CP-108: INFECTIONS CAUSED BY CARBAPENEM-RESISTANT KLEBSIELLA PNEUMONIAE IN A TERTIARY HOSPITAL

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Background

The increasing incidence of carbapenem-resistant *Klebsiella pneumoniae* (CR-KP) has become a significant problem and treatment of infections caused by these pathogens is a major challenge for clinicians.

Purpose

To describe infections caused by CR-KP in the setting of a single tertiary Spanish hospital outbreak between June 2012 and February 2013.

Results

Eighty-one confirmed CR-KP-producing isolates were included.

Table 1. Antibiotical treatment.

Antibiotic	N (%)
Tigecycline	44 (63,8%)
Gentamicin	36 (52,2%)
Meropenem	13 (18,8%)
Fosfomycin	11 (15,9%)
Colistin	8 (11,6%)

Table 2. Antibiotical regimen.

Antiobiotic regimen	N (%)
Monotherapy	28 (40,6%)
Combination therapy	41 (59,4%)
Tigecycline + gentamicin	27 (39,1%)

Postantibiogram treatment data were collected from 69 patients.

Table 2. Antibiotics resistance rates.

Antibiotic	%
Tigecycline	27,2%
Gentamicin	64,2%
Fosfomycin	82,7%
Colistin	93,8%
Meropenem	100%

The most active agent against CR-KP was tigecycline (72.8% susceptibility).

Table 3. Pharmacokynetic parameters

Vd (L/kg)	0,3±0,1
Cl (L/h)	2,4±2,1
$T_{1/2}$ (h)	6,0±9,1
Initial dose (mg/kg/day)	4,1±3,5
Cmin (mcg/mL)	0,9±1,3
Cmáx (mcg/mL)	10,7±5,6
Adjusted dose (mg/kg/day)	5,5±1,2
Cmin (mcg/mL)	0,6±0,9
Cmax (mcg/mL)	16,5±2,7

We registered clinical cure or improvement in 44 patients (54.3%) and microbiological cure in 14 patients (17.3%). The overall mortality of the 81 patients was 27.2%, but just 13.6% were considered attributable to infection.

Conclusion

To our knowledge this is the largest reported series of infections caused by CR-KP in the setting of a single-centre outbreak with such high levels of resistance and provides further input on the clinical management of this type of infections.