



Letter to the Editor

What is the value of repeated upper gastro intestinal endoscopy in cases of a previous endoscopy without macroscopic abnormalities?



Dear Editor,

Upper gastrointestinal endoscopy (UGE) is routinely used in daily practice [1,2]. Some patients are repeatedly sent for UGE despite the fact that a previous procedure showed no abnormalities. Apparently because of recurrent or persistent complaints. Hence there can be discussion on the feasibility of a new procedure. A study was done in order to evaluate the results of a UGE if a previous one revealed no abnormalities. (See Table 1.)

A large prospectively collected dataset covering more than 25 years of consecutive UGE's was used. Only patients with more than one UGE in the dataset, and in whom the index procedure revealed no macroscopic abnormalities, were included. From all patients the data set was searched for the results of a following procedure. If a patient underwent more procedures than the result of the first one with macroscopic abnormalities was noted. The time between the index UGE and the procedure showing either no abnormalities or one or more macroscopic findings was noted in months.

The dataset comprised of 37,869 consecutive endoscopies. In 10,748 (28.3%) no macroscopic abnormalities were detected. From this group 1534 patients (14.3%) underwent one or more new UGE's in the course of time. Patients with more than one follow-up UGE and ultimately abnormalities underwent significantly more endoscopies. Women significantly had more often no abnormalities during following endoscopies ($p = .01$, chi-square testing). The table shows the findings in patients with one follow-up or more follow-up's.

Ten cancers (0.65%) were detected; one colon cancer located in the transverse colon with ingrowth in the pars horizontalis of the duodenum, diagnosed 10 months after the index endoscopy without abnormalities. The other cancers were located in the distal oesophagus or gastric cardia. No distal stomach cancer was diagnosed. For these nine cancers the mean number of months after the index endoscopy was 115 (median 104, range 32–203). Eight of these patients complained of newly developed dysphagia, one patient had hematemesis. A hiatal hernia or insufficient gastric cardia was diagnosed in 410 patients (26.7%), reflux oesophagitis was seen in 113 patients (7.4%). In only 6 patients (0.4%) intestinal metaplasia in the oesophagus (Barrett's) was seen. A total of 32 patients (2%) showed a peptic ulcer. Eight of these patients had an upper GI-bleeding as first sign of the ulcer. There was no difference in time elapsed between patients showing no abnormalities or patients with ultimately macroscopic abnormalities.

The present study is neither a randomized trial nor a standardized follow-up study. It simply reflects daily practice. Patients undergo UGE because of complaints. And in case no abnormalities are detected, re-

gardless of pragmatic therapy, patients are sent for a new UGE. Of course, the absence of abnormalities can be reassuring for both patient and doctor.

There is no difference in number of follow-up months between patients in whom endoscopy still shows no abnormalities and those in whom ultimately one or more macroscopic abnormalities are detected. If a new UGE shows abnormalities, than these very often are signs indicative of reflux disease. It could be assumed that patients with reflux symptoms, in absence of any alarm symptom, will not benefit from a new endoscopic examination. It also can be argued that in case of typical gastroesophageal reflux symptoms the endoscopic finding of a hiatal hernia or oesophagitis will not change the medical treatment. The argument of detecting developing Barrett's oesophagus is not valid since in the present study Barrett's metaplasia only was detected in six patients. Also the number of patients who developed cancer was rather low. A possible flaw in the study is the fact that the reason for the next endoscopy was not noted. These data could not be retrieved anymore from the files. But, it is tempting to assume that patients are sent because of recurrent or annoying complaints or fear for cancer.

From the present study, it can be concluded that a thorough medical history on recurrent upper abdominal complaints without presence of alarm symptoms like dysphagia, bleeding, anemia, weight loss, or changing of previous complaints, can lead to the decision of omitting a new UGE in case a previous one did not show macroscopic abnormalities. This especially seems to be true if the previous procedure was no more than 8 years ago.

Table 1

The findings in two groups of patients.

	One following UGE	More following UGE's
Hiatal hernia/insufficient gastric cardia	231	179
Reflux esophagitis	68	45
"Gastritis"	187	126
Bulbitis	43	18
Peptic ulcer	15	17
Cancer	5	4
Barrett's	2	4
Gastric polyps	37	18
Schatski	15	8
Varices	4	1
miscellaneous	20	22

Declaration of Competing Statement

There are no conflicts of interest.

References

- [1] Axon ATR, Bell GB, Jones RH, Quine MA, McCloy RF. Guidelines on appropriate indications for upper gastrointestinal endoscopy. *BMJ* 1995;310:853–6.

- [2] Early DS, Ben-Menachem T, Decker GA, Evans JA, Fanelli RD, Fisher DA, et al. Appropriate use of GI endoscopy. *Gastrointest Endosc* 2012;75:1127–31.

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