

**P0785 A COMPARISON BETWEEN LACTOSE BREATH TEST AND A QUICK TEST ON DUODENAL BIOPSIES FOR LACTASE DEFICIENCY, IN PATIENTS WITH A SELF REPORTED LACTOSE INTOLERANCE**

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**INTRODUCTION:** Lactose malabsorption may cause gastrointestinal symptoms. Lactose breath test (LBT) is employed to diagnose lactose malabsorption. Lactose Quick Test (LQT, Biohit PLC) is a new test on duodenal biopsies to detect lactase deficiency.

**AIMS & METHODS:** We aimed to assess the ability of LBT and LQT to predict the clinical response to lactose-free diet in patients with a self reported lactose intolerance. We enrolled 51 patients (mean age 47±14; M/F 15/36). All patients underwent 25 g-LBT and upper gastrointestinal endoscopy. Three biopsies were taken in the descending duodenum, in order to determine lactase deficiency (normal, mild and severe) by means of LQT and to rule out other causes of secondary lactose malabsorption. Patients with normal LQT and positive LBT underwent glucose breath test (GBT) for small intestinal bacterial overgrowth (SIBO). The severity of gastrointestinal symptoms was assessed with GSS questionnaire, in basal condition and one month after lactose-free diet.

**RESULTS:** Lactose malabsorption was detected in 31/51 patients with LBT and in 37/51 patients with LQT. Celiac disease resulted in 2 patients. The two tests were concordant in 90% of cases. Two patients had a positive LBT and negative LQT and showed a positive GBT for SIBO. Eight patients had a mild hypolactasia and a negative LBT and had a significant improvement of symptoms after lactose-free diet. LQT and LBT predicted the response to lactose-free diet in 94% and 80% of cases, respectively ( $p=0.03$ ).

**CONCLUSION:** LQT is a sensitive and specific diagnostic tool to detect lactase deficiency, moreover it seems to be more accurate in predicting clinical response to lactose-free diet than LBT.

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