## ANALYSIS OF RECURRENCES AND RISK FACTORS IN INFECTION BY CLOSTRIDIUM DIFFICILE

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OBJECTIVES

Recurrences in *Clostridium difficile* infection (CDI) involve increased morbidity and high costs for the healthcare system.

To analyze the risk of recurrence in patients with CDI according to the prediction scale proposed in the 2020 clinical practice guideline of the Spanish Society of Chemotherapy, Internal Medicine and Anesthesia and

## METHODS AND MATERIALS

Hospitalized patients with CDI were selected from February 1, 2019 to April 30, 2020. The collected data were: sex, age, antibiotics in the previous 3 months and concomitantly with vancomycin or fidaxomicin, immunosuppression, severity (leukocytes > 15000/mm<sup>3</sup> or creatinine > 1.5 mg/dl), duration of diarrhea, inflammatory bowel disease (IBD), liver cirrhosis and neoplasia. Recurrence was defined as a new episode of CDI 2-8 weeks after the first episode. The risk of recurrence was calculated using the scale:

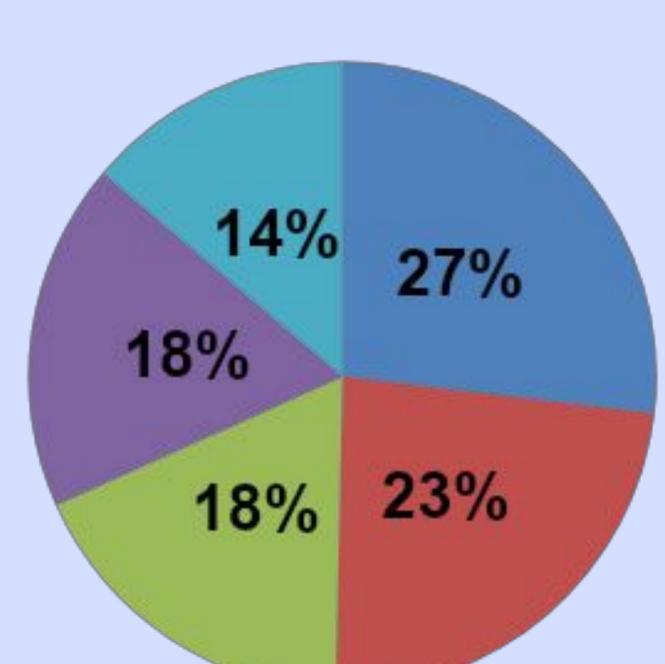
## Reanimation.

To check whether the calculated risk corresponds to the recurrences presented and to establish the main risk factors observed.

m ed	1 POINT	2 POINTS	<b>3 POINTS</b>
3	<ul> <li>&gt; 65 years</li> </ul>	<ul> <li>CDI during</li> </ul>	<ul> <li>Recurrent</li> </ul>
or	<ul> <li>Immunosuppression</li> </ul>	previous year	episode
ty	<ul> <li>Severity</li> </ul>	<ul> <li>Neoplasia</li> </ul>	
l),	Concomitant antibiotics	• IBD	
se	<ul> <li>Diarrhea &gt; 5 days</li> </ul>	Liver cirrhosis	
as			
ne			
ed	A score $\geq$ 3 is considered hi	gh risk of recurrence	2.



## Received antibiotics distribution



Quinolones
Third generation
Cephalosporins
Amoxicilin-clavulanic
Piperacilin-tazobactam
Carbapenems

Of the 69 patients identified, 20 recurrences were observed, 9 of them with a score ≥ 3, which represents a degree of coincidence between the scale and the patients studied of 45%.

•Of the total sample, 36 patients had a score  $\geq$  3, 9 of them had a recurrence (25%).

•Of the patients with recurrences, the following risk factors were identified: 50% presented immunosuppression, 40% neoplasia, 30% concomitant antibiotics; 40% of the subjects had neoplasia and immunosuppression.



The calculated risk of recurrence does not correspond to the results obtained in the analyzed sample. The choice of treatment should be guided by the patient's individual risk factors.

Immunosuppression and neoplasia are the main risk factors for recurrence, increasing the risk when both situations coexist.