

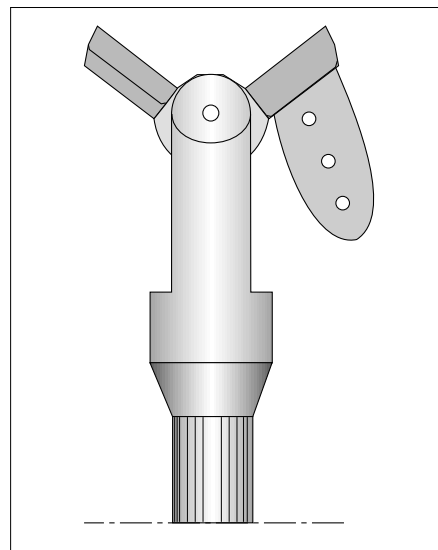
During endoscopy, multiple biopsies are often necessary to clarify certain diagnostic issues, such as gastric *Helicobacter pylori* infection, the presence and extent of inflammatory bowel disease (IBD), or the presence of malignant lesions. In all of these cases, the endoscopist repeatedly has to insert and withdraw traditional biopsy forceps through the endoscope channel in order to obtain all the mucosal specimens required – making the examination excessively long and reducing patient compliance. In addition, frequent passage through the channel quickly wears out the endoscope.

To solve this problem, a new type of biopsy forceps has been devised, incorporating a pouch container that can receive multiple biopsy samples (patented by M.

Paternuosto and in development by Boston Scientific, Inc.).

This new type of disposable metal forceps for endoscopic biopsy (Figure 1) consists of two cups. One of the cups has a central hole and is connected to a 12-mm or 20-mm pouch (for use either in the stomach or in the colon) (Figure 2). The pouch is a small plastic bag, which is open at the distal end so that air can escape; the plastic bag is able to store 10–20 specimens. At the end of the endoscopy, the small pouch is cut from the cup and used to deliver the specimens to the laboratory for histological examination. Alternatively, when samples are being taken from different sites, the specimens can be recovered from the small pouch, and the forceps can be reused.

A total of 90 patients have been studied in whom this new forceps was used; 75 patients had suspected gastric or colonic cancer and 15 had IBD. In patients with gastric and colonic cancer, several specimens were collected (mean 8, range 6–12) from the same site. In patients with IBD, the specimens (mean 5, range 4–7) were stored in the same plastic bag, which was emptied after sampling from four sites. The use of the new biopsy forceps reduced the duration of the examination and increased patient compliance; in addition, the easy collection of multiple biopsy specimens increased the diagnostic power of the examination. The new forceps can reduce the wear on endoscopic instruments and may consequently offer a better cost-benefit ratio in the management of endoscopy services.



**Figure 1** The biopsy forceps.



**Figure 2** The opened cups with the pouch.

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