Assessing the Appropriateness of Stress Ulcer Prophylaxis Use at University Hospital during the COVID19 Pandemic

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Purpose:

Stress ulcers are seen in up to 39% of hospitalized patients in the intensive care unit (ICU), but prophylaxis with proton pump inhibitors (PPI) and histamine-2 receptor antagonists (H2RA) have been widely mis-used and over-prescribed. We conducted a quality assessment study to review the appropriateness of PPI and H2RA for stress ulcer prophylaxis at University Hospital (UH) during the COVID-19 pandemic.

Methods:

A retrospective chart review was done to look at two groups of hospitalized patients between 3/1/2020 - 5/31/2020. We randomly selected 200 charts of patients that were on a PPI or H2RA, another 200 charts for those who were not, and excluded those who were not on these medications for prophylaxis. Findings were compared using two proportion z-tests, Chi-squared, and Fisher's exact test in Stata.

Results:

In the first group, 31 of 200 patient charts were included, of which 70.9% (n = 22, 95% CI= 55.0-87.0) were inappropriately given SUP, and 74.2% (n = 23, 95% CI = 58.8-89.6) had SUP continued at discharge. In the second group, 103 of 200 patient charts were included, and 4.9% (n = 5, 95% CI = 1.6-11.0) were inappropriately not started on SUP. There were no significant differences between inappropriate prescription rates of PPI versus H2RA (Z = 0.8464, p = 0.395) and no significant demographic differences.

Conclusions:

This study showed that the inappropriateness of stress ulcer prophylaxis medications at UH were similar to those in studies from other hospitals prior to the pandemic, however, it questions the appropriateness of the ASHP guidelines during the pandemic when critically ill patients were not in the ICU but received significant respiratory support. The results also support the need to assess the large proportion of patients already receiving PPIs or H2RAs as a home medication.