CONCLUSIONS

E. coli due to non-carbapenem therapy e.g. fluoroquinolones and third- and fourth- generation cephalosporins were used more frequently in such infections treated with non-carbapenem therapy. Due to non-normal distribution of the data, differences in DC, IL, and HL were assessed by the Wilcoxon rank-sum test. All other differences were evaluated by Fisher’s exact test. Odds ratio were assessed using logistic regression after adjusting for underlying renal disease.

No adverse drug-related events were reported under the study regimen. In-hospital mortality was higher in the NC group (14/100) compared to the CP group (2/100) but it was not statistically significant. No difference was found with hospital length of stay (median 16.5 (11.5-5.5) days in the CP group vs 15.5 (11.5-5.5) days in the NC group, p=0.32), but this relationship was also not statistically significant. A similar finding was observed under the analysis of days to reach clinical improvement (CP 4.1 (2-1) days vs NC 4.5 (2-2) days, p=0.52), and ICU readmission (CP 0.05 (0-0) vs NC 0.1 (0-0), p=0.49). The overall outcomes at discharge showed no statistical differences between the groups.

Other outcomes include hospital length of stay (median 5.5 (3-11) days in the CP group, median 5 (3-11) days in the NC group, p=0.49), ICU length of stay (median 1 (1-2) days in the CP group vs 1.5 (1-2) days in the NC group, p=0.52), and Chronic Health Evaluation II score (APACHE II) calculated at admission, which was comparable between the groups; CP 16.9±5.8 vs NC 20.3±9.5, p=0.16. Mean APACHE II scores, age, antibiotic exposure, and Co-morbidities (%). For all analyses, SAS 9.4 was used for data analysis and a 2-sided significance level of α=0.05 was used for all tests. The results of analysis are presented in Table 2.

REFERENCES


Judy Chin, PharmD.

Registry

- ClinicalTrials.gov Identifier: NCT01269347
- fda.gov/drugs/development-approval-process/drug-information-for-patients/clinical-trials-information-how-fda-monitors-drugs-in-market/clinical-trials-registry-requirement

CONCLUSIONS

- There was no statistical difference in clinical response, clinical治愈, and in hospital mortality between CP and NC for ESBL Enterobacteriaceae bloodstream infections.
- Clinical relapse was also not statistically significant.
- In-hospital mortality was higher in the NC group but it was not statistically significant.
- The overall outcomes at discharge showed no statistical differences between the groups.

CLINICAL OUTCOMES IN PATIENTS WITH EXTENDED-SPECTRUM-BETA-LACTAMASE-PRODUCING (ESBL) ENTEROBACTERIACEAE BLOODSTREAM INFECTIONS (ESB) TREATED WITH CARBAPENEMS (CP) AND NON-CARBAPENEMS (NC)

JUDY CHIN,1 JOHN MCCARTHY,1 KATHERINE YANG,2 DIANE MCCOWAN,1 JACQUELYN CITUK,1 ALAN ENDO1

1PHI Health Hospital, Whittier, CA ; 2University of Southern California Keck School of Medicine, Los Angeles, CA

(REVISED) ABSTRACT

BACKGROUND:


METHODS:

- This nonrandomized observational study compared CP to NC for treatment of ESB in adults hospitalized with ESBL bloodstream infection (BSBI) (n=43) in the ICU between 2010-2013. Days to reach clinical improvement (DC), and ICU readmission (IR). Other outcomes include hospital length of stay (HL), ICU length of stay (IL), number of antibiotics used, and Chronic Health Evaluation II score (APACHE II), calculated at admission, which was comparable between the groups; CP 16.9±5.8 vs NC 20.3±9.5, p=0.16. Mean APACHE II scores, age, antibiotic exposure, and Co-morbidities (%). For all analyses, SAS 9.4 was used for data analysis and a 2-sided significance level of α=0.05 was used for all tests. The results of analysis are presented in Table 2.

OBJECTIVE(S)

- To evaluate clinical and sample response and other clinical outcomes with carbapenem or non-carbapenem therapy against ESBL Enterobacteriaceae bloodstream infections is an adult patient population.

RESULTS

- 27 patients were treated with discordant ESB BSBI. Carbapenem therapy was superior in effectiveness.
- Days to improve was statistically significant for both CR, MO and RL were adjusted for underlying renal disease.
- Odds ratio were assessed using logistic regression after adjusting for underlying renal disease.
- There was no statistical difference in clinical response, clinical治愈, and in hospital mortality between CP and NC for ESBL Enterobacteriaceae bloodstream infections.

REFERENCES

- ClinicalTrials.gov Identifier: NCT01269347
- fda.gov/drugs/development-approval-process/drug-information-for-patients/clinical-trials-information-how-fda-monitors-drugs-in-market/clinical-trials-registry-requirement

CONCLUSIONS

- Clinical relapse was also not statistically significant.
- In-hospital mortality was higher in the NC group but it was not statistically significant.
- The overall outcomes at discharge showed no statistical differences between the groups.

CLINICAL OUTCOMES IN PATIENTS WITH EXTENDED-SPECTRUM-BETA-LACTAMASE-PRODUCING (ESBL) ENTEROBACTERIACEAE BLOODSTREAM INFECTIONS (ESB) TREATED WITH CARBAPENEMS (CP) AND NON-CARBAPENEMS (NC)

JUDY CHIN,1 JOHN MCCARTHY,1 KATHERINE YANG,2 DIANE MCCOWAN,1 JACQUELYN CITUK,1 ALAN ENDO1

1PHI Health Hospital, Whittier, CA ; 2University of Southern California Keck School of Medicine, Los Angeles, CA

BACKGROUND:


METHODS:

- This nonrandomized observational study compared CP to NC for treatment of ESB in adults hospitalized with ESBL bloodstream infection (BSBI) (n=43) in the ICU between 2010-2013. Days to reach clinical improvement (DC), and ICU readmission (IR). Other outcomes include hospital length of stay (HL), ICU length of stay (IL), number of antibiotics used, and Chronic Health Evaluation II score (APACHE II), calculated at admission, which was comparable between the groups; CP 16.9±5.8 vs NC 20.3±9.5, p=0.16. Mean APACHE II scores, age, antibiotic exposure, and Co-morbidities (%). For all analyses, SAS 9.4 was used for data analysis and a 2-sided significance level of α=0.05 was used for all tests. The results of analysis are presented in Table 2.

OBJECTIVE(S)

- To evaluate clinical and sample response and other clinical outcomes with carbapenem or non-carbapenem therapy against ESBL Enterobacteriaceae bloodstream infections is an adult patient population.

RESULTS

- 27 patients were treated with discordant ESB BSBI. Carbapenem therapy was superior in effectiveness.
- Days to improve was statistically significant for both CR, MO and RL were adjusted for underlying renal disease.
- Odds ratio were assessed using logistic regression after adjusting for underlying renal disease.
- There was no statistical difference in clinical response, clinical治愈, and in hospital mortality between CP and NC for ESBL Enterobacteriaceae bloodstream infections.

REFERENCES

- ClinicalTrials.gov Identifier: NCT01269347
- fda.gov/drugs/development-approval-process/drug-information-for-patients/clinical-trials-information-how-fda-monitors-drugs-in-market/clinical-trials-registry-requirement

CONCLUSIONS

- Clinical relapse was also not statistically significant.
- In-hospital mortality was higher in the NC group but it was not statistically significant.
- The overall outcomes at discharge showed no statistical differences between the groups.

CLINICAL OUTCOMES IN PATIENTS WITH EXTENDED-SPECTRUM-BETA-LACTAMASE-PRODUCING (ESBL) ENTEROBACTERIACEAE BLOODSTREAM INFECTIONS (ESB) TREATED WITH CARBAPENEMS (CP) AND NON-CARBAPENEMS (NC)

JUDY CHIN,1 JOHN MCCARTHY,1 KATHERINE YANG,2 DIANE MCCOWAN,1 JACQUELYN CITUK,1 ALAN ENDO1

1PHI Health Hospital, Whittier, CA ; 2University of Southern California Keck School of Medicine, Los Angeles, CA

BACKGROUND:


METHODS:

- This nonrandomized observational study compared CP to NC for treatment of ESB in adults hospitalized with ESBL bloodstream infection (BSBI) (n=43) in the ICU between 2010-2013. Days to reach clinical improvement (DC), and ICU readmission (IR). Other outcomes include hospital length of stay (HL), ICU length of stay (IL), number of antibiotics used, and Chronic Health Evaluation II score (APACHE II), calculated at admission, which was comparable between the groups; CP 16.9±5.8 vs NC 20.3±9.5, p=0.16. Mean APACHE II scores, age, antibiotic exposure, and Co-morbidities (%). For all analyses, SAS 9.4 was used for data analysis and a 2-sided significance level of α=0.05 was used for all tests. The results of analysis are presented in Table 2.

OBJECTIVE(S)

- To evaluate clinical and sample response and other clinical outcomes with carbapenem or non-carbapenem therapy against ESBL Enterobacteriaceae bloodstream infections is an adult patient population.

RESULTS

- 27 patients were treated with discordant ESB BSBI. Carbapenem therapy was superior in effectiveness.
- Days to improve was statistically significant for both CR, MO and RL were adjusted for underlying renal disease.
- Odds ratio were assessed using logistic regression after adjusting for underlying renal disease.
- There was no statistical difference in clinical response, clinical治愈, and in hospital mortality between CP and NC for ESBL Enterobacteriaceae bloodstream infections.