

Association between eupatilin and the reduction of small bowel bleeding in aspirin use

동국대학교일산불교병원 내과¹, 경북대학교병원 내과², 라인웍스 데이터분석팀³

강줄기¹, 남지형¹, 이현석², 오동준¹, 안현정³, 임윤정¹

Background/Aims: Capsule endoscopy (CE) has revealed that low-dose aspirin frequently causes small bowel (SB) injury. We evaluated the protective effect of mucoprotective agent (MPA) on SB bleeding in aspirin users using the nationwide database of claim data from the National Health Insurance Service (NHIS).

Methods: An aspirin-SB cohort was constructed using the NHIS claim data since CE has been insured. The follow-up period was limited to a maximum of 24 months. Suspected SB bleeding was defined as anemia, melena, or hematochezia that occurred within 4 weeks before and after CE was performed. Cox proportional hazards regression model was used to determine the risk factors for SB bleeding. Multiple model was adjusted for sex, age, Charlson comorbidity index (CCI) score, duration of aspirin use, concurrent use of anticoagulants, MPAs, and acid suppressants such as proton pump inhibitor (PPI) and histamine-2 receptor antagonist (H2RA). Subgroup analyses were conducted by the use of acid suppressants for SB bleeding and cumulative incidence rates of it were calculated by different categories of gastrointestinal (GI) drugs.

Results: A total of 15,542 cases of aspirin users were included. Anticoagulant use (HR=3.22), high CCI score (≥ 2)(HR=3.54), and PPI use (HR=2.85) were significantly associated with SB bleeding, while eupatilin use (HR=0.35, p=0.013) was a preventive factor. SB bleeding occurred more frequently in cases with concurrent use of acid suppressants vs. non-use (1.3%, vs. 0.5%). In subgroup analysis, only eupatilin significantly reduced the risk of suspected SB bleeding among other MPAs in aspirin users with concomitant acid suppressant (HR=0.23 vs. 2.55).

Conclusions: Eupatilin was associated with reducing the risk of suspected SB bleeding in both aspirin users and those with concomitant use of acid suppressant. Eupatilin use should be considered in aspirin users and especially concomitant users of acid suppressant.