of OXA-carbapenemases. Due to the prevalence of certain OXA-carbapenemases in *Acinetobacter spp.*, *PCR* was better able to detect these genes. The identification of the NDM-1 gene and other carbapenemase genes in Jamaica underscores the need for effective surveillance and infection control measures to identify and prevent spread of MDRGNB's.

http://dx.doi.org/10.1016/j.ijid.2012.05.611

Type: Poster Presentation

Final Abstract Number: 56.063
Session: Antibiotics
Date: Saturday, June 16, 2012
Time: 12:45-14:15
Room: Poster & Exhibition Area

High prevalence of D-test positivity in clinical isolates of *Staphylococcus aureus* among Japanese children

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Background: Clindamycin is one of options for treating skin and soft tissue infections caused by Staphylococcus aureus. Little is known regarding to the prevalence of D-test positivity of clinical isolates of Staphylococcus aureus among Japanese children. Since D-test positivity is associated with treatment failure by Clindamycin, it is important to know the prevalence to select an optimal first-line therapy.

Methods: We retrospectively reviewed the clinical isolates data of Staphylococcus aureus between January 2011 and December 2011 at tertiary Children's hospital in Tokyo. Specimens were collected from both inpatient and outpatient. The antibiotic susceptibility and D-test were performed automatically by MicroScan Walk-Away 96 Plus® (Siemens). The panel PC3.1J (Siemens) was used for analysis. D-test was performed according to M100-S19 Clinical Laboratory and Standards Institute (CLSI) 2009. We reviewed the result of susceptibility and D-test of Staphylococcus aureus isolates.

Results: The total of 468 Staphylococcus aureus was identified in our study. The isolates collected from outpatient and inpatient was 190 and 278, respectively. Methicillin-sensitive Staphylococcus aureus (MSSA) and Methicillin-resistance Staphylococcus aureus (MRSA) were 367 (79.4%) and 101 (21.6%), respectively. D-test was performed among 127 MSSA isolates and 44 MRSA isolates. Positive D-test rates for MSSA and MRSA were 93.7% (119/127) and 86.4% (38/44), respectively. Positive D-test rate for MRSA isolates from outpatient and inpatient was 84.6% (11/13) and 87.1% (27/31), respectively. Over all Clindamycin resistance including D-test positive strains for MSSA and MRSA was 34.1% (125/367) and 75.2% (76/101), respectively.

Conclusion: We identified high prevalence of D-test positivity both in MSSA and MRSA among Japanese children. Intravenous Vancomycin is usually the treatment of choice at inpatient. Oral Clindamycin is often preferred at outpatient. In our study, MRSA isolates from outpatient demonstrated high D-test positive rate. D-test is not routinely performed at microbiology laboratory at small institutions in Japan. Oral Clindamycin may not be a suitable option for MRSA treatment.

http://dx.doi.org/10.1016/j.ijid.2012.05.612

Final Abstract Number: 56.064
Session: Antibiotics
Date: Saturday, June 16, 2012
Time: 12:45-14:15
Room: Poster & Exhibition Area

Survey for carbapenemase-producing *Klebsiella pneumoniae* isolated from clinical specimens in Thai hospitals

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Background: Carbapenems, broad spectrum β-lactam antibiotics are the most effective therapy for various serious infections included those caused by *Enterobacteriaceae*- producing extended spectrum β-lactamases (ESBLs). The rapid spread worldwide of carbapenem resistantKlebsiella pneumoniaeby producing enzymes *K. pneumoniae* carbapenemases (KPCs) limited the effectiveness of carbapenems in the treatment of multidrug-resistant infections. Adequate detection of carbapenemase-producingEnterobacteriaceaein routine diagnostic laboratory is essential for clinical management. This study aimed to detect KPC enzyme production in *K. pneumoniae* isolated from clinical specimens in Thai hospitals.

Methods: A total of 351 *K. pneumoniae* isolates from clinical specimens of 4 hospitals in Bangkokand perimeter areas in 2010 were tested for carbapenem- resistance by ertapenem imipenem and meropenem disk diffusion test, based on the CLSI new breakpoint in June 2010, and Modified- Hodge test (MHT). KPC production was confirmed among the carbapenem disk non-susceptible isolates with *blaKPC* gene detection by PCR.

Results: Among 351 *K. pneumoniae* isolates, 18 (5.13%) were ertapenem non-susceptible isolates and 3 isolates (0.85%) produced MHT positive results. All ertapenem non-susceptible isolates were *blaKPC* gene negative, except one isolate. The MHT positive isolate that possessed *blaKPC* gene, was an MDR-ESBL producing *K. pneumoniae* recovered from respiratory tract of an infected patient. It was highly resistant to both ertapenem and imipenem and intermediate resistant to meropenem (MICs of ertapenem, imipenem and meropenem by E-test; 8, 8 and 3 mg/L, respectively).

Conclusion: Results demonstrated the high prevalence of *K. pneumoniae* resistance to carbapenems among isolates from clinical specimens in Thai hospitals. The carbapenems resistant isolates might have other resistant mechanisms than the production of enzyme KPC. These isolates may have impact in clinical management, therefore future clinical study of infections from this resistance organism and development for more effective assay in routine detection of KPC are required. This study implies that implementing guidelines for detecting carbapenem-resistant *Enterobacteriaceae* are necessary for antimicrobial resistance surveillance system inThailand. Moreover, to contain this resistant organism, an aggressive infection control strategy should early be established.

http://dx.doi.org/10.1016/j.ijid.2012.05.613