



Image of oral cavity status post incision and drainage



Chest CT showing multiple pulmonary nodules

Conclusion: *Pseudomonas Aeruginosa* is an important cause of recurrent community acquired sino-pulmonary disease among HIV-infected patients even in the absence of traditional risk factors. Numerous reports have shown infection with *Pseudomonas Aeruginosa* in immunocompromised patients can cause pneumonia, bronchitis or sinusitis. No cases of *Pseudomonas Aeruginosa* causing an inflammatory nasopharynx mass have been reported in the literature. Infections of the upper respiratory tract in patients with AIDS may present with paucity of symptoms due to poor inflammatory response and may progress to a more threatening condition with obstruction of the oropharynx like in our patient.

Pseudomonas Aeruginosa is an important opportunistic bacterial pathogen that causes infection of the respiratory tract and other organs in susceptible hosts and can also present as an inflammatory mass of the oropharynx.

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Room: Ballroom

A laboratory based study of dengue epidemic in the city of Lahore during year 2011

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Background: Dengue fever (DF), a mosquito borne viral infection, caused by four distinct serotypes of Dengue virus. The disease is worldwide in distribution and a major health issue. Dengue viral infection was initially detected in city of Lahore during 2006. In 2008 and 2010 epidemics were reported on small scale but, dur-

ned to the epidemic area through daily based mass movement, Hence a laboratory based study was conducted in a public tertiary care hospital of Lahore, Pakistan.

Methods & Materials: The study was conducted in the Microbiology laboratory of Mayo hospital, King Edward Medical University, Lahore Pakistan. Blood samples of suspected patients visiting the out patient department OPD, indoor departments of the hospital were tested by using Dengue (1-4) IgM and IgG ELISA method. The major epidemiological parameters like age, gender, location and weekly increase in patient number were included in the study. Chi square test was performed for statistical analysis.

Results: From a total of 5,274 Dengue suspected individuals, 3361 cases found reactive to Dengue (1-4) IgM and IgG. Of the positive cases 51% were reactive to IgM, 36% to IgG while 13% for both IgM and IgG. Of the reactive cases 78.9% were male and 21.1% female. Among dengue cases, 15.2% were less than 15 years, 43.9% were (16-30), 21.6% were (31-45), 15.2% were (46-60), 3.0% were (61-75) and 1.1% were above 76 years. A strong association ($p < 0.05$) of age group between 16-30 years was found with the disease form. Majority of patients were residents of Shalamar, Ravi and Data GanjBukhsh towns. Maximum cases were reported through August- November during the year.

Conclusion: DF has emerged as an important vector borne viral illness in Lahore, Pakistan. The serological tests DEN (1-4) IgM ELISA were demonstrated as sensitive marker for detection of acute dengue viral infection. There is a need to establish an active laboratory-based surveillance system in dengue endemic areas. The only means to control this disease is to interrupt the transmission of the virus.

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Measles seroprevalence in Tianjin, China

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Background: Global efforts toward measles elimination have made tremendous progress in recent years. However, many countries (including China), have not met recent WHO elimination goals, despite wide spread immunization campaigns. In a collaboration to better understand measles susceptibility in Tianjin, China, the University of Michigan and the Tianjin Centers for Diseases Control have conducted a population-based cross-sectional study throughout the municipality.

Methods & Materials: We interviewed and drew dried blood spots (DBS) from a population-based systematic random sample of 2406 people, 1713 of whom were age 1–49 years. The DBS were tested for measles IgG to determine measles susceptibility.

Results: High levels of immune protection (1–4 years, 96%; 5–9 years 100%; 10–14 years 89%) were evident in children under age 15 (who likely received two doses of measles containing vaccine)



and in adults over age 40. Among females age 30–39, 82% tested IgG positive; among males age 30–39, 80% tested IgG positive.

Residents of rural areas were more likely to be positive for IgG (90.6%) when compared to Suburban (85%) and Urban (88%). Likewise residents of Tianjin were more likely to test positive for IgG when compared with members of the non-resident “float” population (89% and 85%).

Conclusion: Measles vaccination campaigns have successfully targeted children, which is mirrored in the IgG results that we found and in measles cases reported to the TJCDC. Perhaps an adult booster dose should be considered as well as initiatives to vaccinate more urban/suburban populations. Innovative interventions will be required to completely eliminate measles in China.

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Invasive device usage and relationship between nosocomial infections



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Background: Nosocomial infections (NIs) acquired in the intensive care unit (ICU) are associated with significant morbidity, mortality and treatment costs. The aim of this study was to establish the incidence of HIs in a neurological intensive care unit (nICU) and medical-surgical ICU (msICU), and to determine the most prevalent causative agents.

Methods & Materials: This study was conducted between 1 January 2013 and 30 November 2013 at an eight-bed nICU and nine-bed msICU at a tertiary care hospital from Turkey. Data was obtained from hospital surveillance system retrospectively.

Results: In total, 542 patients with a total of 5340 patient-days were enrolled during the 11-month study period. A total of 51 NIs were identified among 42 patients (28 patients with 32 NIs in nICU and 14 patients with 19 NIs in msICU). The overall incidence of NIs was 9.4%, while density of HIs was 9.55 per 1,000 patient-days. Bloodstream infections were the most seen infections in both ICUs. Despite the central venous catheter use was approximately two times more in msICU, the same increase was not seen in bloodstream infection density. However, both ventilator associated pneumonia incidence density and the mechanical ventilation use were higher in msICU. Urinary tract catheter use and the urinary tract infection incidence density were similar between two ICUs (Table 1). *Acinetobacter baumannii* and the *Candida* spp. were the most detected microorganisms in msICU and nICU, respectively. While *A. baumannii* and the coagulase negative staphylococcus were the second most seen pathogens in nICU,

Table 1

Comparison of baseline data, rates of device use, and device-associated infection rates between neurological and medical-surgery intensive care units.

Characteristics	Neurological Intensive Care Unit	Medical-Surgery Intensive Care Unit	P value
Number of patient	195	347	
Number of Patient-days	2604	2736	
Mean length of stay day	13,35	7,88	
Device use rate			
Urinary tract catheter %	96	97	0.6
Central venous catheter %	42	78	<0.001
Mechanical ventilation %	37	74	<0.001
Device-associated infections			
Urinary tract infection	2/1,03/0,77	2/0,58/0,73	0.62
No/Rate%/incidence density			
Bloodstream infection	12/6,15/4,61	15/4,32/5,48	0.34
No/Rate/incidence density			
Pneumonia	5/2,56/1,92	14/4,03/5,12	0.37
No/Rate/incidence density			
Surgical site infection	0	1/0,29/0,37	
No/Rate/incidence density			
Total infection	19/9,74/7,30	32/9,22/11,7	0.84

Pseudomonas aeruginosa was the second most seen pathogen in msICU.

Conclusion: The overall incidence density in msICU is higher than incidence density in nICU. We think that this situation is associated with greater use of invasive devices.

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Evaluation of the surveillance system of the National Tuberculosis Control Programme, Sierra Leone, 2012



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Background: Tuberculosis remains a global emergency causing high morbidity and mortality. Annually 2.3 million people still die from the disease, while increased deaths are due to drug resistant tuberculosis, as well as co-infection of TB and HIV. Globally 8 million new cases of TB develop, 80% in the Sub-Saharan Africa. In Sierra Leone about 7,000 cases are detected annually. The objectives of the TB surveillance system are to understand the magnitude and patterns of the disease, to monitor changes in trends in different geographical locations and to provide uninterrupted treatment.

Methods & Materials: The Center for Disease Control and Prevention (CDC) guidelines for evaluating public health surveillance systems was used as reference. Stakeholders were interviewed, observations were made and documentation was done using a checklist. We reviewed surveillance data from 2008–2012 from the national level to the district level. Microsoft Excel was used to analyse the data.

Results: All 14 districts reported from 2008–2012. Timeliness of monthly reporting for districts was 80% below the target of >90%. Sierra Leone recorded 30426 new cases for the period, 62.5% were males. The 15–44 age groups recorded 50% of the new cases. Western urban district recorded 26% of new cases for the period.