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Alimentary Tract

Impact of age at diagnosis on natural history of patients with elderly-onset ulcerative colitis: A French population-based study

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ABSTRACT

Background: Recent population-based study of elderly-onset Crohn's disease patients reported age-related differences in disease phenotype and outcome.
Aims: The aim was to assess the impact of age at diagnosis on natural history of elderly-onset ulcerative colitis patients with emphasis on disease presentation, phenotype and treatment.

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Epidemiology
Phenotype
Surgery

Methods: Elderly-onset patients with ulcerative colitis (≥60 years at diagnosis) registered in a French population-based Registry EPIMAD (1988–2006) were included. Demographic and clinical data at diagnosis and at maximal follow-up were collected using predefined questionnaire.
Results: Four-hundred and sixty-five elderly-onset ulcerative colitis patients were included (median follow-up 6.2 years); 276 (59%) were <70 and 189 (41%) ≥70 years at diagnosis. Patients aged <70 years presented with more rectal bleeding (86% vs. 79%, p = .06) and abdominal pain (44% vs. 34%, p = .04) while those ≥70 years had higher rate of left-sided colitis (62% vs. 49%; p = .02). Cumulative exposure to 5-ASA, corticosteroids and immunosuppressants was similar between the groups as well as surgery rate. However, patients <70 years were significantly more steroid-resistant than older individuals (12% vs. 3%, p < .05) while no significant difference in steroid-dependency was observed.
Conclusion: Patients with elderly-onset ulcerative colitis differed in presentation, disease phenotype and response to medication with respect to age at diagnosis.

1. Introduction

Elderly-onset patients with inflammatory bowel disease (IBD) represent up to 20% of IBD patients diagnosed [1]. Several population-based studies demonstrated that elderly-onset patients, both Crohnís disease (CD) and ulcerative colitis (UC), differ in disease phenotype, disease course and prognosis compared to younger adult and also paediatric populations [2–6]. However, patients with elderly-onset IBD per se might not be a homogenous group in terms of disease presentation and disease outcome. Indeed, a recent French population-based study of elderly-onset CD patients reported a different disease course in patients diagnosed 60–69 years and ≥70 years of age with regard to CD localization, rate of disease progression and exposure to medication [7]. Whether this difference exists also in elderly patients with UC is unknown.

Apart from IBD specific differences in elderly-onset patients, older individuals in general represent specific population having higher risk of infectious or neoplastic diseases resulting from the age as such, higher rate of comorbidities with subsequent polypharmacy and potential drug interactions, or decreased physical and mental reserve [1,8–11]. This fact, beside different IBD course in these patients, may have an impact on general treatment policy, treatment effectiveness and tolerability in elderly-onset individuals. Nevertheless, compared to paediatric or adult onset IBD populations there is relative paucity of data on medical treatment regarding efficacy and tolerability in patients with elderly-onset IBD.

The aim of this population-based study was to assess the impact of age at diagnosis on natural history of elderly-onset UC patients with a specific emphasis on disease presentation, phenotype and treatment outcome.

2. Materials and methods

2.1. Patient population

The study population comprised patients with UC registered in a large prospective French population-based registry named EPIMAD who were diagnosed with UC at or after the age of 60 years during a period from 1988 to 2006 [6].

According to the 2008 national census, the study area of EPIMAD registry contains a total of 5,841,156 inhabitants with a population over 60 years of age of 1,092,296 subjects. Included patients had to be residents of the study area at the time of IBD diagnosis.

The detailed methodology of the EPIMAD registry has been previously described [12]. In summary, 7 interviewer practitioners collected data on all incident cases of IBD diagnosed by gastroenterologists whatever their type of practice (private, public or both; n = 262) using a standardized questionnaire. The registered data of the main interest were: age, gender, year of diagnosis, date of symptoms onset, clinical, radiological, endoscopic and histologic findings at the time of diagnosis. Final diagnosis of UC was determined by two expert gastroenterologists and recorded as definite, probable or possible according to validated and previously published criteria [12]. Only patients with definite or probable diagnosis of UC were included in this study.

2.2. Data collection

Data were prospectively collected at the time of diagnosis and retrospectively at maximal follow-up using the standardized questionnaires and were extracted from patients' medical records. The following information was recorded: age at diagnosis, gender, date of diagnosis, diagnostic delay, symptoms at onset, extent of the disease at diagnosis and at last follow-up, family history of IBD, presence of extraintestinal manifestations (EIM) at diagnosis, disease relapse and surgery (total or partial colectomy). Furthermore, the details on medical therapy (start date, end date, efficacy and complications) including 5-aminosalycilic acid preparations (5-ASA), corticosteroids, immunosuppressants (thiopurines, methotrexate, or ciclosporine) and anti-tumour necrosis factor (TNF) α agents were collected. Disease relapse was defined as worsening of clinical symptoms requiring treatment escalation. The disease extension was classified according to Montreal classification [13]. Corticosteroid resistance was defined as no response to maximal dose of intravenous steroids requiring introduction of salvage medical therapy (cyclosporine or infliximab) or colectomy. Corticosteroid dependency was defined as disease relapse during tapering of steroids or within three months of treatment discontinuation.

2.3. Ethical committee

The study was approved by Ethical Committee of Lille University and Hospital and this study followed the regulations and instructions set up by the Comité National des Registres (approval N° 97107 and N° 983792).

2.4. Statistical analysis

Categorical data are expressed as absolute numbers and percentage; continuous data as median and interquartile range. Chi2 test or Fisher exact test were used for comparison of qualitative data; T-test or Mann–Whitney tests for quantitative variables. As the population over the age of 60 year was being evaluated, with a focus on the differences between those diagnosed before the age of 70 years and those diagnosed above the age of 70 years, death

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