

ABSTRACT

This diploma thesis deals with laboratory functional diagnostics of malabsorption syndromes. Especially the functional diagnosis of lactose intolerance. The golden standard for the functional diagnosis of lactose intolerance is the breath test.

The aim of the study was to determine the prevalence of lactose intolerance (LI) using a lactose breath test when consuming a dose of 20 g of lactose in patients with gastrointestinal symptoms and in volunteers who do not show gastrointestinal problems. Part of the research was also to examine the symptoms that led the individual to see a doctor and undergo a lactose breath test.

The method consisted in the evaluation of the results of breath tests, which were performed on patients and volunteers in the gastroenterological laboratory of the 1st Medical Faculty of Charles University and the General Hospital. A questionnaire was given to everyone to evaluate the symptoms of LI and the phenomena leading to malabsorption.

Lactose intolerance was confirmed in 92 % of patients and 79 % of volunteers. The most reported symptoms in the patient sample were typical gastrointestinal LI-related problems: gastric and intestinal problems after milk consumption (85 % of patients), gastric and intestinal problems after consumption of dairy products (85 % of patients), bloating (100 % of patients) and onset of problems ½ up to three hours after a meal (100% of patients). In the group of volunteers, it was mostly a combination of symptoms not typical for LI. In many individuals, the results of breath tests showed suspected bacterial overgrowth syndrome (SIBO). Breath tests showed suspected SIBO in 69 % of patients and 64 % of volunteers.

Research has confirmed the frequent occurrence of lactose malabsorption at a dose of 20 g of lactose, although some individuals do not have problems digesting lactose. In addition, research has shown suspicion of SIBO in many individuals. It is possible that SIBO is a much more common diagnosis than previously thought.

keywords: nutritional therapy, malabsorption syndrome, lactose intolerance, laboratory diagnostics, functional diagnostics, breath test, SIBO