Methods: At a regional hospital, from January 2011 to October 2014, all enterobactericeae isolates fulfilled CRE criteria were enrolled. If the isolates were from patients hospitalized for 2 days or longer, they were categorized as hospital-acquired infections (HAI). The remaining isolates were further categorized as nursing home-acquired infections (NHAI), if the patients were nursing home dwellers; healthcare-associated infections (HCAI), if the patients were readmitted within 90 days of discharge from a prior hospitalization; or community-acquired infections (CAI), if the patients came from the general community and did not fulfill HCAI or NHAI definition.
Results: A total of 68 CRE isolates were enrolled. Of all CRE, 38.2% (26/68), 36.8% (25/68), 13.2% (9/68), and 11.8% (8/68) of CRE were categorized as NHAI, HAI, HCAI, and CAI, respectively.
Conclusions: As a result of this study, 75 % (51/68) of CRE acquired from nursing home and hospital, especially the number of CRE was similar between nursing home and hospital. Accordingly, we suggest that monitoring CRE and intervention of infection control measures should extend to nursing home in order to reduce the incidence of CRE.

PS 1-181

THE MOST FREQUENT SPECIES OF CARBAPENEM-RESISTANT *ENTEROBACTERICEAE* AT A REGIONAL HOSPITAL

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Purpose: Carbapenem-resistant Enterobactericeae (CRE) is defined as Enterobactericeae resistant to any of carbapenems, including ertapenem, imipenem, meropenem, and doripenem. This study was conducted to explore the most frequent species of CRE.
Methods: This was a retrospective study at a regional hospital in southern Taiwan. From January 2013 to May 2014, all isolates of CRE reported from clinical microbiology laboratory were enrolled in this study. Antimicrobial susceptibility testing was performed by a standard disk diffusion method. The results were interpreted according to criteria recommended by the Clinical and Laboratory Standards Institute 2013 and 2014, respectively. All intermediate results were regarded as resistant in this study.
Results: A total of 80 CRE isolates were collected which included 42 (52.5%) *Klebsiella pneumoniae*, 12 (15%) *Eschechia coli*, 11 (13.8%) *Enterobacter cloacae*, 5 (6.3%) *Providencia stuartii*, 2 (2.5%) *Klebsiella ozaenae*, 2 (2.5%) *Enterobacter aerogenes*, 2 (2.5%) *Citrobacter koseri*, 1 (1.3%) *Enterobacter braakii*, 1 (1.3%) *Providencia rettgeri*, 1 (1.3%) *Klebsiella oxytoca*, and 1 (1.3%) *Morganella morgannii*.
Conclusions: The most frequent species of CRE in this hospital were *K. pneumoniae*, *E. coli*, and *E. clocae*. The three species accounted for 81.3% of CRE isolates. Not surprisingly, those are the frequent Enterobactericeae causing infections and using antibiotics for treatment in clinical practice. However, *E. coli* infections were more than *K. pneumoniae* infections, but the number of carbapenem-resistant *K. pneumoniae* was more than carbapenem-resistant *E. coli*. Hence, we think the reason why *K. pneumoniae* is the frequent species of CRE may be worth further investigations.

PS 1-182

EFFECTIVE THERAPY OF IMIPENEM AND COLISTIN FOR PNEUMONIA CAUSED BY *KLEBSIELLA PNEUMONIAE* HARBORING BLA_{KPC-17} GENE: A CASE REPORT

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Purpose: *Klebsiella pneumoniae* carbapenemase (KPC) is one of the most common carbapenemases. KPC-2-containing *K. pneumoniae* (KPC-2-KP) has been the most worldwide spread and has arrived in Taiwan. Meanwhile, an outbreak of KPC-17-KP is ongoing in southern Taiwan. We report pneumonia caused by a KPC-17-KP strain.
Case report:
A 76 years old man of dementia had fever and pleural effusion. There were no chills, no chest pain, no abdominal pain and no nausea and vomiting. The consciousness was clear and BP showed 105/69mmHg. Laboratory data revealed WBC, 13,900/μL and C-reactive protein (CRP), 19.5 mg/L. Antibiotic of moxifloxacin was given. As unstable O2 saturation, left lung consolidation and septic shock, antibiotic with piperacillin-tazobactam was prescribed, which was shifted to imipenem while sputum culture yielded *Escherichia coli* with extended-spectrum β-lactamase (ESBL-*E. coli*) phenotype. CRP increased to 188.3 mg/L. As hemodynamic instability depending on high-dose vasopressor and unstable O2 saturation (SpO2: 93-94%), the patient was intubated with ventilator support. We provided fluid resuscitation, vasopressor infusion, lung protective ventilation with low tidal volume and high PEEP. CXR showed partial resolution of consolidation with residual ground glass opacities. But WBC increased to 26,700/μL and procalcitonin was 27.4 ng/mL. Follow-up sputum culture yielded imipenem-resistant *K. pneumoniae*, which was later confirmed as a KPC-17-KP by PCR and DNA sequencing. In addition, he had intermittent spiking fever. Antibiotic imipenem was added colistin and then his condition was getting improvement. He was discharged uneventfully after 5 weeks of hospitalization.
Conclusions: We report a patient with ESBL-*E. coli* pneumonia followed by KPC-17-KP pneumonia after imipenem therapy. Combination of imipenem with colistin achieved a good clinical outcome.

PS 1-183

CONTROL OF MULTIPLE-DRUGS RESISTANT ORGANISMS (MDROs) in surgical ward of a general hospital in Hong Kong

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Purpose: There was increased of MRSA infections at the surgical ward since early 2013 and a VRE outbreak was reported in April 2013. This increased concerns and suggested to have improvement on infection control (IC) and caring practices. Then a quality IC program has been implemented to ward to control the MDRO infections.
Methods: 1. Enhanced staff's awareness by: briefing sessions, posting up related information (e.g. MDRO statistics), ICNs participated the departmental meetings.
2. Improved caring practices: Hand hygiene, procedures for bladder irrigation, catheter care for urology patients, wound care and dressing
3. Conducted patrols and audits on hand hygiene by IC link nurses and ICNs
4. Reinforced environment cleansing by using advanced cleaning /disinfection agent and conducting regular audits
5. Provided designated equipment such as stethoscopes, blood pressure monitors etc. for patients with MDROs
6. Enhanced the cleaning of linen and blankets for patients
7. Promoted patient's awareness on hand hygiene with slogans, leaflets, banner and offering of alcohol wipers for patients to disinfect hands
Results: 1. No MDRO outbreak reported from surgical ward since April 2013
2. MRSA rate decreased from the peak 2.5 (April 13) to 0.8 (April 14) per 1000 pbd
3. Staff hand hygiene compliance rate improved from 77% to 82%
Conclusions: With energetic IC strategies and supports from department heads and staffs, the spread of MDROs in ward was under control, the infection rates of MDROs were kept in low level and there was no outbreak reported.

PS 1-184

COMPARATIVE ANALYSIS OF DIFFERENT ANTIBIOTIC SUSCEPTIBILITY TESTS AMONG 670 *mecA*-POSITIVE MRSA ISOLATES FROM STERILE SITES (TIST STUDY, 2006—2010)

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Background: MRSA causes severe infections with considerable morbidity. Antimicrobial susceptibility test (AST) help physicians to choose appropriate