

POSTER PRESENTATION

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Diarrheal diseases burden and causes in an Infectious Diseases department during the era of *Clostridium difficile* infection

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From The 10th Edition of the Scientific Days of the National Institute for Infectious Diseases “Prof Dr Matei Bals”

Bucharest, Romania. 15-17 October 2014

Background

Classically, the diarrheal diseases were a top diagnosis in Romanian infectious diseases hospitals during summer. The increasing incidence of *Clostridium difficile* infection (CDI) after 2011 might change this seasonality of diarrheal diseases, as warm season illnesses. Aim: to estimate the burden of different diarrheal diseases in an Infectious Diseases department and to evaluate if the seasonality still exists.

Methods

We analyzed the monthly distribution of admissions in the Sixth department of the National Institute for Infectious Diseases “Prof. Dr. Matei Balș” during February-July 2014; the burden of diarrheal diseases was estimated as percentage of total patient x hospitalization days. Diarrheal diseases were divided in five subgroups: CDI, food poisoning with quick recovery, infectious diarrhea with identified etiology, diarrhea as symptom in other diseases, unknown etiology diarrhea.

Results

A number of 110 patients with diarrhea were hospitalized in the analyzed period, cumulating 852 patients x hospitalization days, 25.2% of total hospitalization days. No seasonality for burden of diarrheal diseases was discerned; higher burden were reported for months of

March 31.7%, RR=1.32 (1.14; 1.53), p=0.0003 and July, 38.9% RR=1.72 (1.51; 1.95), p<0.0001, and lower level in February 12.2%, CI95% (9.4%; 15.6%).

The patients from the five subgroups represented: CDI, 52 of patients (47.3%) and 66% of patients x days; food poisoning, 13 patients and 2.9% of hospitalization days; other infectious diarrhea (*Salmonella*, rotavirus), 4 patients and 2.8% of hospitalization days; unknown etiology diarrhea, 31 patients and 22.2% of hospitalization days. For 10 patients summing 52 hospitalization days (6.1%), diarrhea was an indicative symptom for different diseases, including serious ones: colorectal neoplasia – 3 patients, Crohn’s colonic disease – one patient, periappendicular abscess – one patient, severe methotrexate mucositis – one patient, colchicine side effects – one patient.

Conclusion

CDI has the highest burden among diarrheal diseases in the Infectious Diseases Department; the CDI emergence seems to eliminate the seasonality of diarrheal diseases. A small number of admissions are avoidable with a short-stay system. In diarrheal diseases with prolonged evolution and unknown etiology several serious causes need to be eliminated: colorectal neoplasia and inflammatory bowel diseases, severe post-drug side effects, surgical diseases.

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Published: 15 October 2014

doi:10.1186/1471-2334-14-S7-P82

Cite this article as: Popescu *et al.*: Diarrheal diseases burden and causes in an Infectious Diseases department during the era of *Clostridium difficile* infection. *BMC Infectious Diseases* 2014 **14**(Suppl 7):P82.

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