit setting with frequent reassurance and reorientation
- Measures to prevent falls, choking, pressure injuries, and blood clots

Complications

Without effective treatment, severe withdrawal can affect many parts of the body. Possible complications include seizures, abnormal heart rhythms, severe dehydration, overheating, and dangerous changes in blood pressure.

Agitation and confusion increase the risk of falls and other injuries. Vomit or saliva may enter the lungs if someone is very drowsy or has a seizure, causing breathing problems or

pneumonia.

Prolonged muscle activity can damage muscle tissue and strain the kidneys. Poor nutrition may contribute to Wernicke encephalopathy, which can cause confusion, problems with balance, and abnormal eye movements.

DTs can be fatal, particularly when treatment is delayed or serious illness is also present. Prompt hospital care greatly improves the chance of recovery.

Prevention

Delirium tremens can sometimes be prevented by planning alcohol withdrawal with medical support. A person who may be physically dependent on alcohol should not assume that suddenly stopping at home is safe.

Before reducing or stopping alcohol, it is important to seek medical advice if there has been daily heavy drinking, morning drinking, previous withdrawal, seizures, DTs, or serious physical illness. A clinical assessment can help decide whether withdrawal should be managed in hospital, a supervised service, or another setting.

Preventive care during withdrawal may include monitoring, withdrawal medicine, thiamine, fluids, nutrition, and treatment of other health problems. The exact plan is based on individual risk.

Longer-term treatment for alcohol use disorder can reduce the chance of repeated withdrawal. Options may include counselling, peer support, recovery services, and medicines that help reduce drinking or support abstinence. No single approach suits everyone.

Repeated cycles of heavy drinking and withdrawal may make later withdrawal more severe. Avoiding another abrupt, unsupported withdrawal is therefore especially important after an episode of DTs.

Living with it and what to expect

With treatment, delirium and nervous system overactivity usually settle over several days. The exact course is not predictable. Recovery may take longer when there is infection, liver disease, injury, poor nutrition, or another cause of confusion.

After the delirium clears, sleep disturbance, tiredness, anxiety, low mood, and difficulty concentrating may continue for days or weeks. Follow-up can check whether symptoms are improving and identify problems such as vitamin deficiency, liver disease, depression, or

memory difficulties.

Many people recover fully from the acute episode. DTs do not automatically cause permanent brain damage, but complications such as prolonged seizures, severe oxygen shortage, head injury, or Wernicke encephalopathy can have lasting effects.

Having had DTs raises the risk during future alcohol withdrawal. Before making another major change in alcohol use, arrange medical support rather than trying to manage withdrawal alone.

The underlying alcohol problem does not end when DTs resolve. Recovery from alcohol use disorder often takes place over months or years and may include setbacks. Ongoing healthcare, treatment services, and support from trusted people can help someone build a safer and more stable life.

When to get medical help

Call emergency services immediately if someone who has recently stopped or reduced alcohol develops confusion, severe agitation, hallucinations, a seizure, collapse, fever, difficulty breathing, or extreme shaking and sweating.

Do not leave a confused or severely unwell person alone. Do not let them drive. If a seizure occurs, move nearby hazards away, cushion the head, and turn the person onto their side when it is safe. Do not restrain them or put anything in their mouth.

Seek urgent medical advice before stopping alcohol if you may be physically dependent, especially if you have had withdrawal seizures, hallucinations, or DTs before. This is for planning a safer withdrawal, not a reason to continue drinking without support.

Routine follow-up is appropriate after hospital discharge, even when recovery seems to be going well. It can cover sleep, mood, nutrition, memory, physical health, and longer-term alcohol treatment.

Common questions

Is delirium tremens the same as alcohol withdrawal?

No. Alcohol withdrawal ranges from mild shaking and anxiety to severe complications. Delirium tremens is the form that causes delirium together with marked nervous system overactivity.

How long after stopping alcohol do DTs start?

They often begin about two to four days after the last drink or a major reduction. They can start outside this window, particularly when drinking patterns, illness, or other substances

complicate the picture.

Can I detox from alcohol at home?

Some lower-risk withdrawals can be managed outside hospital with professional support. Home detox is not appropriate for DTs. If you have had DTs, seizures, severe withdrawal, or significant health problems, you need medical assessment before reducing alcohol.

Can DTs happen if there is still alcohol in my system?

Yes. Withdrawal is triggered by a substantial fall in alcohol exposure, not only by a blood alcohol level of zero. A positive alcohol test does not rule out withdrawal.

Will I get DTs every time I stop drinking?

Not necessarily. However, a previous episode is an important risk factor for severe withdrawal in the future. Repeated withdrawal episodes can also become more serious, so future reductions should be medically planned.

Can delirium tremens be cured?

The acute episode usually resolves with prompt treatment. This does not cure alcohol use disorder or remove the risk from future withdrawal. Longer-term alcohol treatment and follow-up are separate parts of care.

Sources

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