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Substituting IV PHENOBARBITAL for IV benzodiazepines in treatment of ALCOHOL WITHDRAWAL

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Archived newsletters: *Will soon be available on a website. Link will be available in the next issue.*

FYI: *This information was put together by Dr. Timothy Wiegand, Director of Toxicology, and on staff at Strong and Highland Hospitals.*

Toxicology Consult Service can be reached at 278-8161 and is available to discuss treatment options and assist at bedside during phenobarbital administration. The MICU medical staff and clinical pharmacist are also available to answer any questions regarding dosing of phenobarbital and treatment of patients with signs and symptoms of alcohol withdrawal

Guideline for rate of administration of IV phenobarbital:

65-130 mg.- administer over 1 min.

Next Issue: Drugs: Year in Review

Benzodiazepines continue to be in short supply. In order not to compromise patient care, other treatment regimens may need to be considered. Following is information on the use of IV phenobarbital as a substitute for IV benzodiazepines to treat symptoms of alcohol withdrawal.

This treatment protocol is being used already on patients followed by the Toxicology Consult Service here at Strong. Phenobarbital is also the medication of choice in some of the Rochester-area detox programs. Phenobarbital is a safe and effective treatment for alcohol withdrawal when a proper protocol is followed. If you plan to use IV phenobarbital, please check with pharmacy to make sure there is enough phenobarbital available at the particular location the drug will be administered.

What patients are candidates for IV Phenobarbital therapy?

- patients with moderate to severe alcohol withdrawal when IV benzodiazepines would normally be treatment of choice
- patients with rapid escalation of their initial withdrawal symptoms

NOTE-
Many patients admitted to the hospital who require treatment for alcohol withdrawal will be adequately covered using oral benzodiazepines administered via a symptom-triggered CIWA protocol. There is **NO** shortage of oral dosage forms of benzodiazepines.

PHENOBARBITAL PROTOCOL:

1. Assess patient for withdrawal signs and symptoms using CIWA or other objective measurement.
   - for CIWA >15 select 65 mg. of phenobarbital IV x 1 as first dose
2. Reassess in 5 min.
   -if symptoms improved but still present then redose at 65 mg.

Goal -
Cessation of withdrawal symptoms without significant 'overshooting'. Ideal endpoint is a patient who is sleepy but still conversant with tremor markedly improved along with marked improvement in adrenergic signs and symptoms such as tachycardia, hypertension and diaphoresis.

3. If 65 mg. IV phenobarbital does not appreciably improve the signs and symptoms of w/d, then increase dose to 130 mg. IV bolus.
4. After reassessing patient, may increase dose to 260 mg. as single incremental dose with reassessment q5-10 min. between doses.*
5. If >10-15 mg/kg IV phenobarbital has been administered over a 24 hr. period, consider consulting with Toxicology or MICU team for treatment recommendations.

Repeat Dosing -
Depending on the initial dose and patient response, a reasonable repeat dose would be 65-130 mg. IV q15 min. until CIWA <10. Order this as PRN based on CIWA score and nursing reassessment. Avoid simply ordering a fixed dose phenobarbital taper.

*Mean doses of phenobarb used for initial control in moderate alcohol withdrawal (CIWA 15-25) has been consistently reported in literature to be about 500 mg. Patients with rapidly progressive withdrawal or history of DT's and seizures may require up to 10-15 mg./kg of phenobarbital intravenously.
These patients should be treated in an ICU setting.

Phenobarbital levels are not routinely required for this treatment regimen.

Patients should stay on the CIWA with phenobarbital ordered since withdrawal can recur as it does with benzodiazepine therapy. If initial control is adequate, however, dosing of phenobarbital is usually required with less frequency than benzodiazepines require over the subsequent couple of days.

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