UNIVERSITY OF MEDICINE AND PHARMACY OF TÂRGU-MUREŞ SCHOOL OF DOCTORAL STUDIES

EPIDEMIOLOGICAL AND CLINICAL EVOLUTIVE ASPECTS OF THE ULCERATIVE COLITIS

ABSTRACT

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Introduction: Over the last 3 decades, the improvement of diagnosis criteria in idiopathic inflammatory bowel diseases led to an increased interest on a global level for this pathology. The characteristic phenotype of inflammatory bowel diseases will show us the prognostic of the disease and the treatment as well, for each patient with specific medication for the pursued target.

Ulcerative Colitis (UC) is a continuous or recurrent chronic inflammatory disease, which evolves with flares of activity and clinical remission periods. The clinical features in UC are correlated with the severity and extension of the disease. The clinical activity of the disease is classified into four categories: mild, moderate, severe and phase of remission. In relation to the extension of lesions there are described: proctitis, left-sided colitis and extensive colitis (including pancolitis).

The clinical evolution of the disease, the prognosis and any associated complications are of major importance for the patient and the treating physician.

The aim of this study is tracking the incidence and prevalence of UC, emphasizing the demographic, clinical, biological and treatment of disease and monitoring the progress of disease in a group of 160 patients with known diagnosis and newly diagnosed in 2007-2011. Disease was diagnosed based on clinical and laboratory criteria (Classification Truelowe and Wats), endoscopicaly (Montreal classification) and confirmed histologically.

Material and methods: We have performed a prospective observational study on a batch of patients who were being monitored at our clinic in the period January 2007 – December 2011. The batch of study comprised 160 patients with UC. The diagnosis of the disease has been established based on the clinical, endoscopic and histopathological examination. Each patient had a - patient's record - in which we collected the demographic data (surname/name, age, gender, environment and county of origin, smoker status), family history of inherited and collateral diseases, signs and symptomatology of the disease (stool frequency, presence of rectal bleeds, abdominal pains, body temperature, body weight, asthenia, adynamia). From the biological parameters were taken into consideration the values of the hemoglobin, leukocytes, thrombocytes, of serum transaminases, proteins and of the markers of the inflammation: ESR and CRP. All patients have been examined endoscopically (for evaluation of the extension and severity of the lesions) at the onset and subsequently 1-2 years after the moment of the diagnosis in view of monitoring the evolution of the disease during the said period. There have been evaluated the extraintestinal and bowel complications, the treatment for each patient at the onset of the disease, during the active periods of the disease, and as well in the remission phase of the disease (clinical and endoscopic).

The clinical activity of the disease (according to Truelove & Witts' Classification) has been classified into four categories: mild, moderate, severe and remission. The distribution of lesions, according to the Montreal Classification, has been grouped into: proctitis (lesions limited up to the level of the rectosigmoid junction), left-sided colitis (extensive lesions distal to the splenic flexure) and extensive left-sided colitis including pancolitis (extensive lesions proximal to the splenic flexure). The clinical activity of UC and also the extension of the lesions at onset have been studied, and subsequently at each flare of re-exacerbation of the disease, as well as at the end of the monitored period.

Statistical Analysis. All statistical analyzes were performed using EpiInfo utility and utility GraphPad demo.

Results: Epidemiological data recorded from two centers with the largest gastroenterology cases and law addressing Mures county, over this period, showing an incidence of CU, Mures County of 13.88 cases per 100 000 inhabitants adult population, increasing gradually study period (from 2.05 / 105 in 2007 to 6.00 / 105 in 2010 and 5.14 / 105 in 2011). WITH prevalence was 18.77 cases per 100 000 inhabitants adult population. In the studied batch

we had an approximate equal distribution on gender of the patients: 51% women, 49% men. Most of the patients were from of an active urban environment (71%). According to the county of origin, the higher reach refers to the patients from the Mures county (66,25%). The minimum onset age of UC was 15, and the maximum age 80. Concerning the smoker status, 61% of the patients were non-smokers, and 25% active smokers. In the smokers group of patients prevailed the female gender, and in the other two groups (ex-smokers, respectively non-smokers) distribution on genders was approximately equal. According to the extension of lesions, 60% of the patients had left-sided colitis, 22% extensive left-sided colitis, and 17% proctitis. According to the severity of the disease, 54% of the patients had moderate flares of disease, 24% mild flares, 15% severe flares and only 7% have been in clinical and endoscopical remission during the analyzed period. All patients had been at least once admitted to the hospital, and the maximum number of admissions was 10. Concerning the biological pannel, 63% of the patients presented hypoproteinemia with hypoalbuminemia, 47% of the patients presented anemia. During the active periods of the disease only 13% of the patients had positive values of CRP. The presence of low grade dysplasia (LGD) has been identified in 2 patients, high grade dysplasia (HGD) has been identified 1 patient (1%), at whom the evolution of the disease lasted 5 years. Colorectal cancer (CRC) has been identified in 2 patients with a very long evolution of the disease (16 years, respectively 5 years).

Conclusions: According to the results obtained UC has an ascending trend of incidence, fact that imposes an appropriate management of the patients with diarrheic syndrome to which there are associated or not pathologic elements (blood, mucus). These data demonstrate the usefulness of endoscopic monitoring in patients with an older dated disease and of those with an extensive form of the disease, including pancolitis, as well as the usefulness of early colectomy in patients with severe dysplasia.

Key words: Ulcerative colitis, incidence, dysplasia, CCR.