# Early Esophageal Cancer Diagnosed with Jumbo Biopsy Forceps

## technique spotlight



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### **Patient History**

An 80-year-old male presented with progressive dysphagia to solid foods. An initial EGD was performed using standard biopsy forceps and the patient was diagnosed with severe esophagitis. Over the course of the next two weeks, the patient's symptoms worsened and he complained of food getting stuck. He had lost 10 pounds over the past month. He was therefore referred for a repeat endoscopy.

#### **Procedure**

An EGD was performed and revealed irregular, ulcerated friable mucosa in the lower esophagus, extending 3 cm. The luminal circumference was narrowed. Using the Radial Jaw™ 4 Jumbo Biopsy Forceps, six biopsies were taken. An endoscopic ultrasound was also performed showing thickening of the esophageal wall and two hypoechoic lymph nodes outside the esophageal wall. Fine needle aspiration of the lymph node was also performed.

#### **Post-Procedure**

The biopsies from the Radial Jaw 4 Jumbo Biopsy Forceps revealed moderately differentiated adenocarcinoma and lymph node biopsies were negative for cancer. Final diagnosis was T1N0MX esophageal adenocarcinoma.

The patient was a poor candidate for esophagectomy due to his severe cardiac disease. He therefore was referred for chemotherapy/radiation and endoscopic therapy for symptom relief.

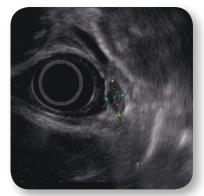
This case illustrates the potential advantage of using Radial Jaw 4 Jumbo Biopsy Forceps.



Distal esophagus with tumor



Retroflex view of tumor at GE junction



Para-esophageal lymph node under EUS

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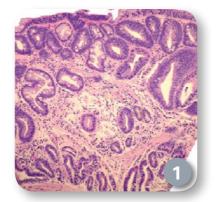
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#### **Gastroenterologist Discussion**

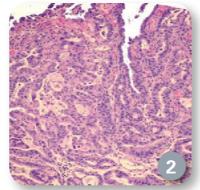
The Radial Jaw™ 4 Jumbo Biopsy Forceps are useful for the diagnosis of dysplasia in Barrett's Esophagus, evaluating potentially malignant lesions and sampling/surveillance in inflammatory bowel disease. One study by Elmunzer et al showed that jumbo forceps are superior to standard large-capacity forceps in obtaining diagnostically adequate inflammatory bowel disease surveillance biopsy specimens. As shown in this case, the use of Radial Jaw 4 Jumbo Biopsy Forceps may have had an impact in the ability to diagnose a cancer that was not diagnosed with standard size forceps during an earlier procedure. I did not experience increased complications such as bleeding or perforation while using Radial Jaw 4 Jumbo Biopsy Forceps.\*

### **Pathologist Discussion**

The biopsy showed multiple fragments of esophageal mucosa with columnar and intestinal metaplasia, characteristic of Barrett's esophagus (Image 1). Several fragments showed areas of confluent and cribriform glands with marked cytologic atypia, diagnostic of intramucosal adenocarcinoma (Image 2). Tissue sample size is an important factor in disease diagnosis. In general, larger fragments should increase diagnostic sensitivity. This case highlights the impact that using a larger biopsy forceps may have on disease diagnosis, as evidenced by the fact that earlier biopsies with a "standard size" forceps did not indicate intramucosal adenocarcinoma



Esophageal mucosa characteristic of Barrett's Esophagus



Tissue fragments diagnostic of intramucosal adenocarcinoma

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