## Using the Overtube as a Mouth Guard for Endoscopic Band Ligation of Esophageal Varices

Recently, variceal banding ligation using a flexible endoscope has been introduced for the treatment of esophageal varices (1,2). After endoscopic examination of the stomach and esophagus has been completed, and before using the Stiegman-Goff endoscopic ligator (BARD), the overtube should be positioned orally. The overtube allows easier reintroduction of the endoscope during multiple band ligations, and minimizes the aspiration potential during the procedure. This technique, however, requires at least two steps. In the first step, an upper gastrointestinal endoscopy is performed, using a mouth guard, to confirm esophageal varices and to decide on ligation therapy. In the second step, the endoscope and mouth guard are removed, and an overtube is positioned in order to carry out multiple band ligations. The patient consequently has to swallow the endoscope two times in this classical method.

In patients who are thought to have esophageal varices, and who are considered to be candidates for band ligation therapy, we have been applying a single-step procedure, reducing patient discomfort. From the beginning, the endoscopist does not use a mouth guard, but an overtube. The overtube should be inserted in such a position that the distal end is between the patient's teeth instead of a mouth guard. The endoscopist then passes the instrument tip through the overtube, and it can be advanced to the esophagus under direct vision. If ligation of esophageal varices is decided on, the overtube can be advanced carefully over the endoscope down into the esophagus, and the ligation can be performed.

We have used this method recently 43 times in 31 patients with esophageal varices, and ligated the varices successfully. We have not observed any esophageal mucosal injuries due to placement of the overtube over the endoscope during the control examination. The patient only needs to swallow the endoscope once with this method, saving time and reducing patient discomfort. We propose this safe and practical method for all patients in whom endoscopic band ligation therapy for esophageal varices is planned.

A. Kadavifci, G. Oksuzoglu, B. Sivri, M. Arslan Division of Gastroenterology, Dept. of Internal Medicine, Hacettepe University Medical School, Ankara, Turkey

## References

- 1. Stiegmann G, Sun JH, Hammond WS. Results of experimental endoscopic esophageal varix ligation. Am Surg 1988; 54: 104 - 8.
- 2. Stiegmann G, Goff JS, Michaletz OP, et al. Endoscopic sclerotherapy as compared with endoscopic ligation for bleeding esophageal varices. N Engl J Med 1992; 326: 1527-32.

Corresponding Author A. Kadayifci, M. D. Dumlupinar caddesi Melek apt. 31/7 Cebeci 06340 Ankara Turkey

Fax: +90-312-3242009