Metanalysis: Rebamipide a potential drug for GI protection against ASA gastroenteropathy

Bienvenido P Tiu Jr
World Citi Medical Center, Philippines

Background: Aspirin has been used to lower the incidence of cardiovascular events but chronic use may lead to gastric mucosal damage that may lead to bleeding. Rebamipide is a gastro protective agent that may reduce the risk of GI bleeding on its pleiotropic effect by increasing gastric mucosal prostaglandin and gastric mucus production, scavenging of hydroxyl radicals, inhibition of neutrophil activation, suppression of gastric mucosal inflammation, regulation of apoptosis related genes and inhibition of tyrosine nitration.

Objective: To investigate whether a mucosal-protective agent, Rebamipide, could prevent gastric mucosal injuries induced by low dose Aspirin.

Methods: Bibliographical searches were performed using PubMed and Cochrane Library. Search terms included Rebamipide and Aspirin. A meta-analysis of all journals that were included in the inclusion criteria were reviewed comparing Rebamipide supplementation with non-Rebamipide containing therapy was performed.

Results: Three RCTs including 579 individuals were eligible. In general, Rebamipide acted better than placebo against Aspirin-induced gastroduodenal injury. Rebamipide showed a beneficial effect against the mucosal GIT damage. Heterogeneity of population were computed using chi2 which shows 2.31 (df of 2, P=0.31, I2=13%). Journals included in the study were Kazuhiro et al., with weight of 2.4%, OR of 0.13(0.02, 0.90); Takatsugu et al., with weight of 90.1%, OR of 0.32 (0.25, 0.41) and Toshio et al., with weight of 7.5%, OR of 0.16 (0.06, 0.47). Combining the three studies yields a total (95% CI) with OR of 0.31 (0.24, 0.39).

Conclusion: Current evidences show Rebamipide is effective and safe for defending against NSAID-induced gastroduodenal and lower-gastrointestinal injuries. However, more well-designed trials should be conducted to fully confirm the practical value of Rebamipide.

Biography
Bienvenido P Tiu Jr. is from Philippines. He graduated from University of Santo Tomas as Bachelor of Science in Biology. He continued his medical education at Far Eastern University - Nicanor Reyes Medical Foundation. He is currently a second year Internal Medicine resident in World Citi Medical Center.

bientiu@ymail.com