

EVALUATION OF EFFECTIVENESS OF COMPOUNDED ORAL VANCOMYCIN CAPSULES FOR TREATMENT OF CLOSTRIDIUM DIFFICILE INFECTION

Narrillos-Moraza A¹, Pernía-López MS¹, De Lorenzo-Pinto A¹, Olmedo-Samperio M², Chamorro-de Vega E¹, Rodríguez-González CG¹, Vicente-Valor J¹, Somoza-Fernández B¹, Herranz-Alonso A¹, Sanjurjo-Sáez M¹

¹ Pharmacy Department. Hospital General Universitario Gregorio Marañón Madrid, Spain.

² Microbiology Department. Hospital General Universitario Gregorio Marañón. IiSGM. Madrid, Spain.

OBJECTIVES

Oral vancomycin is the standard treatment for mild/moderate *Clostridium difficile* infection (CDI). Since there are no marketed vancomycin capsules in our country, vancomycin vials have been taken orally. High price, difficult acquisition and complicated dilution, especially among elderly patients, were associated with poor adherence and higher risk of recurrence. Since December 2017 vancomycin 125 mg capsules were compounded and dispensed to solve these issues.

Purpose: To study clinical effectiveness of oral vancomycin in patients with CDI and to compare the utilization of two different pharmaceutical forms: vials and capsules.

METHODS

- **Retrospective observational cohort** study.
 - All **outpatients** treated with **oral vancomycin (capsules and vials)** from **January 2017 to December 2018**.
 - **Variables:**
 - Demographics (sex, age)
 - CDI episode (new episode, first/second/subsequent recurrence)
 - Vancomycin pharmaceutical form (capsule/vial)
 - Treatment adequacy (dosing and duration)
 - Recurrence rate*
 - Treatment adverse effects
 - Hypervirulent PCR-ribotype 027 strain cases
- Recurrence rate*: presence of symptoms within 60 days after treatment

RESULTS

Vial cohort

35 patients (60.0 % women)
Median age: 69 years (range: 20-97)
CDI episode:

- 22 new episodes (62.8%)
- 11 first recurrences (31.4%)
- 2 second or more recurrences (5.8%)



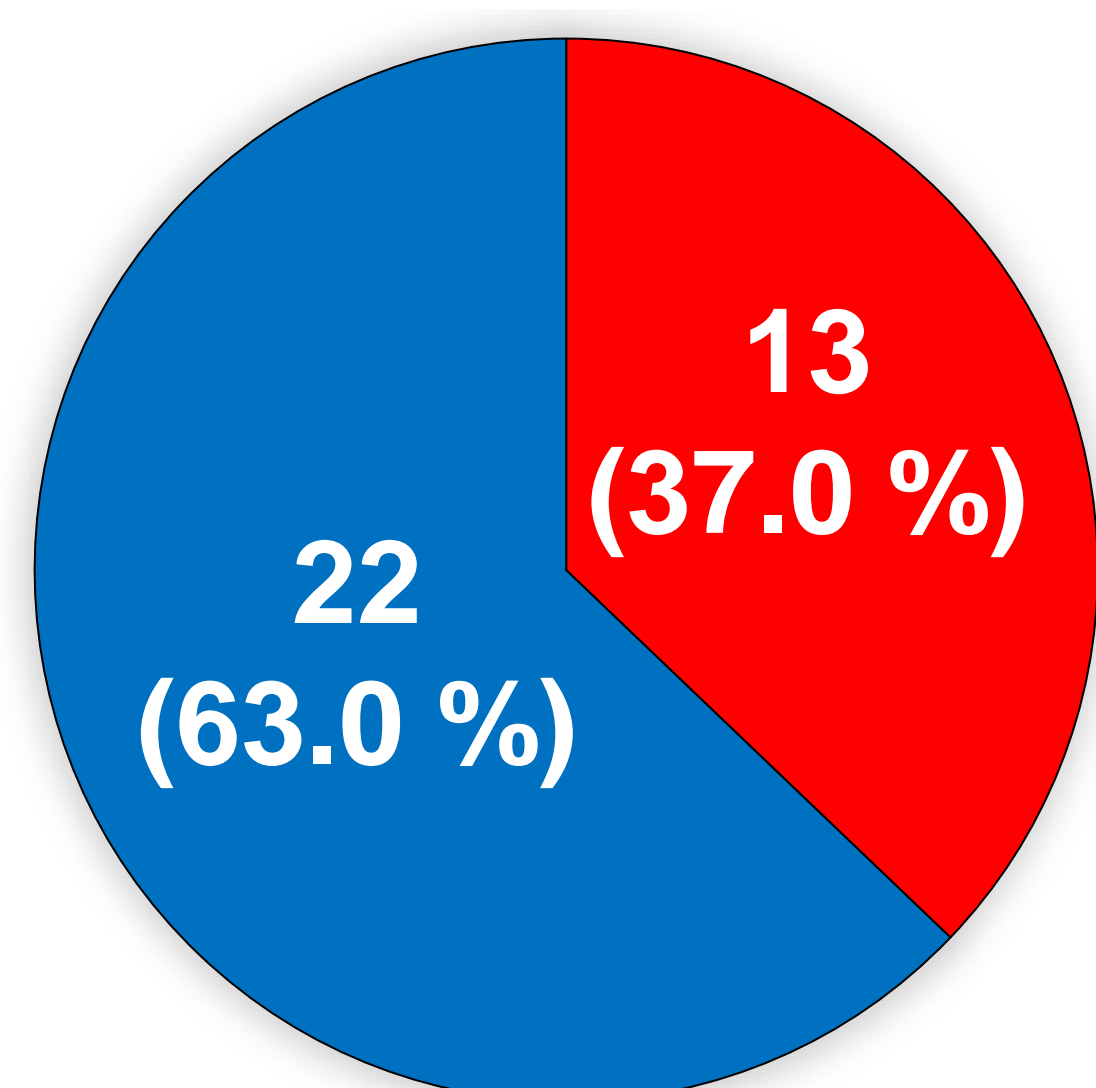
Capsules cohort

64 patients (59.4 % women)
Median age: 70 years (range: 10-82)
CDI episode:

- 48 new episodes (55.0%)
- 13 first recurrences (20.3%)
- 3 second or more recurrences (4.7%)



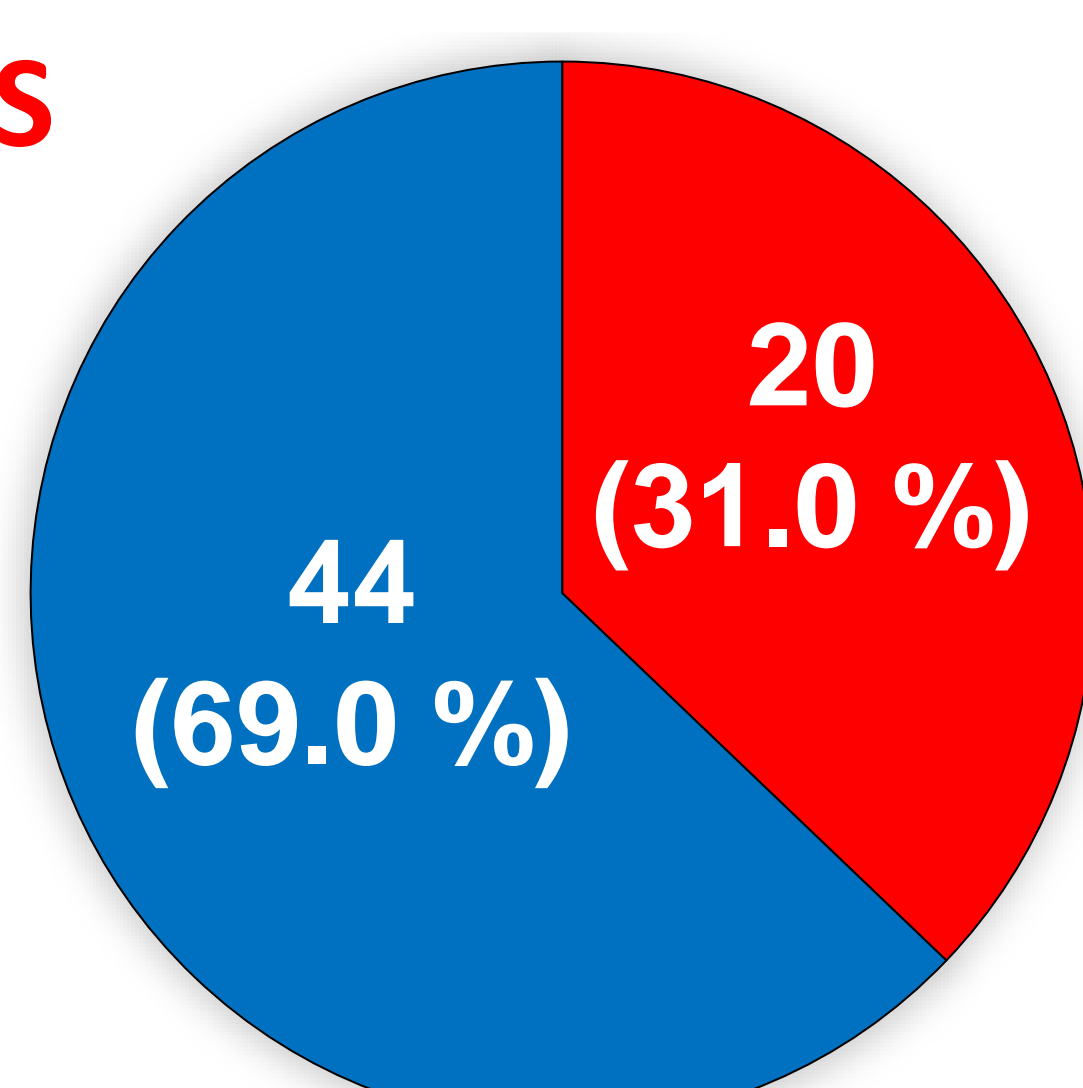
Vial cohort



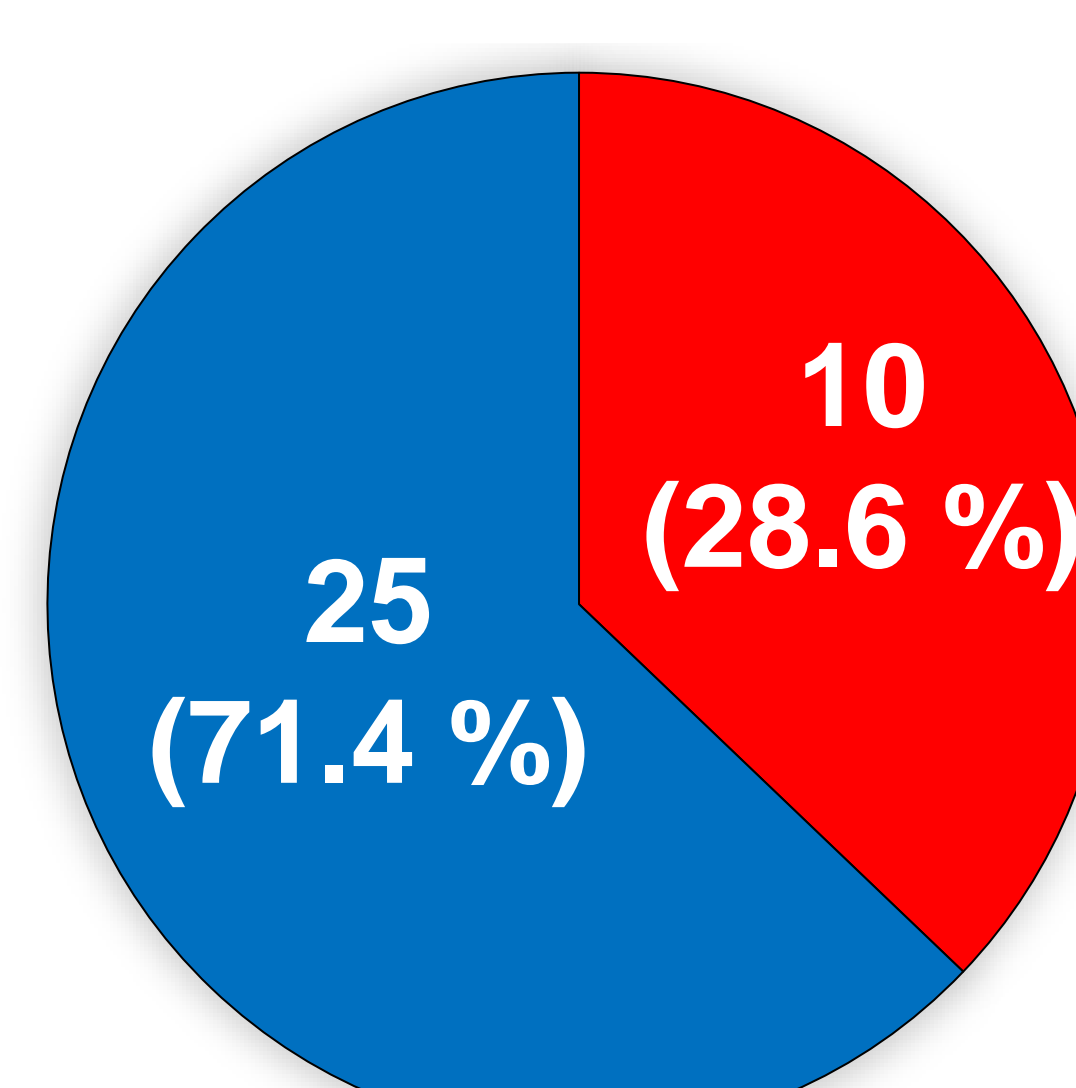
RECURRENCES

p=0.52

Capsules cohort



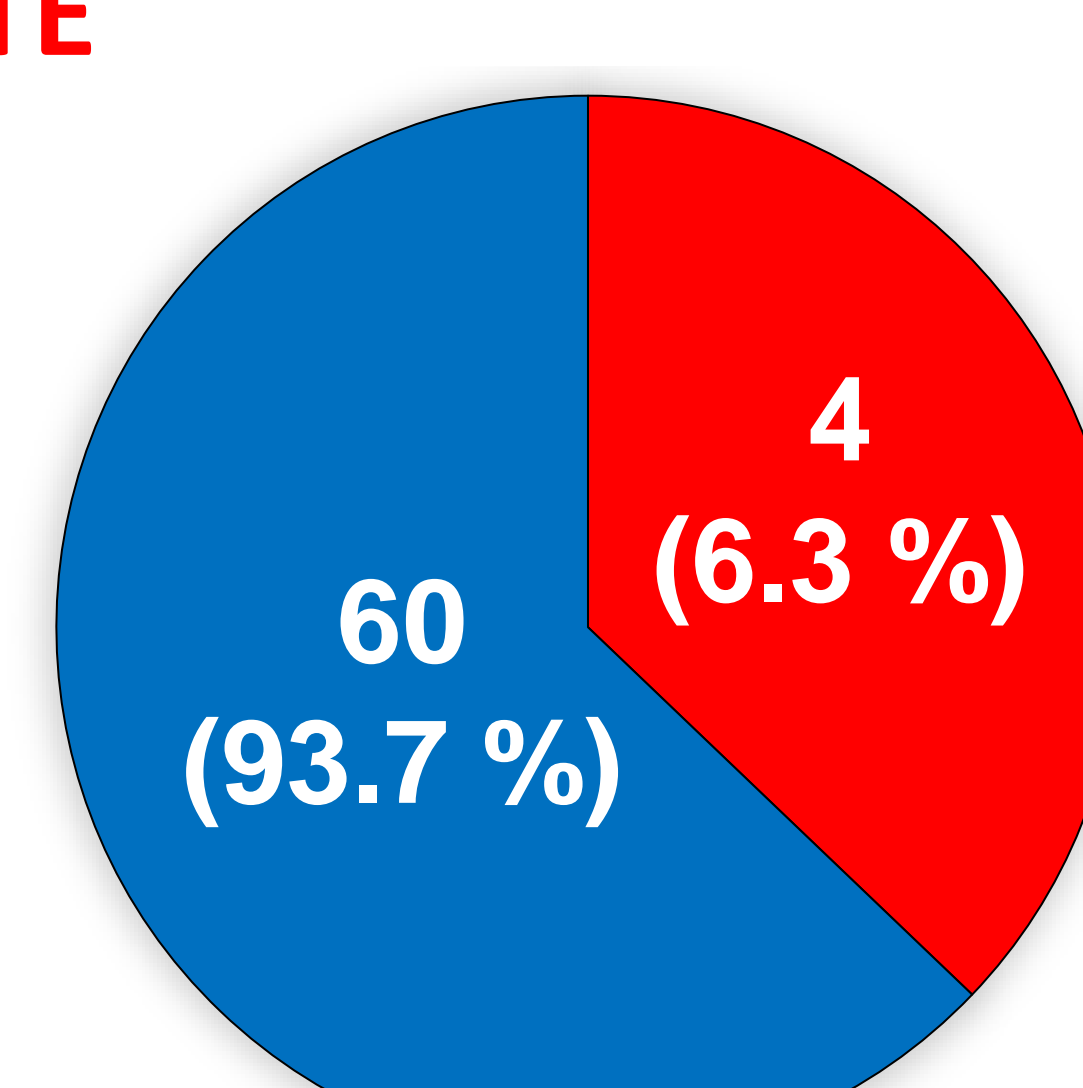
Vial cohort



INAPPROPRIATE DOSING

p=0.002

Capsules cohort



PCR-ribotype 027 was found in 9 patients (9.1%).

No serious adverse events were observed

CONCLUSIONS

- ✓ Oral vancomycin is safe regardless pharmaceutical form.
- ✓ Prescription adequacy improves with capsules.
- ✓ Further studies need to be done to confirm if capsules relates to better adherence and less recurrence rate.

