Did you know ......

In 2017, 15% of the IPCC’s adult poisonings and overdose cases managed at a health care facility had ethanol as one of the substances.

The alcohol withdrawal syndrome and the sympathomimetic toxidrome include many similar clinical effects such as mydriasis, hyperthermia, tachycardia, hypertension, tachypnea, diaphoresis and agitation. Patients presenting with these symptoms should be screened for use of ethanol and sympathomimetics.

Treatment goals involve using high dose benzodiazepines to control symptoms and prevent and treat seizures.

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Alcohol Withdrawal Syndrome

Alcohol withdrawal syndrome (AWS) is seen quite frequently in the Emergency Department (ED). Up to 40% of patients seen in the ED have abused alcohol or are alcohol dependent. Sudden cessation of ethanol intake after chronic heavy ethanol use can cause withdrawal symptoms, which can range from minor to life threatening. Symptoms of AWS include headache, anxiety, insomnia, tremors, palpitations, hallucinations, nausea and vomiting, and diaphoresis. Brief, generalized seizures can occur within 6-12 hours of decreased alcohol intake.

Delirium tremens, the “DTs,” is a life-threatening syndrome that can be seen 24-48 hours after stopping heavy ethanol use. Symptoms of the DT’s are caused by over activity of the sympathetic nervous system. This life-threatening syndrome is characterized by hyperthermia, tachycardia, hypertension, confusion, agitation, and delirium. If untreated, the DT’s can cause significant morbidity and mortality.

It is essential to be aggressive in treating the alcohol withdrawal patient. When assessing the patient for AWS, many clinicians use the Clinical Institute Withdrawal Assessment Scale for Alcohol (CIWA).

Goals of treatment for the patient in AWS are to manage symptoms and prevent seizures.

• Treat agitation, tremors, tachycardia, hypertension and seizures with a benzodiazepine such as diazepam or midazolam.
• Provide IV fluids, and supplement thiamine, multivitamins, potassium and magnesium.
• Intubation may be needed to protect the airway in patients in severe AWS.
• Treat seizures with benzodiazepines as phenytoin is NOT effective.
• Follow electrolytes, blood sugar, renal function and LFT’s closely.
• Monitor CPK in patients who are agitated or have seized.

It is important to note that patients can develop AWS with detectable blood levels of ethanol and can progress to severe withdrawal rapidly. For assistance in managing patients in severe withdrawal, consult an intensivist or medical toxicologist. Provide a referral to substance abuse treatment after the acute episode has resolved.

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