

**P0765**

**Poster Session III**

**Clostridium difficile: epidemiology and outcomes**

**RECURRENCE AND/OR DEATH AFTER A FIRST CLOSTRIDIUM DIFFICILE SYMPTOMATIC INFECTION: INFLUENCE OF PRIOR THERAPY BY PROTON PUMP INHIBITOR.**

O. Dos Santos<sup>1</sup>, S. Boisset<sup>2</sup>, O. Epaulard<sup>1</sup>

<sup>1</sup>infectious diseases, University Hospital, Grenoble, France ; <sup>2</sup>Bacteriology Laboratory, University Hospital, Grenoble, France

**Objective:** Previous studies identified pump proton inhibitor prescription (PPI) as risk factor for *Clostridium difficile* infection. We aimed to determine whether patients with a prior PPI treatment had a higher risk of recurrence or death when diagnosed with a toxicogenic *C. difficile* digestive infection.

**Method:** This monocentric study was carried out in Grenoble university hospital, France. All cases of patients with a symptomatic infection by a toxicogenic *C. difficile* strain during year 2012 were retrospectively analyzed. The primary endpoint was the occurrence of a recurrence or death. The secondary endpoints were the clinical form (regular diarrhea, febrile diarrhea, plain colitis and severe colitis) and the complication rate.

**Results:** 191 patients were included in this study (97 men and 94 women). The mean age was 69.6 +/- 18.0 years (17 to 100 years). One hundred and four (54.5%) patients were already receiving PPI at the time of the *C. difficile* infection (including 85 patients with a prescription > 1 month), 85 (44.5%) were not on PPI, and data was missing for the remaining 2 (1.1%). Twenty-four (23.1%) recurrences appeared in the group receiving PPI, compared to 15 (17.6%) cases in the group not receiving PPI ( $p=0.46$ ). Six (5.8%) patients died because of *C. difficile* infection in the group receiving PPI, compared to 3 (3.5%) in the group not receiving PPI ( $p=0.70$ ). Overall, 30 (28.8%) patients in the group receiving PPI experienced recurrence or death, compared to 18 (21.2%) in the group not receiving PPI ( $p=0.16$ ). There was no difference concerning the clinical form ( $p=0.87$ ) or the complication rate ( $p=0.46$ ) between the two groups.

**Conclusion:** This study does not demonstrate a significant association between recurrence and/or death and prior PPI intake by patients with a toxicogenic *C. difficile* infection. Furthermore, no difference between clinical forms and complication rate on PPI-taking patients was observed. Studies with larger population must be performed to explore the non-significant trends we observed concerning the association between outcome and PPI.