

IgG (serological test). Data collection was made with regards to the patient's demography, clinical presentations and laboratory profiles. Pediatric patients were defined as patients younger than 16 year-old.

Results: From 5143 specimens sent for serological test, 302 specimens were dengue-positive with 276 were secondary infections and subsequently, 205 records of patients were retrieved. Two patients were excluded from the study because they did not fulfill WHO criteria for dengue fever. The mean age of secondary dengue-infected patients was 34.2±17.0 year-old. Pediatric patients contributed to 18.7% of total cases. No significant difference between adult and pediatric cases was observed in gender, ethnicity, import or local cases, underlying diseases and contact history. Epistaxis ($p=0.001$) was a common clinical presentation while myalgia ($p<0.001$) was not in pediatric patients compared with adults. Other presenting symptoms were similar between the two groups. Additionally, pulse rate, hepatomegaly, splenomegaly, pleural effusion, ascites and initial laboratory findings were comparable between pediatric and adults patients. In terms of outcome of infection, the two groups also did not differ in the development of dengue hemorrhagic fever, intensive care admission and mortality.

Conclusion: There is very minimal difference in terms of clinical presentation, laboratory findings and outcome of infection between adult and pediatric dengue patients.

PP-232 Clinical significance of hypoalbuminemia in outcome of patients with scrub typhus

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Background: This study was designed to investigate the clinical significance of hypoalbuminemia as a marker of severity and mortality in patients with scrub typhus.

Methods: The patients with scrub typhus were divided into two groups based on the serum albumin levels; Group I (serum albumin <3.0 g/dL) and Group II (serum albumin ≥3.0 g/dL). The outcome of patients with hypoalbuminemia was compared with that of normoalbuminemia.

Results: Of the total 246 patients who underwent the study, 84 patients (34.1%) were categorized as Group I and 162 patients were (65.9%) as Group II. Group I showed significantly higher incidence of confusion (24.6% vs. 5.3%, $p<0.001$), pulmonary edema (15.8% vs. 3.2%, $p=0.002$), pleural effusion (22.8% vs. 11.1%, $p=0.03$), arrhythmia (12.3% vs. 2.6%, $p=0.008$) and non-oliguric acute renal failure (40.4% vs. 11.1%, $p<0.001$) compared to group II. Hypoalbuminemic group had a higher APACHE II score (11.37±5.0 vs. 6.94±4.2, $p<0.001$), longer hospital stay (19.9±42.1 days vs 7.5±13.8 days, $p=0.012$), and higher hospital cost compared to Group II.

Conclusions: This study showed hypoalbuminemia in scrub typhus was closely related to the frequency of various complication, longer hospital stay, consequently the higher medical cost, necessitating more efficient management of patients, including medical resources.

PP-233 Unusual manifestations in dengue outbreak 2009, Delhi, India

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Objectives: Dengue fever (DF) presents with variable clinical features, often unusual which if not recognized can prove fatal. Our study was undertaken to describe the features of DF with special emphasis on unusual manifestations.

Methods: Case records of 76 adult patients of probable DF (seropositive for dengue by rapid IgM-IgG capture Elisa test) who had been hospitalized during a recent outbreak between September and December 2009 in Delhi, India were retrospectively analyzed for clinical and laboratory profile.

Results: In a retrospective analysis of patients hospitalized with probable DF, mean age was found to be 28±9.6 years. While fever was present in all the cases (mean duration 5.47±2.2 days); body ache (84.2%), vomiting (61.8%), abdominal pain (51.3%) and headache (19.7%) were also seen. Hemorrhagic manifestations in the form of gum/nasal bleeding (35.5%), positive Hess test (27.6%), petechiae (15.8%), malena (15.8%) and hematemesis (5.26%) were also observed. Quite a few number of patients presented with unusual manifestations like vomiting (61.8%), abdominal pain (51.3%), nausea (42.1%) and acalculous cholecystitis (19.7%). Though abdominal pain is a known manifestation of DF, acalculous cholecystitis as a cause of abdominal pain is scantily reported. Hepatomegaly and splenomegaly were observed in 34.2% and 7.89% of cases, respectively. Laboratory investigations revealed thrombocytopenia in all the cases. Leucopenia (WBC <4,000/mm²) and hemoconcentration (Hct >20% of expected for age and sex) were found in 38% and 5.26% of the cases, respectively. Renal dysfunction was observed in 13.1% of cases. Another unusual manifestation was the presentation of patients (7.89%) in circulatory failure without the evidence of plasma leakage and not fulfilling all the 4 criterion proposed by WHO for Dengue Hemorrhagic Fever/Dengue Shock Syndrome.

Conclusion: Results of our study indicate that unusual manifestations do occur in DF and a vigilant approach is needed to suspect, diagnose and treat them.

PP-234 Stigma attached to AIDS and how to reduce it in Muslim societies

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Objective: Some Muslim people still think that HIV and AIDS are not issues for the community. Although AIDS has traditionally been surrounded by stigma worldwide, it is clear that this stigma for many reasons is more profound in Islamic countries. This stigma is expressed in a variety of ways, including: ostracism, rejection, discrimination and even violence against persons with AIDS. The aim of this paper is to present details of stigma development in some Muslim societies, and a proposal of how could we release an enlightening campaign aiming to erase or fight stigma associated with AIDS.

Methods: The paper provides an analysis of the historical processes by which stigma has emerged and become associated with AIDS. It also explores the process by which these associations have been loosened, identifying distinctive features of stigma that may guide intervention programs; and evaluating changes in the magnitude and character of stigma over time and in response to interventions and social changes.

Results:

- Stigma towards people with AIDS has a detrimental effect on their ability to obtain services, their recovery, the type of treatment and support they receive, and their acceptance in the community.
- Stigma associated with AIDS is in large part promoted by the media.
- Improving community attitudes by increasing knowledge and understanding about AIDS is essential if people with AIDS are to live in, and contribute to, the community, free from stigma.

Conclusions: Stigma is one of those social maladies that will probably never be totally eliminated in our Muslim

countries, but there are ways in which it can be diminished. Although, research on stigma associated with AIDS has grown dramatically over the past two decades, particularly in the western countries, I hope that this paper may provokes for more studies and researches to be carried out in our Muslim regions.

PP-235 Analysis of clinical features of 70 adult patients with varicella

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Objective: To analyze the characteristics of epidemiology and clinical features of varicella in adult patients.

Methods: The epidemiological and clinical characteristics between 70 cases of varicella in adults patients and 96 cases in children patients were analyzed by a retrospective review method.

Results: There was no significant difference in gender, source region, onset season and contact history with patient of varicella between the two groups on epidemiology ($\chi^2 = 0.398-5.927$, $P = 0.059-0.641$). Patients in adults group were observed not only in family (78.6%, 55/70) but also in dormitory (17.1%, 12/70) or single-living environment (4.3%, 3/70), while all in children group (100%, 96/96) were infected in family ($\chi^2 = 22.675$, $P = 0.000$). Seen from the clinical features, Patients in adults group had more obvious manifestations ($\chi^2 = 4.698-15.635$, $P = 0.000-0.042$) and were more susceptible to visceral lesions and complications than that in children group, such as hepatitis, pneumonia, myocarditis, encephalitis and so on ($\chi^2 = 9.586$, 8.432, $P = 0.001$, 0.001).

Conclusions: Adults patients with varicella have more severe clinical manifestations, and they need positive preventions and treatments due to the susceptibility to visceral lesions and complications.

PP-236 The role of housefly in transmission of *Chlamydia trachomatis* and ocular bacterial pathogens

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Introduction: Conjunctivitis in Egyptian children is a major problem as it has been noted now that bacterial Conjunctivitis is a major cause of total or partial loss of vision. Conjunctivitis usually increases during summer season of the year where maximum fly population. In addition Trachoma is aggravated if there is associated bacterial infection and this leads to more frequent corneal complications.

Chlamydia trachomatis is a major public health problem as it is the world leading cause of blindness.

Aim: To determine the role played by the housefly in the transmission of *Chlamydia trachomatis* and various bacterial pathogens & any seasonal variation.

Material and Methods: The study was carried out in a locality representing the rural community from hamlets of Beheira province (village of Sidnawi El Wosta) Alexandria, Egypt. Sampling consisted of thirty collections of houseflies in sterile disposable containers. The houseflies were washed, the fluids were centrifuged and given symbol (X). Secondly the outer surface of the houseflies were sterilized and washed, this fluid was given symbol (X'). Lastly the houseflies were suspended in 0.5 ml PBS, crushed in sterile mortar and given symbol (X''). Specimens X, X', X'' were cultured for bacteria, for *Chlamydia trachomatis* on McCoy cell line and Chlamydiazyme was done.

Results: 73.33% of X and 90% of X'' contained bacterial while 73.33% of X' were sterile. *Chlamydia trachomatis* was not isolated on tissue culture but it was found in fourteen cases out of the sixty specimens (X, X'') by the Chlamydiazyme.

Conclusion: Flies contain more bacteria in their contents, meaning their excreta are serious. The highest percentage of bacteria were during spring and summer, the breeding season of the flies. The first time to prove the role of flies in transmission of *Chlamydia trachomatis*.

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PP-237 Evaluation of ITS2-rDNA polymerase chain reaction assays for sibling species studies in Vietnam and Southeast Asia

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Background: Sibling species complexes are groups of closely related species that are difficult or impossible to distinguish by morphological traits. The morphological characters of these members make confusion for taxonomists. The PCR method has been shown to be a very useful approach in identification of closely related insect species. Because of the high conserved overall structure of DNA in multicellular organisms and the relative ease of amplifying and sequencing the internal rDNA spacer, the PCR based on these sequences offer a potential solution to the problem of sibling species identification.

Methods: Mosquito specimens used in this study were collected from various localities in the North of Vietnam and other Southeast Asia region. The genomic DNA was extracted using reported method described by Collin (1997). One forward primer running with six reversed primers as a cocktail in a total PCR volume is 25 μ l following the PCR programme: 94°C (5'); then 30 cycles (94°C: 1'; 56°C: 2'; 72°C: 2') and 72°C: 5-7'. The PCR product were determined by electrophoresis on 1.2% agarose gel.

Results: The six primers can be combined in a multiplex PCR mixture amplification of all 6 species. Therefore, each unknown specimen can be identified without performing six separated PCRs. This diagnostic cocktail gives a 185 bp band for *An. minimus* (A); 252 bp for *An. varuna*; 306 bp for *An. aconitus*, 346 bp for *An. jeiporiensis*; 452 bp for *An. pampanai* and 509 bp for *An. minimus* C.

Conclusion: The PCR used in this study represent a rapid and efficient method. The multiplex PCR method not only has the potential to detect individual members of the group found sympatrically, but it is also possible to recognize the same species from the various geographical differences.

PP-238 The construction of a RNAi vector based on mosquito densovirus and its preliminary application in mosquito control

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Objectives: To construct the recombinant *Aedes aegypti* densovirus (AeDNV) vector for RNA interference, and to evaluate its interference efficiency in mosquito C6/36 cells and in *Aedes albopictus* larvae. Furthermore, to test its bioinsecticidal activity against *Ae. albopictus* larvae in laboratory for development of valuable alternative approaches to control vector-borne infectious diseases.

Methods: The RNA polymerase III promoter of *Aedes aegypti* was used to express shRNA, and expression cassette was inserted in an artificial intron. This artificial intron containing shRNA expression cassettes was then inserted in NS1-GFP exon sequence of plasmid pNS1-GFP, named as