Clinical Pathway for use of Fomepizole

Patient presents with a history of exposure to a product that may contain either ethylene glycol (EG) or methanol (MeOH) or has an unexplained wide anion gap metabolic acidosis.

- Contact the Poison Center at 1-800-222-1222*
- Draw a stat serum alcohol screen including EG, MeOH, ethanol, isopropranol
- Draw labs, including Chem 7, anion gap, serum osmolality by freezing point depression method for calculation of osmolar gap, ABGs, UA, serum ASA, serum Fe
- Administer folic acid 50 mg IV every 4 h
- Administer Pyridoxine (B6) 50 mg IV or IM every 6 h
- Administer Thiamine (B1) 100 mg (adults) or 50 mg (children) slow IV or IM every 6 h

Did the exposure recently occur and is the serum EG/MeOH concentration test result rapidly available (within 4-6 h from time of exposure)?

YES

Is [EG] or [MeOH] > 20 mg/dL?

YES

Start fomepizole (Antizol®)
- Dilute in 250 mL NS or D5W
- Administer over 30 min

Loading dose = 15 mg/kg
Maintenance dose = 10 mg/kg
4 doses then 15 mg/kg for any subsequent doses.

NO

Is [EG] or [MeOH] >50 mg/dL or does patient have severe toxicity?

YES

- Initiate nephrology service consult for emergency hemodialysis.
- Continue fomepizole at required dose every 4 hours.
- After hemodialysis is complete, give next scheduled dose of fomepizole 12 hours after the last dose was administered.

NO

Is the patient having any signs or symptoms of toxicity such as N/V, CNS depression, elevated osmolar gap, increased anion gap metabolic acidosis, or evidence of end organ damage (renal failure for EG, visual disturbances for MeOH)?

YES

Monitor patient for development of any signs or symptoms of toxicity. Re-consult with Poison Center* to determine further treatment or evaluation.

NO

Continue fomepizole until [EG] or [MeOH] < 20 mg/dL, patient is asymptomatic, metabolic acidosis has resolved, and Poison Center has been re-consulted*.

*Poison Center consultation is available 24/7/365 at 1-800-222-1222 to assist in assessment and monitoring of poisoning cases. Each case may present with variations that may require variation from the above pathway. Clinicians are urged to consult as often as necessary to ensure optimum care. At times, our regional center may be busy with other calls. If this occurs, the call may roll to another regional poison center within the Texas Poison Center Network and callers may request to be transferred back to their own regional center for continuity of care.