Diagnostic quality of biopsy specimens: comparison between a conventional biopsy forceps and multibite forceps

A C Fantin, Jörg Neuweiler, W R Suter & Christa Meyenberger

BACKGROUND: The endoscopic biopsy is a prerequisite for histopathologic diagnosis. Various types of forceps are used to obtain tissue specimens. The aim of this study was to assess and compare the diagnostic quality of biopsy specimens obtained with a conventional forceps and a Multibite forceps.

METHODS: In a prospective, partially blinded, and randomized trial that included 250 patients referred for diagnostic upper and/or lower endoscopy, 510 biopsy specimens obtained with the Multibite forceps were compared with 520 specimens obtained with a conventional forceps. An experienced, blinded pathologist evaluated the specimens for diameter, depth of specimen, artifacts, anatomic orientation, vitality, general histologic quality, and diagnostic quality. Statistical analysis was performed by using the Fisher exact test. A p value of < 0.05 was regarded as significant.

RESULTS: There were no statistically significant differences between the specimens obtained with the 2 forceps. The p values for the evaluated parameters were as follows: diameter 0.45, depth of specimen 0.56, artifacts 1.0, pathoanatomic orientation 0.40, vitality 0.45, and histologic diagnostic quality 0.53.

CONCLUSION: The quality of biopsy specimens obtained with the Multibite forceps is comparable with that of specimens taken with a conventional forceps. Use of the Multibite forceps saves time in that 4 specimens can be obtained in 1 pass in situations in which a large number of specimens are needed or when the potential for transmission of infection is of concern.

type: journal paper/review (English)
date of publishing: 11-2001
journal title: Gastrointestinal endoscopy (54/5)
ISSN print: 0016-5107
pages: 600-4