

# IMPROBABLE MEDICAL: ESOPHAGUS, WITH PEPPERS AND WATER

*Improbable diagnoses, techniques, and research*

*compiled by Bertha Vanatian, Improbable Research staff*

## Esophageal Rupture After Ghost Pepper Ingestion

“Esophageal Rupture After Ghost Pepper Ingestion,” Ann Arens, Leila Ben-Youssef, Sandra Hayashi, and Craig Smollin, *The Journal of Emergency Medicine*, vol. 51, no. 6, 2016, pp. e141-e143. (Thanks to Matthew Hall for bringing this to our attention.) The authors at the University of California, San Francisco, and Alameda County Medical Center/Highland Hospital, report:

The ghost pepper, or “bhut jolokia,” is one of the hottest chili peppers in the world. Ghost peppers have a measured “heat” of > 1,000,000 Scoville heat units (SHU), more than twice the strength of a habanero pepper. To our knowledge, no significant adverse effects of ghost pepper ingestion have been reported.

A 47-year-old man presented to the Emergency Department with severe abdominal and chest pain subsequent to violent retching and vomiting after eating ghost peppers as part of a contest.... The patient was intubated and taken immediately to the operating room, where he was noted to have a 2.5-cm tear in the distal esophagus, with a mediastinal fluid collection including food debris, as well as a left-sided pneumothorax. The patient was extubated on hospital day 14, and was discharged home with a gastric tube in place on hospital day 23.

## Thermal Effects of Whole Head Submersion in Cold Water on Nonshivering Humans

“Thermal Effects of Whole Head Submersion in Cold Water on Nonshivering Humans,” Thea Pretorius, Gerald K. Bristow, Alan M. Steinman, and Gordon G. Giesbrecht, *Journal of Applied Physiology*, vol. 101, no. 2, 2006, pp. 669-675. The authors, at the University of Manitoba, report:

In 17°C water, the head does not contribute relatively more than the rest of the body to surface heat loss; however, a cold-induced reduction of perfused body mass may allow this small increase in heat loss to cause a relatively larger cooling of the body core.

*Detail from the study “Thermal Effects of Whole Head Submersion in Cold Water on Nonshivering Humans.”*

### ESOPHAGEAL RUPTURE AFTER GHOST PEPPER INGESTION

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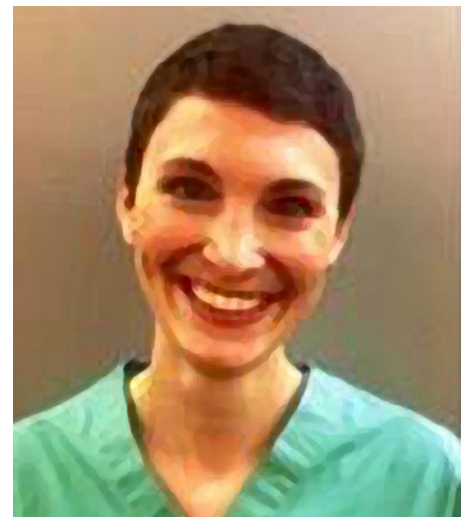
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□ Abstract—Background: The ghost pepper, or “bhut jolokia,” is one of the hottest chili peppers in the world. Ghost peppers have a measured “heat” of > 1,000,000 Scoville heat units (SHU), more than twice the strength of a habanero pepper. To our knowledge, no significant adverse effects of ghost pepper ingestion have been reported. *Case Report.*

### INTRODUCTION

The ghost pepper, also known as bhut jolokia, is grown in the northeast region of India and is one of the hottest chili peppers in the world (1). Ghost peppers have a measured



*Ann Arens, lead author of the study “Esophageal Rupture After Ghost Pepper Ingestion.” Drawing by Nan Swift, Improbable Research staff.*

