Development and Implementation of an Evidence-Based Alcohol Withdrawal Order Set

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Objectives

- Identify the process of developing and implementing a new alcohol withdrawal order set in an acute care hospital.
- Describe the new evidence-based order set.
- Describe outcomes of using the new order set.
Case Study

- 46 year old man
- Admitted to the neuroscience unit with a small subdural hematoma
- Blood alcohol level of 70 mg/dl on arrival
- Reports drinking “two or three beers” each day for many years
Development and implementation of order set

- Identified the problem
- Referred to Nursing Research and Evidence-Based Practice Committee
- Formed a multidisciplinary team
- Surveyed nursing staff
- Reviewed current literature
- Developed new order set
- Presented to medical committees
- Computer documentation developed
- Educated nursing staff
- Monitored for appropriate use and outcomes
Alcohol withdrawal syndrome in hospitalized patients: review of literature

Symptoms of alcohol withdrawal usually start in the first 24 hours of abstinence.

If treated aggressively in early abstinence the most serious symptoms are less likely to develop.

If not treated the patient suffers, care becomes more complex, and length of stay increases.
Alcohol withdrawal syndrome in hospitalized patients: review of literature

- Delirium tremens (DT) and seizures are the most serious responses to alcohol withdrawal.
- DT and seizure can be avoided by recognition and treatment of early withdrawal symptoms.
- Effective withdrawal treatment increases the likelihood the patient will follow through with substance abuse treatment.
Alcohol withdrawal syndrome in hospitalized patients: review of literature

- Patients at high risk for severe withdrawal symptoms should have treatment with medications in early abstinence whether or not withdrawal symptoms have developed.

- Patients with moderate or severe symptoms of withdrawal should be treated with medications.

- Patients at moderate risk should have medications based on withdrawal symptoms.

- Benzodiazepines are the medication class of choice for treating alcohol withdrawal.
Order set

- Assessment with CIWA-Ar scale
- Vitamin and fluid replacement
- Benzodiazepine orders based on risk of severe withdrawal symptoms, age, and liver disease
Benzodiazepine orders

- High risk patients
  - Scheduled benzodiazepines for three days
  - Symptom triggered benzodiazepines based on CIWA-Ar score

- Medium risk patients
  - Symptom triggered benzodiazepines
Choice of benzodiazepine

- Long acting benzodiazepines for most patients
- Intermediate acting benzodiazepines for patients over age 65 or with severe liver disease
- All benzodiazepines ordered my mouth with instruction: “May give IV if patient is not able to tolerate PO; may give IM if patient is not able to take PO and no IV access is available”.

Safe use orders

- Call physician if CIWA-Ar score remains greater than 15 on two consecutive assessments.
- Monitor vital signs with each assessment and with medication administration.
- Omit any dose if patient is difficult to awaken, is showing signs of over sedation, is exhibiting marked ataxia, or has a respiratory rate less than 12. Notify physician if unable to arouse.
Outcomes

Patients with emergence of confusion, hallucinations, or disorientation

Order set not used
Order set used
Outcomes

Patients requiring constant observation for confusion related to alcohol withdrawal
References


References

