

PS 2-404**THE EXPERIENCE OF INVESTIGATION AND PROCESSING THE OUTBREAK OF SCABIES WHICH MEDICAL STAFFS INFECTED IN MEDICINE DEPARTMENT IN A REGIONAL HOSPITAL**

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Purpose: This event is an aggregative phenomenon, and because the infection control practitioners immediately take some intervention measures to quickly and effectively prevent the first-line medical staff from being threatened by scabies infection and prevent further expansion of the infection, we provide medical community with the experience of our hospital for reference.

Methods: On April 1, 2013, it was reported that more than one staffs in the ward had suffered from itching and erythematous papules one after another since March 25, we immediately counted the number of staffs with symptoms, traced the source of infection, taken contact infection protective measures, such as cleaning and disinfection of environmental and clothing.

Results: It was diagnosed by the dermatologist that a total of 16 staffs suffered with scabies (including two suspected cases), among which 10 were registered nurse, 2 were nurse specialists, one was a teacher and 3 were students; all 16 staffs had erythematous papules (100%), mainly located in arms (75%). We investigated the source of infection and found two patients: For one patient, scabies was excluded by department of dermatology through twice consultations in February (at admission) and March; for the other patient, scabies was excluded through consultation on March 26 (at admission), and then scabies was diagnosed through the second consultation on April 1. **Conclusions:** The two patients had been into the same ward but different beds, it was speculated that improperly diagnosis resulted in the delayed preventive measures and then interact infection. No new cases occurred after April 6, so it was closed a month later. It was recommended that the timing of preventive use of drugs should be investigated for high-risk cases, clinical application of personal protective equipment should be strengthened every day, and information on medical staff's health should be informed.

PS 2-405**AN OUTBREAK OF SCABIES IN A DISTRICT HOSPITAL: LESSONS LEARNED.**

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Purpose: On September 24 2013, fourteen elderly residents and five health-care workers were infected with this parasite at our Respiratory Care Ward, believed to have come from a new resident from another hospital. The failure of staff to diagnose scabies in this patient on admission might be due to a lack of pruritus in this new resident under incomplete treatment by the previous hospital. How did we properly and effectively deal with a widespread outbreak of scabies in residential care facilities?

Methods: Infection Control Team and the Occupational Health teams were informed. Aggressive infection control precautions beyond Centers for Disease Control and Prevention barrier and isolation recommendations were instituted, including the following: (1). Outbreak control plans including isolation precautions and recommended treatment to residents, staff and visitors. (2). Meet with key staff to coordinate control measures. (3). Evaluate patients on affected units and immediately place patients with suspected scabies in contact isolation. (4). Prepare a line listing of symptomatic patients and health care workers and a separate line listing of their contacts. (5). Provide training to all staff on the signs and symptoms of scabies. (6). Perform environmental cleaning of affected units. (7). Evaluate effectiveness of control measures at least every 2-3 days.

Results: During the ensuing 14 weeks, observe for any further presence of scabies so that any possible cases can be dealt with promptly. The outbreak was considered under control and no new cases occurred.

Conclusions: Scabies is especially common among elderly patients living in long-term care facilities. When the patients with scabies are admitted to long-term care facilities, failure to diagnose this condition may give rise

to a massive epidemic. Due to its atypical clinical presentation as well as difficulties associated with its management it poses a number of challenges both from a therapeutic aspect as well as from public health perspective.

PS 2-406**STUDY ON THE CONTAMINATION STATUS OF LEGIONELLA IN PUBLIC PLACES ENVIRONMENT**

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Objective: To investigate the contamination status of legionella in Public places environment.

Methods: We sampled cooling tower water, shower water, potable water and indoor supply aerosol from Public places, detected legionella by culture. **Results** The legionella positive rate of cooling tower water, shower water, potable water and indoor supply aerosol was 75% (111/148), 27% (27/100), 44% (22/50) and 5.3% (2/38). *Legionella pneumophila* was positive in the vast majority of samples. LP1,LP2-8,LP10, *L. micdadei* and *L. bozemanii* were detected.

Conclusions: In Public places environment(cooling tower water, shower water, potable water and indoor supply aerosol), legionella pollution was serious, LP as the advantage. Cases of community-acquired LD might have occurred in the public places in China.

Keywords: Public places; Water; Legionella

PS 2-407**EMPIRICAL APPROACH FOR REDUCING HEALTHCARE-ASSOCIATED BLOODSTREAM INFECTION RATE OF PATIENTS RECEIVING DIALYSIS**

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Purpose: The rate of healthcare-associated infections is a crucial indicator of the quality of clinical medical care. The rate of bloodstream infections (BSIs), an acute care indicator, is among the Taiwan Clinical Performance Indicators established by the Taiwan Joint Commission on Hospital Accreditation. The BSI rate among patients in this department was 7.63‰ (peer value = 4.70‰) in the first quarter of 2014. Among the patients with BSI receiving dialysis, 55% experienced prolonged hospitalization, and 22% died. We identified an excellent improvement program for improving patient safety during care by adopting an empirical point of view.

Methods: This improvement program from April to September 2014. The program was implemented in two stages. At Stage 1, the Infection Control Center staff analyzed and reviewed the demographics, site of catheter insertion of patients with BSI, as well as the standard procedures for central venous catheter insertion for these patients. These guidelines included the following five items: hand hygiene of health care staff, disinfection of the skin using 2% chlorhexidine gluconate, preparation of maximal sterile barrier precautions that cover the patient from head to toe and selecting an appropriate insertion site (avoiding use of the femoral vein), daily assessment of necessity of the catheter, and removing unnecessary tubes as early as possible. they were also required to use a sterile basin when performing bed baths. At Stage 2, including physicians and nurses were trained based on the training plans established by the Infection Control Center; central venous catheter insertion checklists and daily care assessment forms were incorporated into the medical care work routine, and monthly meetings were held for discussion and staff feedback.

Results: Based on the feedback the use of central venous catheters dropped from 47.3% to 30.3%; the correct completion rate of the checklist for catheter insertion increased from 67% to 100%; the correct completion rate of the catheter insertion evaluation form increased from 25% to 90%; and hand-washing compliance increased from 86% to 95%. During the fourth inspection, correct completion of catheter care was 100%; the BSI rate decreased from 7.63‰ to 4.55‰; and the average time of hospitalization decreased from 7.29 days to 5.15 days