Inappropriate Use of Proton Pump Inhibitor in Hospitalized Patients

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Background: Proton pump inhibitor (PPIs) blocks the H+/K+ ATPase in parietal cell of gastric wall, leading to the inhabitation of acid secretion. PPIs are often inappropriately prescribed in hospital, especially when patients are discharged. This inappropriate prescription of PPIs can increase the country’s healthcare costs.

Objective: To determine the prevalence of inappropriate prescription of PPIs in both hospitalized and discharged patients at medical wards of Siriraj Hospital, and to analyze associated risk factors and costs of inappropriate PPIs prescription.

Methods: A prospective observational study was carried out from September 2016 to September 2017 in medical wards. The 88-day medical records of hospitalized patients were examined for the prescription of PPIs. Data of all patients with prescribed PPIs were collected including demographics, PPIs indication, PPIs dose, and duration to determine the appropriateness of PPIs prescription. Medical records were also reviewed for the prescription of PPIs at discharge.

Results: A number of 265 patients were prescribed PPIs. Treatment was initiated during admission of 131 patients (49.4%). There were 134 patients (50.6%) with inappropriate PPIs prescription, while 103 (76.8%) were no indication of PPIs used. Meanwhile, 102 patients (76.1%) were prescribed PPIs at discharge and 61 patients (45.5%) were prescribed PPIs with continuing follow-up.

Conclusion: Similar to other studies, there is a high prevalence of inappropriate PPIs prescription in Siriraj Hospital. Most of them are no indication, leading to the inappropriate prescription at discharge.

Keywords: Proton pump inhibitors, PPIs, Inappropriate prescription