

P0261 Influence of immunosuppression in *Clostridium difficile* infection

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Background: Immunosuppression is a risk factor for CDI. The aim of this study was to compare the characteristics of CDI in immunosuppressant and not-immunosuppressant patients.

Materials/methods: We performed a retrospective study of all patients older than 18 years with CDI between January 2017 and September 2018 in two hospitals in Asturias, Spain: University Hospital of Cabueñes and Hospital Universitario Central de Asturias. Patients diagnosed with any type of solid/hematologic neoplasm, transplants or with immunosuppressive therapy were included in group 1 and the rest in group 2. *C. difficile* was detected in stool samples by detection of GDH antigen and toxins A and B using an immunoassay (C. Diff Quick Check Complete, Alere). Those samples with GDH (+)/Toxins (-) were analyzed with the PCR-based assay GenomEra CDX System (ABACUS Diagnostica) to detect gen tcdB. Qualitative variables were compared using the Chi² test or the Fisher exact test, when necessary. For quantitative variables, the Student t test or the Mann-Whitney U test were used. Significance was designated at p<0.05.

Results: 165 patients (52,5% females, mean age: 71 years) were included. Sixty-two were included in immunosuppressant group. The most frequent underlying diseases in group 1 were: neoplasm (21 cases), and hematologic disease (19). Fifty-eight patients received immunosuppressive or antineoplastic therapy. There is not differences in sex, or age between the two groups. Regarding clinical characteristics all patients had diarrhea, follow by abdominal pain (94 cases) and fever (49 cases) without differences. Leucocytes were significantly higher in not immunosuppressed patients (16305 ± 9196 versus 10121 ± 6345 p=0.015). Nineteen patients developed a complication but only three in the group. Thirty-five (21%) patients had a recurrence, 10 in group 1 (16%) and 25 (24,2%) in group 2 without significantly differences. Sixteen patients dead due to the infection without differences between the two groups p = 0.227. There is not significantly differences in sex, age, or underlying diseases between relapses or not.

Conclusions: Recurrences are frequent in *Clostridium difficile* infection but do not seem to be related to the presence of immunosuppression.

