

Sara Birdsong, R2

Article: Lewis, M, et al. "Ecallantide for the Acute Treatment of Angiotensin-Converting Enzyme Inhibitor-Induced Angioedema: A Multicenter, Randomized, Controlled Trial." [Ann Emerg Med](#). 2014 Aug 30. pii: S0196-0644(14)00621-0. doi: 10.1016/j.annemergmed.2014.07.014.

Background: Ecallantide is a kallekrein inhibitor used in the treatment of hereditary angioedema (HAE). It overrides the mutation in C1 esterase to prevent the bradykinin release. It has been approved by the FDA since 2009 for treatment of HAE. Most common side effect is anaphylaxis.

Methods: This is a prospective multicenter phase 2 double blind randomized study comparing the effectiveness of Ecallantide vs placebo in ACEI-induced angioedema. Pts were given a placebo dose of NS of a single SQ dose of ecallantide either 10 mg, 30 mg or 60 mg. Endpoint was discharge from the hospital after 6 hours.

Results: This was a small study with only 76 patients. This study was terminated early because a large number of the patients from all groups met discharge criteria. (72% of the placebo group vs 85%/89%/89% of the 3 ecallantide groups). The difference in disposition was not clinically significant between the groups.

Conclusions: Ecallantide did not appear to improve outcomes compared with standard therapy for ACEI-mediated angioedema. They did not find any harm associated with the administration of ecallantide. Furthermore, this study suggests that patients presenting with mild-moderate angioedema who have improvement of edema, stable vital signs, absence of stridor, absence of dyspnea or use of accessory muscles during respiration, absence of drooling, and ability to drink without difficulty are safe for discharge home rather than requiring admission for observation which seems to be standard practice in Dayton.

---