142. THE TIME COURSE AND DETERMINING FACTORS OF DIAGNOSTIC DELAY IN AUTOIMMUNE ATROPHIC GASTRITS

Lenti M.V. [1], Miceli E. [1], Staiani M. [1], Cococcia S. [1], Guglielmi F. [1], Pisati M. [1], Caccia Dominioni C. [1], Klersy C. [2], Di Stefano M. [1], Corazza G.R. [1], Di Sabatino A. [1]

[1]First Department of Internal Medicine, IRCCS Fondazione Policlinico San Matteo, Pavia, Italy; [2]Servizio di Biometria e Statistica, IRCCS Fondazione Policlinico San Matteo, Pavia, Italy

Background & Aims: Diagnostic delay may represent a relevant problem for autoimmune atrophic gastritis (AAG) which, if not promptly diagnosed, can lead to severe or irreversible complications, including pernicious anaemia, gastric adenocarcinoma, and neurological lesions. Our aim was to evaluate the time interval from clinical signs at AAG onset to its final diagnosis, and possible factors influencing AAG diagnostic delay.

Methods: All new consecutive outpatients referred to our Unit over a 10-year period, who received a diagnosis of AAG according to the updated Sydney system, were enrolled. We administered a questionnaire that included information regarding: (1) the time interval between the onset of any AAG-related signs or symptoms (e. g. pernicious anaemia, isolated macrocytosis, vitamin B12 deficiency, neurological symptoms, cardiovascular ischemic events, infertility, gastrointestinal symptoms, autoimmune associations) and the final AAG diagnosis; (2) number and specialty of physicians consulted before AAG diagnosis; (3) socioeconomic and demographic factors (e. g. marital status, years of education, exemption from ticket, economic status). Both patient-dependent delay (i. e. the time between onset of symptoms suggestive of AAG and the first medical consultation), and physician-dependent delay (i. e. the time between the first medical consultation and final diagnosis), were evaluated. Statistical analyses were performed using STATA statistical software. A p<0. 05 was considered as statistically significant.

Results: Over the 10-year period, 291 patients (ratio F: M = 2. 3:1, mean age 61±15 years) were diagnosed as affected by AAG. The median overall delay was 14 months (range 0-300), being the median patient-dependent delay 4 months (range 0-180), and the median physician-dependent delay 5 months (range 0-242). Factors who resulted significantly associated with a longer patient-dependent delay were female sex (p=0. 0007), low education level (p=0. 04), and infertility/miscarriages (p=0. 008), while gastroenterological symptoms were significantly (p=0. 014) associated to a longer physician-dependent delay. In addition, the delay was influenced by the physician's specialty, being significantly (p=0. 01) higher among gastroenterologists (median 6 months, range 0-242) in comparison to internists (median 3 months, range 0-120 months) and haematologists (1 month, range 0-48 months). A previous misdiagnosis was related with a longer physician-dependent delay (26 months, range 1-242 vs 4 months, range 0-180 months; p<0. 01). A lower overall diagnostic delay was significantly associated with haematological abnormalities (9 months, range 0-200 vs 17 months, range 0-240; p=0. 004). Marital status and low economic status did not affect diagnostic delay.

Conclusions: AAG is burdened by a significant diagnostic delay, likely due to its wide clinical spectrum. Haematological alterations are recognised earlier compared to other clinical presentations. Patients with a higher educational level may underestimate their symptoms thus prolonging the delay. Increasing awareness of AAG among the general population and physicians may shorten the diagnostic delay thus preventing the end-stage AAG-related complications.

143. RECTAL MUCOSA INFLAMMATION IN NON-CELIAC WHEAT SENSITIVITY: COMPARISON WITH DUODENAL HISTOLOGY

Carroccio A. [1], Giannone G. [2], Mansueto P. [3], Soresi M. [3], La Blasca F. [3], Fayer F. [3], Geraci G. [4], Catalano T. [5], Arini A. [3], D'Alcamo A. [3], Villanacci V. [6], Florena A.M. [2]

[1]DiBiMIS University of Palermo, Italy and Internal Medicine, Giovanni Paolo II Hospital, Sciacca (ASP Agrigento), Italy; [2]Pathology Unit, Dept. of Scienze per la Promozione della Salute e Materno Infantile, University of Palermo, Italy; [3]DiBiMIS University of Palermo, Italy; [4]Surgery Dept, University of Palermo, Italy; [5]Internal Medicine, Giovanni Paolo II Hospital, Sciacca (ASP Agrigento), Italy; [6]Servizio di Anatomia ed Istologia Patologica, Azienda Ospedaliera Spedali Civili, Brescia, Italy

Background and Aims: In recent years an increasing number of studies on Non-Celiac Gluten/Wheat Sensitivity (NCG/WS) have been published but no markers of this condition have as yet been found. Although the NCG/WS clinical presentation often overlaps with IBS, no previous study evaluated colon or rectal histology in NCG/WS patients.

Patients and Methods: We performed a prospective study on 78 patients (66 females, 12 males, mean age 36. 4 years) diagnosed with NCG/WS by double-blind wheat challenge, presenting at two tertiary care centers in Italy from January 2015 through September 2016. Data were also collected from 55 control patients either with celiac disease (CD) or with self-reported NCG/WS who tested negative at the wheat challenge. Duodenal immunohistochemistry studies were performed to evaluate the number of intra-epithelial CD3+ lymphocytes (IEL), lamina propria CD45+ immunocytes, CD3+, CD4+ and CD8+ lymphocytes, mast cells, eosinophils, and presence and size of lymphoid nodules. Identical studies were performed on the rectal mucosa of NCWS patients and of self-reported NCG/WS with a negative wheat challenge.

Results: In the duodenum, NCG/WS patients showed a significantly higher number of CD3+ IEL, lamina propria (LP) CD45+ immunocytes and eosinophils than self-reported NCG/WS with a negative wheat challenge. NCG/WS patients with dyspepsia had a higher number of LP eosinophils than those not reporting upper digestive tract symptoms. In the rectal mucosa, NCG/WS patients showed enlarged lymphoid follicles more frequently than self-reported NCG/WS subjects with a negative wheat challenge, and a higher number of CD3+ intra-epithelial lymphocytes and LP CD45+ and eosinophils than control patients. The CD controls had the highest number of immunocytes (CD3+, CD45+, eosinophils) of the 3 groups studied, both in the duodenum and in the rectum.

Conclusions: Both the duodenal and rectal mucosa are inflamed in NCG/WS patients and eosinophils are increased in these districts. NCG/WS could be considered an inflammatory condition of the entire intestinal tract, mainly involving the rectum, and eosinophil infiltration a key candidate player in the pathogenesis of NCG/WS.

144. SUPPLEMENTATION WITH LACTOBACILLUS REUTERI 6475 IN PATIENTS AFFECTED BY ACUTE UNCOMPLICATED DIVERTICULITIS: A RANDOMIZED DOUBLE-BLIND PLACEBO CONTROLLED TRIAL

Petruzziello C., Franceschi F., Migneco A., Covino M., Potenza A, Ojetti V.
Emergency Department, Fondazione Policlinico universitario A. Gemelli, Roma, Italy

Introduction: Acute Uncomplicated Diverticulitis (AUD) is defined as the inflammation of a colon diverticulum, often involving colic wall and pericolic fat.
Aim of our double blind RCT study is to test the efficacy of Lactobacillus Reuteri 4659 (L. Reuteri), a specific strain with anti-inflammatory effect in association with conventional antibiotics in treating AUD compared to conventional antibiotic therapy plus placebo. Primary outcome is the reduction of abdominal pain and inflammatory markers (C-RP) in the group treated with L. Reuteri 4659 supplementation compared to placebo. Secondary outcome is the comparison of hours of hospitalization between the two groups.

Patients and Methods: A double-blind, placebo RCT was conducted in 88 (34M/54F mean age 61,9 +- 13,9 years) consecutive patients who came to the Emergency Department of Foundation Policlinico A. Gemelli Hospital with a diagnosis of AUD. All patients performed routine blood test, dosage of C - reactive protein value, admitted to Brief Observation Unit (BOU) and they were randomly assigned to two groups:
- Group A (44 patients, 26F), treated with ciprofloxacin 400mg twice a day and metronidazole 500mg three times a day for one week, with a supplementation of L. Reuteri 4659 twice a day for 10 days.
- Group B (44 patients, 28F), treated with the same antibiotic therapy for one week plus placebo twice a day for 10 days.
All patients filled a daily Visual Analog Scale (VAS) for abdominal pain, with a range value from 0 (asymptomatic) to 10, and C-RP value was determined on admission and at 72 hours.

Results: As regards the VAS values: between day 1 and 3, group A decreased 4. 5 points of vas scale, group B decreased 2. 36 points of vas scale (p < 0,0001); between day 1 and 5 group A decreased 6. 6 points of vas scale, group B decreased 4. 4 points of vas scale (p < 0,0001); between day 1 and 7 group A decreased 7. 6 points of vas scale, group B decreased 5. 6 points of vas scale (p < 0,0001); between day 1 and 10 group A decreased 8. 1 points of