

**Aim of the study.** The aim of this review was to evaluate the current information regarding lactose intolerance in order to establish whether the prevalent misconception has scientific grounds.

**Materials and methods.** An extensive English search was undertaken of the PubMed database for the terms “lactose intolerance”, “self-reported lactose intolerance”, and relevant articles from 2010-2020 were examined.

**Results.** Lactose intolerance is associated with gastrointestinal symptoms with intra- and inter-individual variability after ingestion of lactose-containing foods, this relation being influenced by: the expression of lactase, dose of lactose, intestinal flora, gut transit time, ingestion of other dietary components, the sensitivity of the gastrointestinal tract and the genetically programmed decrease in lactase synthesis. While lactose is the main factor considered, other maldigested carbohydrates, dairy related nutrients (some fats or casein proteins) and some gastrointestinal diseases may be taken in account. A nocebo effect has also been considered to contribute to the exaggerated understanding of lactose intolerance, individuals erroneously attributing their symptoms to lactose consumption. Inappropriate avoidance of dairy products can lead to nutritional inadequacy, increasing the risk of osteoporosis, bone fractures, hypertension.

**Conclusions.** The common wrong understanding of lactose intolerance has led to the increasing misleading self-diagnosis, a decision that results in a series of consequences associated with diet restrictions.

**Key words:** lactose intolerance, the nocebo effect, lactase persistence, self-reported lactose intolerance

### 304. PHENOPTOSIS - BIOCHEMICAL MECHANISMS

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**Introduction.** In the last decades, we have witnessed a real "inflation" of medical discussions and research on science of longevity and anti-aging medicine. Understanding the aging process can offer us different solutions to slow down the process and enjoy health and vitality for a longer time.

**Aim of the study.** Studying the biochemical mechanisms and the influence of the various factors in phenoptosis and description of the miraculous effects of antioxidant substances.

**Materials and methods.** Have been studied 17 articles from relevant scientific journals regarding the terms “phenoptosis”, “oxidative stress”, “reactive oxygen species”, “antioxidant”.

**Results.** After highlighting all the sequential steps in carrying out the aging program, we may deduce the important role of the mitochondria, as the energy supply stations of the cell, and at the same time, sources of free radical production. Lipid peroxidation exacerbates during the aging process in cells – increases the pro-oxidative capacity and decreases the antioxidant capacity. It was discovered the most effective protector against reactive oxygen species, the compound SkQ1, to which plastoquinone, the natural antioxidant of the plants, is attached. SkQ is able to delay the development of signs of aging and increase the life span of a large variety of animals.

**Conclusions.** (1) Aging is a set of processes, each reducing the body's resistance. (2) Understanding the aging process, however, can provide us with different solutions to slow down the process and enjoy health and vitality for a longer time.

**Key words:** phenoptosis, oxidative stress, reactive oxygen species, antioxidant.

## DEPARTMENT OF PHARMACOLOGY AND CLINICAL PHARMACOLOGY

### 305. GASTROESOPHAGEAL REFLUX DISEASE: DIAGNOSIS AND TREATMENT REFERENCES

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**Introduction.** Gastroesophageal reflux disease is a common clinical pathology of the upper digestive tract, due to the reflux of the gastric or duodenal content within the esophagus, caused by a failure of the antireflux mechanisms, namely the lower esophageal sphincter.

**Aim of the study.** To study the clinical features, the diagnostic methods and the therapeutic treatment in patients with gastroesophageal reflux disease

**Materials and methods.** The retrospective study was conducted on 120 patients, admitted at the Department of Gastroenterology, within "Timofei Moşneaga" Republican Clinical Hospital. The study included two groups of patients: 60 patients, hospitalized during 2017-2018 years and 60 patients admitted during 2018-2019, aged between 18- 80 years old. The data regarding the patients' complaints, anamnesis, methods of diagnosis and treatment outcomes have been studied and interpreted.

**Results.** The study showed a higher incidence of female patients in both study groups. According to the age criterion, 33.33% of patients were aged between 51 -70 years old and only 1.66% - aged under 20. The most common patients' complaints (more than 50%) included as following: 85.8% of cases presented epigastric pain, 53.3% - belching and 52.5% - heartburn, followed by 48.3% - mouth bitterness, 44.1% - nausea and 30.8% - bloating. The least recorded complaints were regurgitations in 5% of cases and dysphagia - 4.1%. Both groups of patients were diagnosed based on the presence of the classic symptoms of GERD, positive response to PPI treatment, upper digestive endoscopy and chest X-ray assessment. According to the study, during the period 2017 -2018, the treatment of patients with GERD was mainly aimed at reducing the gastric acid secretion by administering omeprazole - 71.7% and pantoprazole - 18.4%. In 2018-2019 years, patients with GERD underwent a treatment for increasing the intestinal motility, by administering metoclopramide - 68.4%, followed by the proton pump inhibitors - pantoprazole - 30%, omeprazole - 21.7% and antacids - 28.4%.

**Conclusions.** The study of the gastroesophageal reflux disease particularities in patients from the Department of Gastroenterology has proved that the diagnosis should be based on the presence of the classic symptoms, changes detected in the upper digestive endoscopy and the presence of the reflux on the chest X-Ray assessment. The treatment regimens included both the suppression of gastric acidic secretion and the increase of the intestinal motility, thus diminishing the action of the harmful factors on LES and esophageal mucosa.

**Key words:** reflux, diagnosis, esophagus, treatment, acid suppression