

# **Delirium Tremens**

Delirium tremens is the most severe form of alcohol withdrawal and is characterized by altered consciousness and autonomic instability. Symptoms commonly manifest 2-4 days after the last drink. Patients may develop autonomic hyperactivity, tremor, anxiety, nausea, altered mental status, insomnia, hallucinations, and seizures. This condition is treated with benzodiazepines and supportive care.



**PLAY PICMONIC** 

## **TIMING**

# 2-4 Days After Last Drink

# Tutu-Four Fork-Day Calendar

Delirium tremens occurs 2-4 days after the last drink. Suspect this condition in a hospitalized patient with unknown history who develops symptoms of delirium (e.g., autonomic instability, agitation, seizures, hallucinations) at least 48 hours after the last drink.

# Cause

# Alcohol Withdrawal

### Withdrawal from ATM and Alcoholic-martini

Ethanol in alcoholic beverages binds to GABA receptors in the CNS and with chronic use leads to downregulation of this system. Therefore if chronic users stop drinking, their CNS has a relative GABA deficiency, leading to an excitatory state in the CNS. This syndrome is delirium tremens. It occurs when a chronic alcohol drinker is suddenly restricted from drinking; this can happen for example during a hospital stay.

# Clinical Manifestations

# Altered Mental Status (Change In LOC)

### Delta Halo

Altered mental status (AMS) is one of the early manifestations of delirium tremens. This includes confusion, disorientation, and hallucinations.

# **Anxiety**

# **Anxiety-bag**

Anxiety is one of the manifestations of delirium tremens. These patients can develop a tremor, sweating, shortness of breath, and panic attacks.

## **Hallucinations**

### Halloween-hallucination

Hallucinations are common in patients with delirium tremens. Visual, auditory, and tactile hallucinations are all possible. A sensation of ants crawling, known as formication, a type of tactile hallucination is particularly common.



### **Autonomic Instability**

### Unstable Atomic-automobile

Autonomic instability is common and is characterized by tremor, tachycardia, hypertension, anxiety, and insomnia.

### **Seizures**

### Caesar

Seizures, typically generalized tonic-clonic, can be a manifestation of delirium tremens; these seizures usually happen 2-4 days after the last drink.

### Insomnia

# Taped-awake-insomniac

Insomnia can be a manifestation of delirium tremens.

### Nausea/Vomiting

# Vomiting

Nausea and vomiting can be a manifestations of delirium tremens.

### **Treatment**

# **Benzodiazepines**

### Benz-dice

Benzodiazepines (lorazepam, diazepam, chlordiazepoxide) are used for the treatment of delirium tremens. These work by increasing inhibitory GABA activity in the CNS. For patients with concomitant liver disease (e.g. alcoholic liver disease), short-acting lorazepam or oxazepam are recommended.

### **Supportive Care**

## Supportive IV bags

Management of delirium tremens is directed at alleviating symptoms, correcting metabolic derangements, and preventing complications. If there are no contraindications (e.g., volume overload), isotonic IV fluids can be infused until patients are clinically euvolemic. Thiamine (B1) and glucose should be administered in order to prevent the development of Wernicke encephalopathy as these patients frequently have a history of excessive alcohol use. Multivitamins containing folate (B9) should be given, and deficiencies of potassium, magnesium, and phosphate should be corrected.