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FC022 HELICOBACTER PYLORI COLONISATION INCREASES PHOSPHATE BINDER PILL BURDEN IN DIALYSIS PATIENTS

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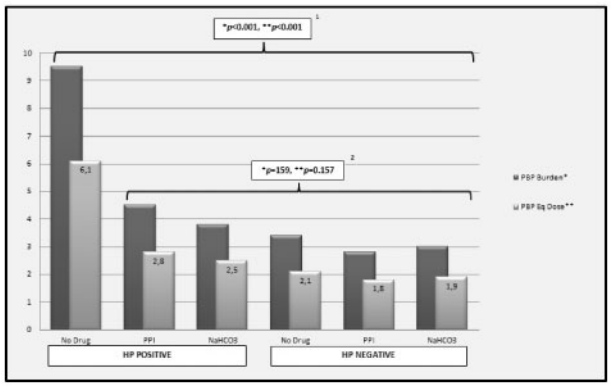
INTRODUCTION: Phosphate binder pill (PBP) burden is a major problem in many dialysis patients. Phosphate presents as H2PO4- and HPO4-2 forms in gut. H2PO4- is more absorbable due to its less negative charge and is the main form in relatively acidic pH. In this study, the effect of factors contributing duodenal pH -*Helicobacter pylori* (HP), proton pump inhibitors (PPIs), and NaHCO3 capsules- on PBP burden is evaluated.

METHODS: 255 dialysis patients with gastric biopsies were evaluated. Data of consecutive three months prior to gastric biopsy was analyzed. Patients divided into two groups regarding HP existence and subgroups regarding use of PPI or NaHCO3 capsules. Patients with low Kt/Vs, gastrectomy and parathyroidectomy were excluded.

RESULTS: Baseline characteristics, laboratory, and health parameters were similar between HP+ and HP- groups. HP+ group had significantly higher PBP burden and PBP equivalent doses ($p<0.001$; both). In both groups, the subgroups determined in terms of the use of PPIs and NaHCO3 showed a significant difference ($p<0.001$; both). HP positive subgroup not using daily PPIs or NaHCO3 capsules had the highest PBP burden and PBP equivalent doses ($p<0.001$; both). Subgroups of HP- patients had similar PBP and PBP equivalent doses ($p=0.446$, and $p=0.382$; respectively).



CONCLUSIONS: HP significantly increases PBP burden in dialysis patients, presumably due to decrease of duodenal pH. Among HP+ patients, PPI or NaHCO3 capsules restores PBP burden.