

Supplementary Appendix 1

This appendix has been provided by the authors to give readers additional information about their work.

Supplement to: Kraut JA, Mullins ME. Toxic alcohols. N Engl J Med 2018;378:270-80. DOI: 10.1056/NEJMra1615295

Supplement

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Antizol: Package Insert

PALADIN LABORATORIES (USA) INC | Last revised: 27 July 2009

DOSAGE AND ADMINISTRATION

Dosing of Antizol®: A loading dose of 15 mg/kg should be administered, followed by doses of 10 mg/kg every 12 hours for 4 doses, then 15 mg/kg every 12 hours thereafter until ethylene glycol or methanol concentrations are undetectable or have been reduced below 20 mg/dL, and the patient is asymptomatic with normal pH. All doses should be administered as a slow intravenous infusion over 30 minutes

Dosage with Renal Dialysis: Antizol® (fomepizole) Injection is dialyzable and the frequency of dosing should be increased to every 4 hours during hemodialysis

Dosing in patients receiving hemodialysis

Dose at beginning of hemodialysis

If < 6 hours since last Antizol dose do not administer dose

If > 6 hours since last Antizol dose administer next scheduled dose

Dose during hemodialysis

Give dose every 4 hours

Dosage at time hemodialysis is completed

Time between last dose and the end of hemodialysis

< 1 hour	Do not administer dose
1 – 3 hours	Administer ½ of next scheduled dose
> 3 hours	Administer next scheduled dose

Maintenance Dosing Schedule off hemodialysis:

Give next scheduled dose 12 hours from last dose administered

Table S1. Recommendations for Treatment of Methanol and Ethylene Glycol Intoxications

Methanol	Ethylene glycol
<p>American Academy of Clinical Toxicology Initiate treatment with ethanol or fomepizole with documented plasma methanol concentration > 20 mg/dL or documented recent history of ingesting toxic amounts of methanol and osmolal gap > 10 mOsm/kg/ H₂O or history of strong clinical suspicion of methanol poisoning and at least two of the following criteria: Arterial pH < 7.3; Serum [HCO₃⁻] < 20 mmol/L; Osmolal gap > 10 mOsm/kg /H₂O</p> <p>Initiate hemodialysis if significant metabolic acidosis (pH< 7.25–7.30) is present or there are visual problems and deteriorating vital signs despite intensive supportive care; AKI or electrolyte imbalance unresponsive to therapy or serum methanol concentration > 50 mg/dL Intermittent hemodialysis preferred over continuous renal replacement therapy</p>	<p>American Academy of Clinical Toxicology Initiate treatment with ethanol or fomepizole with plasma ethylene glycol > 20 mg/dL or recent hx of ingesting toxic amounts and osmolal gap > 10 mosm/L or hx or strong clinical suspicion of poisoning <i>and</i> at least two of the following criteria: Arterial pH < 7.3; serum [HCO₃⁻] < 20 mmol/L; osmolal gap > 10 mOsm/L urinary oxalate crystals</p> <p>Initiate hemodialysis if severe metabolic acidosis – blood pH < 7.25 - 7.3 ;unresponsive to therapy; renal failure ethylene glycol concentration > 50 mg/dL unless fomepizole is being administered and patient is asymptomatic with normal blood pH; Intermittent hemodialysis preferred over continuous renal replacement therapy</p>
<p>Extracorporeal Treatment in Methanol Poisoning Workgroup Initiate hemodialysis if there is significant metabolic acidosis: pH ≤ 7.15, severe visual defects, coma, or deteriorating vital signs despite intensive supportive care; Persistent metabolic acidosis despite adequate supportive measures and antidotes; serum anion gap > 24 mmol/L serum methanol: > 70 mg/dl with fomepizole; > 60 mg/dL with ethanol; > 50 mg/dL in absence of inhibitor; Intermittent hemodialysis preferred over continuous renal replacement therapy Consider ancillary measures: Folinic acid (5-formyl tetrahydrofolate) at dose of 1 mg/kg/bd wt q 4 - 6 hrs enhances metabolism of formic acid; base to correct acidemia and promote urinary excretion of toxic metabolites (treatment without dialysis)</p>	<p>Consider ancillary measures: Pyridoxine and thiamine promotes metabolism of glycolic acid; base base to correct acidemia and promote urinary excretion of toxic metabolites (treatment without dialysis)</p>

References

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