

Shake, rattle and roil

Robert Patterson, Wayne T. Stewart

A 16-year-old male presented to the emergency department late in the evening complaining of the sudden onset of left upper quadrant abdominal pain. He had spent the day outdoors in the warm sun, and then at dusk he had begun his chores on the family farm. Shortly into a tractor ride, the pain had started. The patient described a severe pressure-like sensation. There was no history of nausea, vomiting or diarrhea. The patient was otherwise healthy and was active in school athletics. He had not had any previous abdominal surgery. There was no family history of inflammatory bowel disease or peptic ulcer disease.

On examination, the patient was afebrile and had normal blood pressure with slight tachycardia. The abdomen was moderately distended, with active bowel sounds. There was mild generalized abdominal tenderness, but no peritoneal signs.

The emergency physician ordered blood work and a CT scan of the abdomen. The findings of the complete blood count were normal, as was the case for the blood chemistry.



Fig. 1: CT scout film demonstrating an anterior/posterior view of the patient's abdomen, with massive distension of the stomach and large amounts of gas in the small intestine and colon.

The results of a monospot test were negative. The CT scan showed a grossly dilated stomach with some distended bowel, best appreciated in the scout film (Fig. 1). No other abnormalities were noted. Surgical consultation was then requested.

When seen by the surgical service a short while later, the patient stated that he felt much better. The findings of a repeat abdominal examination were completely benign. Two views of the abdomen taken at that time showed a normal-sized gastric bubble, with copious air throughout both the small and large bowels.

On further questioning, the patient admitted that while engaging in outdoor recreation all day in high temperatures he had had little to drink. By sunset, he was quite thirsty. Before starting his farm chores that evening, he guzzled down a 2-L bottle of a popular carbonated beverage. He then climbed aboard a tractor for a rough, bumpy ride, and the abdominal pain soon followed.

We deduce that this patient suffered from excessive enteric carbon dioxide. An ocean-like quantity of carbonated fluid entered an empty stomach and was immediately subjected to a bouncy tractor session, during which gastric contents were "shaken, not stirred." The subsequent release of large amounts of CO₂ caused acute gastric distension and discomfort. A search of the medical literature revealed a case report of an overdose of the other type of cola, which resulted in acute emphysematous gastritis.¹ Fortunately for our patient, the course of his disease was self-limiting and benign. We can only conclude that, in excessive amounts, "the real thing" can make you real sick.

Dr. Patterson is a general surgeon and Dr. Stewart is a radiologist at Uintah Basin Medical Center, Roosevelt, Utah.

Reference

1. Hadas-Halpren I, Hiller N, Guberman D. Emphysematous gastritis secondary to ingestion of large amounts of Coca Cola. *Am J Gastroenterol* 1993; 88(1):127-9.

Correspondence to: Dr. Robert Patterson, 250 West 300 North, Roosevelt UT 84066, USA; fax 435 722-6122; robpatterson@ubtanet.com