## 9. GLUTEN INTOLERANCE. CELIAC DISEASE.

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**Introduction.** Celiac disease (CD) is an immune-mediated inflammatory condition of the small intestine that occurs in genetically predisposed individuals when they are exposed to gluten (a plant-based protein component found in grains). The disease has a variable incidence, with a worldwide prevalence of approximately 1:100; Statistics have shown that 70% of patients reported with celiac disease are female. Distribution of population groups, reported that HLA DR3 Phenotype occurs in 70-90% of patients.

**Aim of study.** Celiac disease is an autoimmune disorder and an inflammatory disease that manifests itself upon ingestion of gluten in the upper small intestine and is characterized by the gradual deterioration of the intestinal mucosa. Biochemically, it highlights an immune reaction, which is mediated by certain cells of the immune system, which attack the cells of the small intestine.

**Methods and materials.** It has been scientifically proven that the prevalence of celiac disease in the majority of the population ranges from 0.5% to 1%. Medical science researchers have determined that the incidence is higher among people with autoimmune disorders. Patients with type 1 diabetes are prone to celiac disease, and in the last 20 years there has been a considerable increase in cases.

**Results.** Inflammation and nutrient malabsorption, in addition to diarrhea, distention and abdominal pain, lead to damage to many organs and systems such as: iron deficiency leading to anemia, vitamin deficiencies, osteoporosis, dermatitis herpetiformis, tooth enamel defects, chronic fatigue, joint pain, poor growth, delayed puberty, infertility or repeated miscarriages, and other autoimmune disorders. A number of neurological problems have also been associated with celiac disease; these include migraines, depression, attention deficit/hyperactivity disorder and epilepsy. The diagnosis of celiac disease is established: a) upon the histological finding of an increased number of intraepithelial T lymphocytes; of crypt hyperplasia; of the expansion of regenerative epithelial crypts until the total disappearance of villi; b) positive serological testing (IgA tissue transglutaminase, anti-deamidated gliadin-related peptides IgA and Ig G, IgA antibodies); c) by molecular genetic testing of HLA-DQA1 and HLA-DQB1 which can be determinant or of HLA-DQ2 and HLA-DQ8) which can be used to exclude celiac disease.

**Conclusion.** Celiac disease (CD) is a very common disorder but in most cases it starts silently. Many of the patients are identified through screening of at-risk groups or after the onset of symptoms of malabsorption, rarely for complications associated with the disease. The diagnosis of CD and its differential diagnosis is made from integrations between typical histological findings and clinical, serological and immunological features. The Corazza-Villanacci system is a useful method to assess mucosal damage and response to gluten-free diet in patient follow-up.

**Keywords.** Celiac disease, intestinal mucosa, gluten intolerance.