**Introduction**

_Clostridium difficile_ is a nosocomial pathogen that can cause diarrhea and life-threatening intestinal conditions such as pseudomembranous colitis, toxic megacolon, sepsis and death. Antibiotic treatment is the most widely recognized risk factor for _C. difficile_ infection.

The spread of _C. difficile_ - the biggest problem of all

- _C. difficile_ spores can survive for up to 5 months in the environment.
- _C. difficile_ can be acquired from contact with contaminated surfaces.
- _C. difficile_ is transmitted via a fecal-oral route and through the air.

One of the most effective ways to prevent the spread of _C. difficile_ is to control the spread of spores. Containment of contaminated feces through use of an indwelling fecal management system can be a valuable infection control tool when managing patients with _C. difficile_. Fecal management systems can only play a role in minimizing environmental bacterial load if they effectively contain the _C. difficile_ spores.

The purpose of this study was to evaluate the ability of the FMS to contain _C. difficile_ in vitro, using a model that simulated clinical use.

**Methods and Materials**

_In-vitro_ studies demonstrate that fecal management systems (FMS) effectively contain and prevent _C. difficile_ from spreading into the environment

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**Results**

A stringent _in vitro_ model designed to simulate and monitor containment of fecal effluent & _C. difficile_ in a CDI patient demonstrated that the fecal management device* effectively contained _C. difficile_. The device was not associated with environmental contamination with _C. difficile_ in the vicinity of the device, and both the device and collection bags effectively contained _C. difficile_, while the positive controls did not. For the absorbent underpads, lateral spread of the bacterium across the inner challenged side was observed.

**Conclusion**

Based on _in vitro_ data, the fecal management device* was shown to effectively contain _C. difficile_.

**Sponsored by ConvaTec Inc.**

*“Flexi-Seal” SIGNAL™ FMS

**“Flexi-Seal” Fecal Management System

**The devices tested are indicated for 29-day maximum single patient clinical use only. Testing was completed for 31 days to capture data beyond maximum usage recommendations.

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