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Does the treatment of proton pump inhibitors reduce dysplasia or adenocarcinoma development in Barrett's esophagus?

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ABSTRACT

Besides reducing the reflux symptoms, the benefit of proton pump inhibitors (PPI) in the treatment of Barrett's esophagus (BE) is not exactly known. The data in the literature show that although the PPI treatment does not reduce the Barrett's segment length, it can reduce dysplasia or the development of early-stage adenocarcinoma (odds ratio (OR): 0.46). Therefore, treatments with PPI may be considered in patients with a diagnosis of BE and at a high risk of adenocarcinoma, even though they are not symptomatic.

Keywords: Barrett's esophagus, proton pump inhibitors, adenocarcinoma

No decline in the Barrett's segment was found with PPI treatment in randomized controlled studies (1-3). In a meta-analysis in which the arms of PPI, histamine-2 receptor antagonist, and arm with no treatment were compared, while no decline in the Barrett's segment was detected in all the three arms, a significant decrease in the development of dysplasia was observed in the arm of PPI in use for more than 2-3 years (4). However, in a recently published cohort study in which 1437 patients using and not using PPI were compared, it was claimed that the long-term use of PPI could increase the risk of HGD/EAC development up to 4-5 times in BE patients (5). When we add the data of the cohort study that was recently published to the data of the meta-analysis performed by Singh et al. (4), it is seen that the positive impact of PPI therapy on the development of dysplasia in BE persists (OR: 0.46) (6).

Conflict of Interest: No conflict of interest was declared by the authors.

RECOMMENDATIONS

- Proton pump inhibitor (PPI) therapy does not decrease the length of the Barrett's segment (Level of evidence: 1b).
- There is data regarding the fact that PPI can reduce dysplasia or the development of early-stage adenocarcinoma (odds ratio (OR): 0.46).
- The treatment of PPI may be considered in patients with a diagnosis of BE and at a high risk for the development of adenocarcinoma (Prague M>3 cm, low-grade dysplasia, obesity, smoking, and advanced age), even though they are not symptomatic (Level of evidence: 2b).

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