Delirium Tremens - A Case Study

Veena Sharma

Mr. Shankar Rai, a 35 years old married, factory worker was brought to the emergency department of a hospital by his family members because he had vomiting, tremors of hands and tongue, sweating, and seemed wild eyed and confused. He ate and slept very little. He was shouting that the insects were crawling on his body.

In the emergency department his pulse was recorded as 120 per minute, B.P. 170/90 mm of Hg, respiration 36 per minute and temperature 100 degree F. He also began to have grandmal seizure. After collecting history from the family, it was revealed that the patient customarily drank at least a bottle of liquor a day. He had been drinking for the past 10 years, but had run out of money and liquor about 3 days ago as he was recently sacked from his job.

Based on the symptoms and history, the patient was diagnosed to be having alcohol withdrawal Delirium or Delirium Tremens (DTS).

Alcohol Withdrawal Delirium

It is a medical emergency that often occurs in alcoholics with 10 or more years of heavy drinking. It is characterized by tachycardia, hypertension, sweating, irregular tremors, delusions, vivid hallucinations, wild agitated behavior, disorientation, clouding of consciousness, hyperexcitability to lethargy and fever (100 – 103 degree F).

About 5% of patients withdrawing from alcohol will progress to delirium tremens two to three days after the last drink. It has up to 20% mortality rate. Although the symptoms of DTS usually last one to five days, they can persist for as long as 10 days. Even with treatment up to 15% of patients with DTS die from cardiac arrhythmia, respiratory arrest, severe dehydration, hypothermia or circulatory collapse.

Root Cause of Alcohol Withdrawal Symptoms

Alcohol is a central nervous system depressant. The signs and symptoms of withdrawal are directly opposite alcohol’s pharmacological effect. Patients undergoing withdrawal therefore, experience automatic nervous system arousal. Symptoms are often more severe with older age, poor general health, poor nutritional status, large amounts of alcohol ingested and a long duration of dependency.

Management of Delirium Tremens

Treatment Measures planned and taken for Mr. Shankar Rai were as follows:

1. Administer intravenous fluids (dextrose and normal saline) at 100 cc/hour with thiamine 100 mg, folate 1 mg and multivitamins added to the I.V. fluids once daily.

2. Infuse 50-100 mg of the sedative, Chlorpromazine in ml of 0.9% NaCl and administer it as an I.V. bolus slowly over several minutes (overly rapid administration may cause apnea, hypotension, bradycardia or cardiac arrests). After the patient becomes calm, a dosage of 50 mg of Chlorpromazine may be given orally every 6 hours thereafter, which is then tapered off.

3. Clonidine 0.2 mg Q4HRPN (for systolic B.P. higher than 160 mm of Hg or diastolic B.P. higher than 100 mm Hg.).

After the Immediate Crisis

After the immediate crisis passed following nursing measures were planned and implemented for Mr. Shankar Rai:

1. Placed Mr. Shankar Rai in a quiet room leaving the lights on at all times and raise the side rails of the bed in order to reduce the risk of injury.

2. Avoid agitating him, use restraints, if required, and prescribed.

3. Hourly monitoring of the vital signs.

4. Check every one hourly electrolytes fluid status and replenish fluids and electrolytes as needed.

5. Monitor neurologic status.

6. Watch for medication side effects such as over sedation.

7. After successful recovery from alcohol withdrawal Mr. Shankar Rai needs nutritional counseling, psychiatric or psychological counseling and referral to inpatient or outpatient rehabilitation programme.

Reference:

