The effect of antibiotics for patients who presented with gas and negative lactulose breath test

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Background/aim: It is not clear whether antibiotics treatment is useful to improve the global symptoms in patients with gas and negative lactulose breath test (LBT).

Methods: LBT from 38 IBS patients (compatible with Rome III criteria), 10 Non-IBS were examined. LBT was considered positive if biphasic pattern in breath H2 or CH4 levels, two peaks with an early increase of at least 20 ppm (H2) or 10 ppm (CH4) within the first 2 hours, followed by a much larger increase. The two pecks may merge as an early plateau. Improved IBS symptoms through a chart review was determined adequate relief of global symptoms during weeks 3 to 6. Adequate relief was defined as self-reported positive response.

Results: The positive LBT rate in the IBS and Non-IBS patients were 52.6% (20/38) and 80% (8/10). There was no significant difference in positive LBT rate between IBS and Non-IBS patients. In the all subjects, the subtypes of LBT positive patients were LBT(H2) with 47.9% (23/48), LBT(CH4) with 14.6% (7/48), and LBT(both) positive with 58.3% (28/48). In all patients, the 31 (64.6%) patients were treated with antibiotics and 17 (35.4%) patients did not. The positivity of the group showed improvement after antibiotics treatment was 67.7% (21/31) and the group showed improvement without medication was 35.3% (6/17) with significant differences (p=0.030). The global response rates to antibiotics treatment in the positive LBT and negative LBT group were 65.0% (13/20) and 72.7% (8/11), respectively. There was no significant difference in the global response rate between positive LBT and negative LBT group irrespective of IBS.

Conclusion(s): Antibiotics treatment was considerably helpful for the improvement of the global symptom irrespective of the presence of positive LBT. These findings suggest that antibiotics might be related affecting colonic fermentation rather than SIBO. Otherwise lactulose might be an inappropriate substrate for breath test to assess the presence of SIBO.

Key words: Lactulose breath test, Small intestinal bacterial overgrowth, Irritable bowel syndrome, Antibiotics

A Case of Cholecysto-Gastro-Colonic Fistula with Upper Gastrointestinal Bleeding

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Background: Biliary enteric fistula is uncommon disease and is abnormal pathway caused by biliary disease (ex. Chronic cholecystitis, cholelithiasis, etc.) or extra biliary factors (ex. Crohn’s disease, gastric ulcers, duodenal ulcers, etc.). Chief complain of these patients is epigastric pain but some of patient complain no specific symptoms. So, It is difficult to diagnosis biliary enteric fistula. Now we report a case of cholecysto-gastro-colic fistula presented by upper gastrointestinal bleeding.

Case: A 67 years old woman was admitted because of hematemesis and melena. The patient's vital sign was checked, blood pressure 110/70 mmHg, body temperature 36.2℃, heart rate 68 beat/min, respiratory rate 22 times/min. In laboratory finding, WBC 19,890/mm³, Hb 8.5 g/dL, AST/ALT 20/14 U/L, total bilirubin 0.62 mg/dL, ALP 108 IU/L, r-GTP 12 IU/L, CRP 4.18 mg/dL. We checked upper gastrointestinal endoscopy. Fresh blood from an exposed vessel was observed on the great curvature of the gastric antrum. wo hemoclips were applied on the lesion to achieve hemostasis. After 3 days, during follow up gastrointestinal endoscopy we found abnormal opening at the gastric antrum. Yellowish and bubbly contents were drained through this site. It suggested biliary fistula. So, we checked upper gastrointestinal series and simple abdomen. Abdomen simple X-ray showed pneumobilia in the common bile duct, suggesting the presence of biliary enteric fistula. Abdominal dynamic CT scan showed swelling and fatty infiltration around the gallbladder with contrast enhancement and adhesion of the gallbladder to the gastric antrum. And severe inflammatory changes involving the transverse colon was noted. Laparoscopic cholecystectomy and wedge resection of the gastric antrum was done. And right extended hemicolectomy was performed. After operation, she complained no specific symptoms.

Conclusion: This case was cholecysto-gastro-colic fistula caused by chronic cholelithiasis due to cholelithiasis. It was rare case of biliary enteric fistula. Almost biliary enteric fistula was presented right upper quadrant abdominal pain or steatorrhea, nausea, vomiting, jaundice. But in our case, patient was admitted due to upper gastrointestinal bleeding. We treated by operation and then symptoms were improved.