

Electrohydraulic Lithotripsy Treatment for Persimmon Bezoars

We recently treated two patients with gastric bezoars. Endoscopic removal of the bezoars was safely achieved after electrohydraulic lithotripsy treatment.

Case 1. A 68-year-old woman complaining of mild epigastralgia and anorexia was referred to our hospital by her general practitioner. A black foreign body with a hard crust, 5 cm in diameter, was found at endoscopy in the upper portion of the stomach. As the patient had a history of cardiac disease, including arrhythmia and an earlier myocardial infarction, surgical removal of the bezoar was too risky, and endoscopic treatment was chosen.

Case 2. A 76-year-old man was admitted with hematemesis. Emergency endoscopy revealed a dark green irregular foreign body, 5×4 cm in size, on the greater curvature of the stomach. It had a hard crust that was resistant to pressure from the biopsy forceps. At the patient's request, endoscopic treatment was performed.

In the electrohydraulic lithotripsy treatment, the probe was inserted through the working channel and placed in contact with the surface of the bezoar. Repeated electrical discharges were applied (Figure 1) until the bezoar gradually fragmented (Figure 2). The debris was collected with basket forceps, snare forceps, and foreign-body forceps. Although repeated insertion and withdrawal of the endoscope was necessary to remove all of the fragments, pain was minimized by using the type of overtube usually employed in



Figure 2: Gradual fragmentation of the bezoar.

endoscopic injection sclerotherapy. The bezoars were completely removed in approximately two hours, without complications. In both cases, the bezoars were found to consist of tannic compounds. As both patients reported excessive ingestion of persimmons for several weeks prior to admission, the final diagnosis was persimmon bezoar.

The properties of gastric bezoars vary, depending on their components (1,2). It is therefore important to identify them prior to selection of treatment. However, there are no specific guidelines for the selection of treatment methods based on the various

constituents of bezoars. In patients with a history of persimmon ingestion and a gastric bezoar shown on endoscopy to have a hard crust, electrohydraulic lithotripsy is a valuable technique.

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Figure 1: The electrohydraulic lithotripsy probe, inserted into the stomach through the working channel.