To identify objective and subjective predictors for the reliable diagnosis of gastroesophageal reflux disease (GERD) and the response to proton pump inhibitor (PPI) therapy. Retrospectively, 683 consecutive patients suspected for GERD who underwent pH-metry/impedance measurement (pH/MII) were analyzed. All patients had previously undergone standard PPI treatment (e.g., pantoprazole 40 mg/d or comparable). Four hundred sixty patients were at least 10 d off PPIs (group A), whereas 223 patients were analyzed during their ongoing PPI therapy (group B). In addition, all patients completed a standardized symptom- and lifestyle-based questionnaire, including the therapeutic response to previous PPI trials on a 10-point scale. Uni- and multivariance analyses were performed to identify criteria associated with positive therapeutic response to PPIs. In group A, positive predictors (PPs) for response in empirical PPI trials were typical GERD symptoms (heartburn and regurgitation), a positive symptom index (SI) and pathological results in pH/MII, along with atypical symptoms, including hoarseness and fullness. In group B, regular alcohol consumption was associated with the therapeutic response. The PPs for pathological results in pH/MII in group A included...
positive SI, male gender, obesity, heartburn and regurgitation. In group B, the PPs were positive SI and vomiting. Analyzing for positive SI, the PPs were pathological pH and/or MII, heartburn regurgitation, fullness, nausea and vomiting in group A and pathological pH and/or MII in group B. Anamnestic parameters (gender, obesity, alcohol) can predict PPI responses. In non-obese, female patients with non-typical reflux symptoms, pH/MII should be considered instead of empirical PPIs.