



Dear Doctor,

Greetings from Micro Labs limited.

Inside This Issue

- The influence of proton pump inhibitor therapy on the outcome of infliximab therapy in inflammatory bowel disease: A patient level meta-analysis of randomised controlled studies
- Risk factors of Bacteraemia after endoscopic procedures in hospitalised patients with a focus on neutropenia
- Associations of duration, intensity and quantity of smoking with risk of gastric intestinal metaplasia

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Best Regards,
Medical Team, Micro Labs Ltd

The influence of proton pump inhibitor therapy on the outcome of infliximab therapy in inflammatory bowel disease: a patient-level meta-analysis of randomised controlled studies

Objective

In treating patients with inflammatory intestine malady (IBD), however concomitant medications influence the response to anti-TNF compound is basically unknown. we tend to aim to judge whether or not nucleon pump inhibitors (PPIs) have an effect on the response to anti-TNF compound medical aid in patients with IBD.

Design

Patient-level information of adult patients with moderate-to-severe IBD treated with anti-TNF compound were obtained from the Yale Open information Access Framework. Multivariable analysis and propensity score-matched analysis were performed to assess week thirty remission rates, week fifty-four remission rates and medical care rates in patients on anti-TNF compound medical aid with and while not PPI exposure.

Results

Among the 5 irregular controlled studies, there have been 889 and 147 patients on anti-TNF compound with and while not PPI medical aid, severally. Patients on PPI were older, additional possible to be Caucasian and were less possible to get on immunomodulator medical aid. Patients on PPI were considerably less possible to realize week thirty remission on multivariable analysis (OR zero.45, $p < 0.001$). Following propensity score matching adjusting for baseline distinction in patient characteristics, the week thirty remission rates were half-hour and forty ninth in patients with and while not PPI medical aid, severally ($p < 0.001$). Analysing one by one for malady, the findings remained statistically important in Crohn's malady however failed to reach significance in UC. Similar results were seen with week fifty-four remission rates. Patients on PPI were conjointly additional possible to be hospitalised (15% vs 8 May 1945, $p = 0.007$). Rates of adverse events like intestinal flu weren't completely different between the 2 teams.

Conclusion

In this patient-level meta-analysis of irregular controlled studies, we tend to found that patients with IBD taking PPI were less possible to realize remission whereas on anti-TNF compound medical aid. The results of our study warrant more investigation into the result of PPI on IBD outcomes and therapies.

Source: Lu TX, Dapas M, Lin E, et al; The influence of proton pump inhibitor therapy on the outcome of infliximab therapy in inflammatory bowel disease: a patient-level meta-analysis of randomised controlled studies. Gut Published Online First: 17 December 2020. doi: 10.1136/gutjnl-2020-321609

Risk Factors for Bacteremia After Endoscopic Procedures in Hospitalized Patients With a Focus on Neutropenia

Background:

The risk for bacteremia following endoscopic procedures varies among studies. A low neutrophil count is considered as a risk factor.

Objective:

To assess risk factors for bacteremia following endoscopic procedures, focusing on neutropenia.

Methods:

This was a retrospective analysis of all in patients undergoing endoscopic procedures between 2005 and 2018 with neutrophil count taken within 72 hours before the procedure in a tertiary center in Israel. The primary outcome was positive blood culture within 48 hours following the procedure of bacteria that was not cultured before. Risk factors for bacteremia were assessed and multivariate logistic regression models were built. In neutropenic patients, comparator groups were used to assess the risk related to the procedure and neutropenia.

Results:

Of 13,168 patients included, post-procedural bacteremia was recorded in 103 (0.8%). Neutropenia, low albumin level, male gender, older age, pre-procedure fever, and admitting department were associated with increased risk for bacteremia in both univariate and multivariate analyses. A multivariate model including these factors was found to be predictive of bacteremia (area under the curve 0.82; 95% confidence interval, 0.78-0.88). In neutropenic patients, the risk of post-endoscopic bacteremia (4.2%) was not significantly different compared with neutropenic patients undergoing bronchoscopy (1.8%, $P=0.14$) or from the rate of bacteremia-to-neutropenic episodes ("background risk") in neutropenic patients in general (6.3%, $P=0.33$).

Conclusions:

Post-endoscopic bacteremia is a rare event among inpatients. Although neutropenia was found to be a risk factor for bacteremia, it was not higher than the background risk in these patients. Models highly predictive of bacteremia were developed and should be validated.

Source: Isenberg, Yoni MD et al; Risk Factors for Bacteremia After Endoscopic Procedures in Hospitalized Patients With a Focus on Neutropenia, Journal of Clinical Gastroenterology: December 16, 2020 - Volume Publish Ahead of Print - doi: 10.1097/MCG.0000000000001476

Associations of Duration, Intensity, and Quantity of Smoking With Risk of Gastric Intestinal Metaplasia

Goal:

To determine whether various dimensions of smoking increase risk for gastric intestinal metaplasia.

Background:

Cigarette smoking has been implicated within the etiology of gastric cancer, but it's not clear if smoking may be a risk factor for gastric intestinal metaplasia, a precursor lesion of gastric cancer.

Materials and Methods:

Data compared from 385 gastric intestinal metaplasia cases and 1577 controls without gastric intestinal metaplasia recruited into a cross-sectional study at the Michael E. DeBakey VA Medical Center in Houston, Texas. All participants completed standardized questionnaires and underwent a study endoscopy with gastric mapping biopsies. Gastric intestinal metaplasia cases included participants with intestinal metaplasia on any noncardia gastric biopsy. We calculated odds ratios and associated 95% confidence intervals using multivariable logistic regression models.

Results:

Compared with never smokers, current smokers had 2-fold increased risk for gastric intestinal metaplasia (odds ratio, 2.05; 95% confidence interval, 1.47-2.85). Among ever smokers, increasing duration and total dose were significantly associated with increased risk for gastric intestinal metaplasia (P-trend, 0.004 and 0.01, respectively). Among former smokers, risk for gastric intestinal metaplasia decreased over time and was no different to never smokers after 15 years smoking cessation. Cases with gastric intestinal metaplasia were more likely than controls to have *Helicobacter pylori* infection (53.2% vs. 21.7%);

however, smoking effect on gastric intestinal metaplasia was not different by H. pylori infection status.

Conclusions:

Cigarette smoking is a risk factor for gastric intestinal metaplasia. Risk of gastric intestinal metaplasia among former smokers remained significantly elevated until 15 years of post-cessation.

Source: Thrift, Aaron P. PhD et al; Associations of Duration, Intensity, and Quantity of Smoking With Risk of Gastric Intestinal Metaplasia, Journal of Clinical Gastroenterology: December 16, 2020 - Volume Publish Ahead of Print - doi: 10.1097/MCG.0000000000001479



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