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Should we systematically perform an Esophagogastroduodenoscopy (EGD) in any patient with IBD?

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Introduction :
Certain complementary examinations are essential to make the diagnosis of inflammatory bowel disease (IBD), as well as to establish an initial mapping that seems to be a crucial element in the therapeutic choice. However, the systematic search for lesions in the upper digestive tract is still controversial. The aim of this work is to study the contribution EGD in IBD.
Materials and methods : *It is about a retrospective study, including all the patients followed for an IBD and having benefited from an EGD within the department of gastroentero-hepatology of the CHU Hassan II of Fez between January 2005 and April 2018.*
Results : *Among 740 patients followed for IBD, 207 were included. The mean age was 36.8 years [18-74 yo] with a sex ratio F / M of 1.28 .132 patients (63.7%) had Crohn's disease (CD) and 75 patients (36.2%) had ulcerative colitis (UC). The EGD was performed routinely in 129 patients (62.3%) either as part of a Crohn's disease assessment (57.4%), or while an inaugural severe acute colitis (42.6%), and was indicated in the presence of upper gastrointestinal symptoms in 78 patients (37.7%) dominated by epigastralgia (47 patients) and vomiting (38 patients).*
EGD was almost normal in 131 patients (63.2%), and revealed: oesophagitis in 15 patients (7.2%), nodular or atrophic gastritis in 26patients (12.5%), a loss of duodenal folds in 17 patients(8.2%), and gastroduodenal aphthous ulcerations suggestive of a high localization of Crohn's disease in 18 cases (8.7%). Histology confirmed the diagnosis of Crohn's disease in 5 patients, and showed associated celiac disease in 11 patients (5.3%), 10 of whom were Crohn's, whereas in 178 patients (85%), it was nonspecific. HP was found in 55.8% (n = 115) of patients.
Conclusion
In our series, the EGD was almost normal in 63.2% of cases , whereas it showed an upper localisation of crohn's disease in 18 patients (8.6%) and an association with celiac disease in 11 patients (1.4%). % of all patients followed for IBD.
The results elucidated recommend the EGD as a systematic examination in IBD especially in case of an upper digestive symptomatology .
Keywords *: Esophagogastroduodenoscopy (EGD), inflammatory bowel disease (IBD) , Crohn's disease (CD) ulcerative colitis (UC)*
Conflicts of interest :
All authors declare that there is no conflict of interests. This study was not supported by any pharmaceutical industry .

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I. Introduction :

The chronic inflammatory bowel diseases (IBD) are characterized by periods of remission interrupted by the episodes of clinical relapse due to recurrent intestinal inflammation. Their immunopathogenesis reflects dysregulated interaction among environmental factors, intestinal flora, and genetic susceptibility factors within the immune system, which triggers inflammatory activities in the colonic mucosa [1]. They mainly affect the colon, the ileum that's why the systematic search for lesions in the upper digestive tract is controversial.

Aim of the study : To prospectively determine the importance and the findings of the upper gastrointestinal endoscopy in patients with IBD.

II. Materials And Methods :

This is a retrospective and descriptive study including the 105 patients who have an IBD and who underwent an EGD between January 2005 and April 2018 in the gastroentero-hepatology department of the Hassan II University Hospital in Fez - Morocco.

The variables were retrospectively collected in a computer database then their statistical analysis was performed using SPSS 20.0 .

Conflicts of interest :

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III. Results :

A total of 207 patients that underwent EGD during the study period were identified : 132 cases of CD and 75 cases of UC . The diagnosis of IBD was made by a combination of endoscopic, histologic, and radiologic studies in all patients using conventional criteria . The characteristics of patients are shown in Table 1. Ninety patients were males while one hundred sixteen were females, and the average age was 36.8 years old [18 -74 yo]. The EGD was practiced in 78 patients due to upper gastro-intestinal symptoms such as epigastric pain, nausea or womiting ,while in the rest of patients , it was done by part of work-up.

Characteristics (n=207)	
Mean age	36.8 [18 -74].
Sex (F/M)	116/90
Type of IBD	CD :132 UC : 75
Smoker (n)	47
symptomatic patients (n=78)	Epigastralgia (n=47) Nausea / vomiting (n=38) heartburn/reflux (n=6)

Table 1: Patient's characteristics.

EGD was almost normal in 131 patients (63.2%), and revealed: oesophagitis in 15 patients (7.2%), nodular or atrophic gastritis in 26patients (12.5%), a loss of duodenal folds in 17 patients(8.2%), and gastroduodenal aphthous ulcerations suggestive of a high localization of Crohn's disease in 18 cases (8.7%). Histology confirmed the diagnosis of Crohn's disease in 5 patients, and showed associated celiac disease in 11 patients (5.3%), 10 of whom were Crohn's, whereas in 178 patients (85%), it was nonspecific. HP was found in 55.8% (n = 115) of patients.

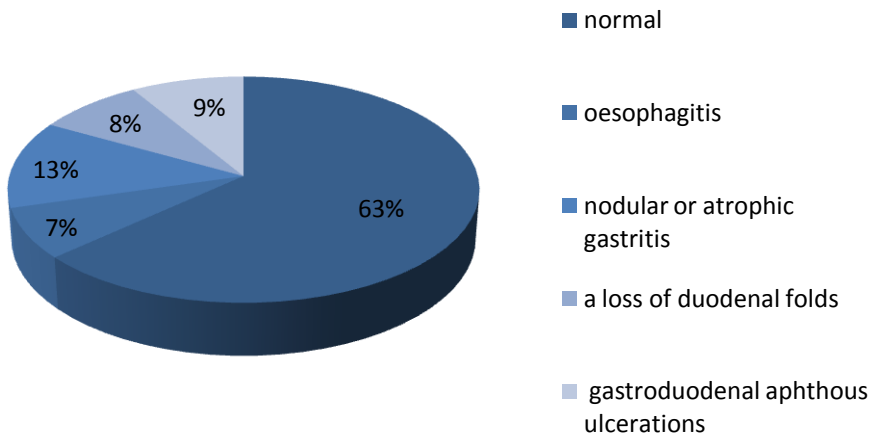

Figure 1 : results of EGD

IV. Discussion :

The CD mainly affects the ileum and colon, but more recently upper gastrointestinal tract involvement has gained attention [1, 2, 3]. The reported rate of UGI lesions in CD varies from 1% to about 80%. The difference in the rate of UGI involvement is more likely due to the different criteria that were adopted among the studies. Some studies used histology whereas some studies used macroscopic criteria, as shown in the figure

2. The difference in the age of the patient population may also affect the outcome [4,5]. In our study , we found that the CD affects the UGI tract in 18 patients .

In order to unify the definitons , the UGI lesions of CD include aphthae, erosions, ulcerations, bamboo joint like lesion, strictures, and notch like appearance [6,7] .

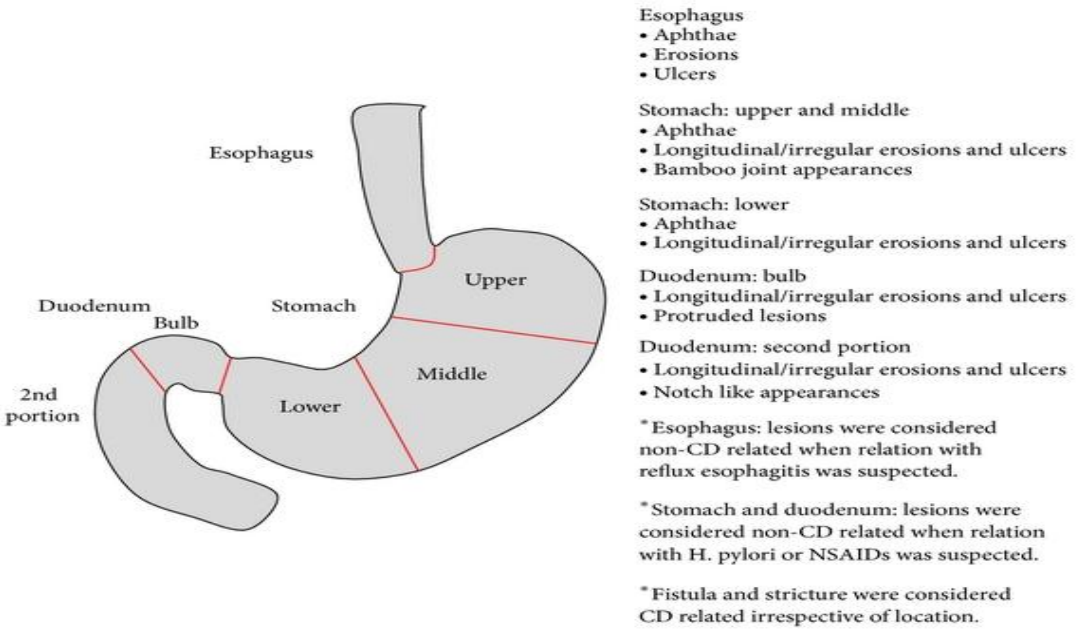

Figure 2: Definition of UGI lesions specific to CD [4]

As far as the UC concerned ,in a case-control study made by investigators from Cedars-Sinai Medical Center in Los Angeles,, 100 patients : 50 patients with UC (cases) and 50 patients with CD (control)were assessed. Symptoms of heartburn/reflux and epigastric pain were similar in each group; nausea and/or vomiting was less common in those with ulcerative colitis than in those with Crohn disease (8% vs 26%; P = .016). There were no significant difference in the two groups as well as Endoscopy findings concerned, including non–Helicobacter pylori gastritis [8]. Unlikely in our study ,UGI symptoms were notified more frequently in patients with CD (63%)than patients who have an UC (37%) .

No need to mention that Celiac disease and IBD are inflammatory disorders of the gastrointestinal tract with genetic, immunological and environmental factors involved in their pathogenesis .The multicentre study , which was conducted by the Italian Group for IBD between January 2002 and December 2004 including 1711 consecutive outpatients with IBD: 860 cases of CD and 791 cases of UC showed that Nine of all these patients (0.5%) had serological and histological findings compatible with a diagnosis of celiac disease : six of them had UC and three had Crohn's disease .On the other hand , the prevalence of IBD is reportedly 5 to 10 times higher in celiac disease than in the general population [9] .

In our series , the Helicobacter Pylori infection was found in 115 patients unlike the low proportion of the patients positive for HP infection found in other series that was 10.8% and 16.7% in USA and Japan respectively .That could be attributed to the frequent antibiotic use in patients with IBD . [4, 7].

The sensitivity and specificity of radiological imaging techniques in the assessment of upper GI CD is unclear, with publications limited to case reports and small series. Radiological assessment of patients should be reserved only for those patients with CD and upper GI symptoms in whom endoscopic assessment has failed or is incomplete. Radiological assessment of the upper GI tract should not form part of routine diagnostic workup[10].

V. Conclusions:

we have shown that UGI lesions are frequent among CD patients based upon our endoscopic criteria however the detection of granuloma was less frequent .

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