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Poster Session III
Diagnosis of Clostridium difficile and other gastrointestinal infections

EVALUATION OF DIASORIN LIASON TEST FOR DIAGNOSIS OF C. DIFFICILE INFECTION.

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Objective: *Clostridium difficile* infection (CDI) is the most frequent cause of nosocomial diarrhea associated with the use of antibiotics. Today there are many marked methods available to improve the diagnosis of CDI, some of which are fast to perform, but poorly sensitive. The aim of this study was to compare the diagnostic performance of a new chemiluminescence (CLIA) Liason® test with routine enzyme immunoassays for the detection of *C. difficile* in stool samples in order to better define the management of hospitalized patients and the laboratory work flow.

Methods: 369 unformed stool samples were tested using the current in-house diagnostic algorithm: first screening with Wampole C. diff CHEK ™ -60 (GDH 96-well ELISA) with a second determination, only for GDH positive samples, for the presence of toxin A and B by Wampole ™ TOX A / B QuikCheck.

All samples were also tested with the new methods Liason® C.Difficile GDH and Toxin A/B as described in the package insert.

Results: 50/369 patients tested (13,5%) gave positive results with Liason® C.Difficile GDH and Toxin A/B against 37/369 (10,2%) tested routinely. With the CLIA method, the percentage of positivity in samples tested increased by almost 3.3%.

Conclusion: Several studies suggest the usefulness of sensitive and specific 2-step diagnostic algorithm for the detection of *C. difficile*. Liason, according to European guidelines, can be considered a hopeful tool for detection of *C. difficile* in faeces, allowing use of a simple and automated procedure, a random access and the availability of specific results.