

P1084

Paper Poster Session

Clostridium difficile: epidemiology and risk factors

Physician knowledge of Clostridium difficile: a Latin American survey

Alejandro Cane¹, Daniel J. Curcio^{*2}, Alvaro Quintana³

¹Regional Medical and Scientific Affairs Head Latin America /Canada Pfizer Vaccines, Buenos Aires, Argentina

²Regional Medical and Scientific Affairs Director Latin America /Canada Pfizer Vaccines , Buenos Aires, Argentina

³Regional Global Medical Development. Pfizer Vaccines . Pfizer Inc., Collegville, United States

Background: The aim of this study was to determine the awareness of *C. difficile* infection among LA physicians

Material/methods: A total of 645 (response rate 63%) LA hospitalists physicians (Argentina, n=162; Brazil, 173; Colombia, n=63; Mexico, n=222; and Perú, n=25) were randomly surveyed using a web-based form consisting of 25 questions covering microbiologic, epidemiologic and clinical points related to *C. difficile* (internal medicine specialists, n=340; intensive care unit physicians, n=96 and pediatricians, n=209).

Results: *C. difficile* were identified correctly as an anaerobic bacillus by 71% of physicians (456/645). In addition, 43% (281/645) of the surveyed were aware that ~5% of adults have *C. difficile* in the gut as part of the normal flora. The spectrum of illnesses caused by *C. difficile*, as well as the significant associated risk factors and the drug of choice for first-line antibiotic treatment (oral metronidazole) and the second-line treatment for persistent symptomatic infection (oral vancomycin or fidaxomicin) were correctly answered by 67% (431/645); 81% (522/645); 45% (289/645); and 18% (116/645) of physicians, respectively. In addition, 55% (352/645) of doctors identified the most common antibiotics considered as predisposing factors for the acquisition of *C. difficile* infection. Only 8% of doctors (51/645) were aware that cytotoxin assay is the gold standard diagnostic test for *C. difficile*. Based on a multivariate analysis, physicians who had 1-5 years post-graduation and those who were pediatricians have been significantly associated with better knowledge about *C. difficile* (p=0.0058 and p=0.0541, respectively).

40% of physicians (258/645) answered the possibility to process specimens for *C. difficile* test in their hospitals (in-house testing or using reference laboratories); testing for toxin with real-time polymerase chain reaction or enzyme immunoassay were most common (46% [119/258] and 44.5% [115/258], respectively), followed by latex agglutination (15.5%, 40/258), and culture for toxigenic *C. difficile* (14.3%, 37/258). Twenty percent of doctors (53/258) have reported ≥1 test. Public hospitals and those with ≤100 beds were significantly associated with the inability to perform *C. difficile* diagnostic test (p=0.0445 and p=0.0074, respectively). Among these physicians, *C. difficile* was referred as the etiologic agent of nosocomial diarrhea in <10% of cases (164/258; 63.5%) and 11-25% (33/258; 13%) at their hospital settings. In terms of number of cases of *C. difficile* hospitalized in the last year doctors referred <10; 65.5% (169/258); 11-20; 29%; (74/258) and >20; 8.5% (22/258).

Conclusions: Our survey suggests that the knowledge of the LA physicians related to *C. difficile* is low to moderate in most of the topics surveyed (microbiologic, epidemiologic and clinical). In general, public and smaller hospitals in LA do not have the facilities to perform *C. difficile* test. The implementation of targeted interventions aiming to increase the *C. difficile* infections awareness in LA hospitalist physicians is required.