Maine Medical Center  
Department of Emergency Medicine  
Faculty Journal Club Summary  
July 2013

**Topic:** Glucagon for Esophageal Foreign Body

**Articles Reviewed:**


Esophageal foreign body is a common problem evaluated and treated in the emergency setting. For many years, ED treatment has included administration of intravenous glucagon (usually 1 mg, sometimes repeated one time), often at the suggestion of our consulting GI colleagues. While there have been few well-conducted randomized, controlled trials evaluating the efficacy and/or safety of glucagon in this patient population, we reviewed the major papers on the topic at this journal club including an RCT, a systematic review, two retrospective reviews, and a standard review article.

**Key findings from the articles we reviewed include the following:**

- Administration of glucagon is no more effective in relieving oesophageal foreign body than when no medication is given (Leopard et al.)
- Meat and pre-existing esophageal rings or strictures are associated with a decreased likelihood of spontaneous bolus passage and with response to glucagon (Sodeman et al.)
- Patients with a shorter duration of symptoms are more likely to experience spontaneous bolus passage (Sodeman et al.)
- More patients receiving glucagon + a benzodiazepine experienced resolution of symptoms than patients receiving glucagon alone (Al-Haddad et al)
- No statistically significant difference in bolus passage was noted when placebo and glucagon/diazepam were compared (Tibbling et al.)

In sum, there is currently not evidence to support the use of glucagon to facilitate the passage of esophageal food bolus in the ED. In addition, evidence supporting the safety of the medication for this purpose is also lacking. Finally, if glucagon is administered, effect should be seen in approximately 15 minutes; bolus passage more than 15 minutes after glucagon administration is likely spontaneous and unrelated to glucagon effect.