

P0646 **Double carbapenem therapy for carbapenem-resistant *Klebsiella pneumoniae* bacteraemia**

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**Background:** In this study our aim was to describe the outcomes of patients with blood stream infections with carbapenem resistant *Klebsiella pneumoniae* (CRKP) who received ertapenem containing double carbapenem therapy (ECDCT) retrospectively.

**Materials/methods:** This study was performed at a tertiary-care educational university hospital. Adult (>18 years old) patients with culture proven CRKP bacteremia treated with double carbapenem regimen between Aug 2016 to Oct 2017 were included in the study. Blood cultures were performed on Bact-Alert (Bio Merieux, France). Antimicrobial susceptibility testing of the isolates was performed with the VITEK 2 system (bioMérieux). Resistance to imipenem, ertapenem, and meropenem was tested by E-test (bioMérieux). The results were interpreted according to the EUCAST criteria. Ertapenem dosage was adjusted as creatinine clearance as >30 1 gr/day (7 cases); <30 0.5gr/day (5 cases) while meropenem dosage was 3x1 gr/day when creatinine clearance >50 (5 cases), 2x1gr/day when 10-50 (5 cases) and 2x500mg/day <10 (1 case).

**Results:** There were a total of 11 cases fulfilling study criteria. Male/female ratio was 9/2 (mean age 54.18+/-18.40 years). Nine cases had concomitant CRKP urinary tract infections and history of urological operation. Seven cases had a history of antibiotic usage in the previous one month period. All of the isolates were resistant to meropenem and ertapenem with the MIC levels  $\geq 16$  and  $\geq 8$   $\mu\text{g/ml}$ , respectively. Five isolates were resistant to colistin and nine isolates were also resistant to gentamycin. Five isolates were found to be sensitive (MIC  $\leq 2$   $\mu\text{g/ml}$ ) and one isolate was intermediately sensitive (MIC=4  $\mu\text{g/ml}$ ) to tigecycline. All of the cases were treated with ECDCT. In 6 cases ECDCT was combined with colistin and combined with tigecycline in 4. Mean duration of ECDCT was 15.5 +/- 4.5 days. Microbiologic eradication was observed in all cases within a mean of 6 days. Overall one-month survival rates (with one relapse and one reinfection (with Enterococci)) were 90.9% (10/11) and one case died due to hepatic encephalopathy and multiple organ failure while waiting for liver transplantation.

**Conclusions:** Although the number of cases is low and uncontrolled, ECDCT containing therapy resulted in relatively high successful outcome in CRKP bacteremia.