Ulcerative colitis in Albania: Clinical and endoscopic correlations

Ilir Bibolli¹, Jonida Uku¹, Bajram Begaj² and Liri Çuko¹

Abstract

Ulcerative colitis is a chronic disease of unknown cause, characterized by ulceration of the colon and rectum mucosa with rectal bleeding and diarrhea. Frequently causes anemia, hypoproteinemia and electrolyte imbalance, and is also less frequently complicated by peritonitis, toxic megacolon or colon carcinoma (Danese and Fiocchi, 2011). The goal of this review is to analyze the most affected age and clinical presentations related to age groups; the relationship between age, clinical activity of the disease, hemorrhage and endoscopic findings and to define the correlation between age and disease evolution. This is a retrospective five years study, based on medical cards, which includes 100 patients with ulcerative colitis hospitalized in the University Hospital Center “Mother Theresa”, in the Gastroenterology department. Ulcerative colitis is active age pathology, with an average age of 49.7 years. Rectal bleeding correlates with endoscopic extension of the disease. Pancolitis is mostly found in severe clinical presentations, although it is present in 18-26% in moderate forms of ulcerative colitis. The pathology is located in the rectum in 14-16% of the severe clinical presentations. Pseudopolyps are common in every age group, while atrophy and colon cancer are characteristic in patients older than 40. There are reciprocal correlations between clinical presentation and endoscopic findings. Age is an important factor affecting clinical activity, endoscopic findings and disease evolution.

Keywords: Age groups, endoscopic findings, evolution disease, pancolitis, rectal bleeding, ulcerative colitis

INTRODUCTION

Ulcerative colitis is a chronic idiopathic inflammatory disease of the gastrointestinal tract that affects the large intestine (Abraham, 2009). It is thought to be a multifactorial disease characterized by remission and active phases, which is individual (Nature Clinical Practice, 2006).

The disease affects up to 12 per 100000 people in Western countries with an increasing worldwide incidence. The prevalence is 8 to 246 per 100000 people (JCrohns Colitis, 2014).

Diarrhea and rectorrhage are the main clinical features of the disease which might be also presented with local or systemic complications (MFMER, 1998-2003). Endoscopic examination is the diagnostic gold standard.

Current management of ulcerative colitis is based on the use of anti-inflammatory, glucocorticoids, immunomodulators (Kornbluth, 2010) and biologic therapy (Ford, 2011). Subtotal/total colectomy is reserved for some complicated cases (American Society of Colon and Rectal Surgeons, 2012).

METHODS

This is a retrospective five years study, based on medical cards, which includes a hundred patients with ulcerative colitis hospitalized in the University Hospital Center “Mother Theresa”, in the Gastroenterology department,
Endoscopic findings - Age

Figure 1. Endoscopic findings of the disease in different groups of ages

from the year 2007 to 2011. The trials are focused on patients’ age, clinical presentations including the frequency of defecation and rectal bleeding, hemoglobin value, disease evolution and endoscopic findings.

Analysis

All the variables in this study were expressed in percentages and in absolute values. In this study was applied the Statistical Package for Social Science, SPSS 19.0. The correlations between clinic and endoscopic findings and others were examined using Chi-squared test and Spearman Correlation. A p value of <0.05 was considered significant.

RESULTS

What ages is ulcerative colitis most frequent?

12% of the patients with ulcerative colitis are 20-30 years old, 22% of them are 30-40 years old, 22% are 40-50 years old and the remaining 38% are older than 50. The disease presentation gets more frequent getting older, this is because of the chronic state of the disease. Minimum age of onset is 14.6 years old. Its maximum is 82.1 years old, with an average age of 49.7 years.

What is the clinical presentation of ulcerative colitis among age groups?

The main clinical features of the disease, diarrhea and bleeding, in most cases are both present. 37% of the patients have frequency defecation more than eight times a day; 14% of them are 20-30 years old, 22% are 30-40 years old, 32% are 40-50 years old and 32% are over 50. Severe bleeding is present in 21% of the patients; 19% of them are 20-30 years old, 33% are 30-40 Years old, 19% are 40-50 years old and 29% are older than 50. These values lead to the conclusion that severe bleeding is mostly present after the first presentation of the disease, ensued by a depletion of the clinical severity with a second peak in the older age. That means ulcerative colitis does not present a clinic plato, it presents in a sinusoid form.

Is there a correlation between age and endoscopic findings?

In evaluating endoscopic findings in several groups of ages we found that 67% of patients aged between 20-30 years, had ulcerative lesions located beyond the rectum and 33% had pancolitis; 14% of patients aged 30-40 years had lesion located only in the rectum, in 64% of this group, the disease was found beyond the rectum and 18% had pancolitis. In the 40-50 year old group the disease limited in the rectum in 18% of the cases, 57% beyond the rectum, 25% had pancolitis. In the over-50-year old group, in 13% of the cases the disease was located in the rectum, 58% beyond the rectum and 29% had pancolitis. According to the values found in this trial, endoscopic findings in different ages are the same as in general, which means there are no differences among age groups. Except for pancolitis, which is much more frequent at age over 50? (Figure 1 and 2)

Is there a correlation between clinic and endoscopic findings in ulcerative colitis?

Endoscopic findings were evaluated in comparison with clinical features, respectively, defecation frequency and rectal bleeding (MFMER, 2003). We found out pancolitis is more frequent in severe clinical presentations, even though it is found in 18-26% of mild disease presentation. On the other hand, 14-16% of severe presentation, the disease is located in rectum.
Figure 2. Endoscopic expansion of the disease in respectively mild, moderate and severe forms of diarrhea and rectal bleeding.

Figure 3. Rectal bleeding severity according to the endoscopic extension of the ulcerative lesions.

Figure 4. The evolution of the disease to pseudopolyps, atrophy and colon cancer at different ages.
That concludes there is no absolute correlation between clinical and endoscopic findings, even though they mostly go together. As to the bleeding, further the ulcerative lesions go, greater is the bleeding severity.

Pseudopolyploid evolution is dominant in 36% of cases, while as only 5% evaluate to colon atrophy, and 1% develop colon cancer. Pseudopolyps were found in 25% of patients aged 20-30 years, 32% in 30-40 years, 32% in 40-50 years and 45% over 50 years. Atrophy was registered in 7% of patients aged 40-50 years and 8% over 50 years. Colon cancer was found only in 4% of patients aged 40-50 years. Pseudopolyps are found at every age, but atrophy and colon cancer are characteristic for patients older than 40. (Figure 3 and 4)

CONCLUSIONS

Ulcerative colitis is a common disease characterized by considerable inter-individual variability in terms of severity and morbidity. The spectrum of the disease ranges from the mild presentation to severe complications. Rectal bleeding and diarrhea are associated to each other. There are reciprocal correlations between clinical activity and endoscopic findings. The severity of bleeding correlates with the endoscopic extension of the ulcerative lesions. At the other hand, we find pancolitis mainly at severe clinical presentation of the disease. But there is no strong correlation between clinical activity and endoscopic extension of the disease, although in most of cases they are concordant.

Ulcerative colitis is an active age pathology. Age is an important factor affecting clinical activity, endoscopic findings and disease evolution. Defecation frequency over than eight times a day is mostly found in patients older than 40 years. Pancolitis is common at the age of fifty. As to its evolution, pseudopolyps are common in every age group, while atrophy and colon cancer are characteristic in patients older than 40.

REFERENCES


American Society of Colon & Rectal Surgeons (2012)


Crohn's and Colitis foundation of America, Inc. 1996-2002


Department of Pathology, University of Washington, Seattle, Washington 98195-7705, USA

Dr K Geboes, Department of Pathology, University Hospital, KULeuven, Minderbroedersstraat 12, 3000 Leuven, Belgium

Evangelisches Krankenhaus Kalk, University of Cologne, Germany


Mayo Foundation for Medical Education and Research (FMFER), 1998-2003


National Digestive Diseases Information Clearinghouse, MD 20893-3570


University of California, Davis Medical Center

University of Newcastle, North Tyneside Hospital, Rake Lane, North Shields, Tyne and Wear NE29 8NH, UK.