



Sodium Valproate Versus Continuous Infusion of Haloperidol in Management of Agitated Critically ill Patients

Thesis

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Abstract

Depakene is an antiepileptic and mood stabilizer approved for treatment of seizures, manic episodes associated with bipolar disorder, and migraine prophylaxis. Mechanistically, it blocks voltage-dependent sodium and calcium channels, increases γ -aminobutyric acid (GABA) synthesis, potentiates GABA activity at postsynaptic receptors, blocks GABA degradation, and attenuates the activity of glutamate upon N-methyl-D-Aspartate receptors (*Perucca E.2002 & Rosenberg G.2007*).

Recently, valproate has been administered to critically ill patients to treat agitation and delirium, but there are few published reports to support this practice (*Bourgeois JA, et al.2005*), (*Sher Y, et al.2015*) & (*Fitz K, Harding A.2011*). Valproate is an emerging treatment for ICU agitation because it allows patients to interact with their caregivers; can be administered outside of the ICU; has both an intravenous (IV) and enteral formulation; has a low drug acquisition cost; and has not been associated with respiratory depression, hemodynamic derangements, or delirium.

Key words: **Valproate Versus Continuous Infusion of Haloperidol**