

Evidence-Based Medicine Project

Case

Case: 47 yo woman with polysubstance abuse (cocaine, EtOH) recently discharged from United hospital for SI and domestic abuse, presents to E with suicidal ideation and cough. +Night sweat, fever, chills; - nausea, vomiting, diarrhea. Mediastinal mass seen on chest CT. Drinks "as much as I can" and last drink was immediately before ED presentation. Besides other medical intervention, she was started on Librium 25mg PO Q6h with gradual taper (decrease 5mg QD--total 5d treatment) and ativan PRN for agitation.

Question

"That seems like a lot of benzos...Is all of that really necessary?"

Strategy

PubMed Clinical Queries:

(Alcohol withdrawal and benzodiazepines and duration) AND (randomized controlled trial [Publication Type] OR (randomized[Title/Abstract] AND controlled[Title/Abstract] AND trial[Title/Abstract]))

[Spies CD, Otter HE, Huske B, Sinha P, Neumann T, Rettig J, Lenzenhuber E, Kox WJ, Sellers EM.](#)

Alcohol withdrawal severity is decreased by symptom-orientated adjusted bolus therapy in the ICU.

Intensive Care Med. 2003 Dec;29(12):2230-8. Epub 2003 Oct 14.
PMID: 14557857 [PubMed - indexed for MEDLINE]

[Vorma H, Naukkarinen H, Sarna S, Kuoppasalmi K.](#)

Treatment of out-patients with complicated benzodiazepine dependence: comparison of two approaches.

Addiction. 2002 Jul;97(7):851-9.
PMID: 12133124 [PubMed - indexed for MEDLINE]

[Daepfen JB, Gache P, Landry U, Sekera E, Schweizer V, Gloor S, Yersin B.](#)

Symptom-triggered vs fixed-schedule doses of benzodiazepine for alcohol withdrawal: a randomized treatment trial.

Arch Intern Med. 2002 May 27;162(10):1117-21.
PMID: 12020181 [PubMed - indexed for MEDLINE]

[Lenzenhuber E, Muller C, Rommelspacher H, Spies C.](#)

[Gamma-hydroxybutyrate for treatment of alcohol withdrawal syndrome in intensive care patients. A comparison between with two symptom-oriented therapeutic concepts]
Anaesthesist. 1999 Feb;48(2):89-96. German.

PMID: 10093649 [PubMed - indexed for MEDLINE]

Study

Daeppen JB, Gache P, Landry U, Sekera E, Schweizer V, Gloor S, Yersin B. Symptom-triggered vs fixed-schedule doses of benzodiazepine for alcohol withdrawal: a randomized treatment trial. Arch Intern Med. 2002 May 27;162(10):1117-21.

Group	Definition	n
Population screened	Consecutive pts. admitted to two alcohol inpatient treatment programs in Switzerland between 8/19/1999 and 10/3/2003	251
Inclusion criteria	Admission to program and acceptance of study	243
Exclusion criteria	1. Last alcoholic beverage >72hr prior to admit	-44
	2. Alcohol withdrawal meds used within past 30d	-42
	3. Cognitive, psychiatric, or medical comorbidity	-13
	4. Opiate or stimulant dependence	-16
	5. No fluency in French	-2
	(Total)	(-117)
Losses after randomization	Leaving program within 4 days	-4
	Exclusion criteria realized after randomization	-3
	Somnolence	-1
	Falling	-1
		(-9)
Patients included in data		117
Fixed-schedule group	Oxazepam 30mg Q6x4, then 15mg Q6x8; 15 or 30mg oxazepam Q30min after last dose PRN ¹	56
Symptom-triggered group	Mannitol 30mg Q6x4, then 15mg Q6x8; 15 or 30mg oxazepam Q30min after last dose PRN ¹	61

¹ Based on CIWA-Ar score: 30 min after regularly scheduled oxazepam or placebo, pt.'s with CIWA-Ar of 8-15 received 15mg oxazepam, while CIWA-Ar >15 received 30mg; pt.'s were re-evaluated after 30 minutes more and the cycles repeated based on score, until asymptomatic.

“Main Outcome Measures” Total amount and duration of treatment with oxazepam,
Incidence of complications,
Comfort level

Validity

Randomized?	Yes
All pt.'s accounted for?	Yes
Follow-up complete?	Yes
Intention to treat?	No/Difficult
Blinding?	Yes (demonstrated)
Equal treatment?	Yes
Randomization worked?	Yes

Results

	Total oxazepam (mg)	Duration (h)	Quality of life	Complications
Symptom-triggered	37.5±81.7 [⚡]	20.0±24.45 [⚡]	91.9	1 (seizure)
Fixed Dose	231.4±29.43	62.7±5.44	84.2	0

[⚡]P<0.001

Utility

Can I apply the results of this study to my patient: NO

- Pt. meets 2 exclusion criteria (actually 3, but who needs French?)
- Medically ill patients may not be as amenable to this style of treatment
- Study was powered to detect dosage difference, not complication difference