

rhage (9.2%), and multiple sites bleeding (11.7%) were noted frequently. The mean platelet count noticed in DF, DHF, and DSS were $[50 \pm 27.4, 46 \pm 31.1, 42 \pm 26.0 \times 10^3/\text{mm}^3]$ respectively. In DF, DHF, and DSS, the mean serum bilirubin was recorded as the mean values for $0.8 \pm 0.27, 0.9 \pm 0.3, 0.9 \pm 0.5 \text{ mg/dl}$ ($p = 0.9$) respectively were $123 \pm 88.5, 120 \pm 93, 112 \pm 37 \text{ IU}$, ALT was $108 \pm 48, 109 \pm 70, 107 \pm 36 \text{ IU}$ ($p = 0.01$), and for serum alkaline phosphatase (SAP) mean values were $138 \pm 53, 124 \pm 52, 153 \pm 26 \text{ IU}$ ($p = 1.7$). All patients recovered, except one who succumbed due to an intracranial hemorrhage.

Conclusions: Fever, rash, abdominal pain, bleeding manifestation, and thrombocytopenia were the predominant features. Significant elevations in transaminases along with normal serum bilirubin and SAP values were observed. Prompt diagnosis and judicious therapy is the key in managing an outbreak in an emergency department.

Keywords: dengue fever; hospital; India; outbreaks; clinical presentations
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(235) Ultrasonography as a Diagnostic Marker in Dengue and Other Viral Febrile Illnesses Presenting with Thrombocytopenia

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Purpose: This study assessed sonographic findings and evaluated its diagnostic efficacy in dengue and other viral febrile illnesses with thrombocytopenia.

Methods: The study was conducted in the Department of Radiology at Yashoda Hospital, a 250 bed healthcare center in the city of Ghaziabad, India between September and October 2006 during the outbreak of dengue in the region. Patients with short febrile illness with thrombocytopenia undergoing sonography were included. Those with known hematological disorders or systemic illnesses causing thrombocytopenia were excluded.

Results: Of the 169 patients, 56 (33.1%) were IgM positive, 51 (30.2%) for IgG, and 34 (20.1%) were positive for both antibodies. The mean platelet count was $53,000/\text{mm}^3$. Gallbladder edema was seen in 122 (72.2%), hepatomegaly in 78 (46.2%), ascites in 126 (74.6%), splenomegaly in 66 (39.1%), right pleural effusions in 48 (28.4%), pericholecystic fluid in 63 (37.3%), pericardial fluid in four (2.3%) and perinephric fluid collection in 24 (14.2%) patients. Mean platelet counts were significantly lower in sonographically positive than in negative patients ($51,510$ and $66,280/\text{mm}^3$, respectively; $p = 0.000$). A poor correlation was observed between sonographic evidence of disease and serological markers of dengue and the platelet counts (Pearson's correlation coefficient 0.365, and 0.064 respectively). Sonographic findings appeared as early as three days of pyrexia and complete resolution of the findings was the rule.

Conclusions: This study reiterates the fact that ultrasound is an important diagnostic marker for dengue and other viral febrile illnesses with thrombocytopenia. Since it is inexpensive and noninvasive, it may reduce the diagnostic utility of serological tests.

Keywords: dengue; diagnostic marker; thrombocytopenia; ultrasonography, viral febrile illnesses

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(236) Laboratory Profile of Patients Presenting with Dengue Fever in an Emergency Department at an Urban Tertiary Care Hospital during the Outbreak in 2006

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Objective: The aim of this study was to assess the clinical profile of patients presenting to the emergency ward of an urban tertiary care hospital with dengue fever during the 2006 outbreak.

Methods: The study was conducted in the Emergency Department at the All India Institute of Medical Sciences in New Delhi between August and October 2006. Information from all patients presenting with a short febrile illness and found to have thrombocytopenia were included in the study.

Results: Of the 3,707 cases assessed, 2,834 (76.4%) were males; there was a similar distribution of other parameters between both sexes. The mean (\pm SD) age was 25.5 ± 12.83 years; the mean hemoglobin concentration was $12.5 \pm 3 \text{ g/dL}$, the mean hematocrit was 36.9 ± 8.3 the mean platelet count was $50,875 \pm 22,090/\text{cmm}$; and the mean total leukocyte count was $6,392 \pm 3,778/\text{cmm}$. During the outbreak, 15 (1%) patients died due to dengue hemorrhagic fever and shock. The mean age of the patients who succumbed to the illness was 33.6 ± 16.13 years compared to 25.48 ± 12.8 years in those who recovered; ($p = 0.072$). The platelet counts of the patients who died were significantly lower ($39,571 \pm 18,923/\text{cmm}$) than those who recovered ($50,918 \pm 22,093/\text{cmm}$) ($p = 0.043$).

Conclusions: Young males were noted to be more susceptible to dengue fever during the recent outbreak of this disease in parts of northern India, but the illness was more severe among older individuals. Lower platelet counts may pre-empt mortality.

Keywords: dengue fever; emergency department; India; mortality; thrombocytopenia

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(237) Possible Disaster from Industrial Emissions and How to Control Them

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Objectives: To establish risk assessment for organic solvents in a printing industry, and to develop control measures for a possible environmental pollution disaster.

Methods: The study was conducted in a printing industry with about 400 employees in a highly populated community. Monitoring of ambient air for various organic solvents was conducted. The industry as the target area uses solvents such as ethyl acetate (EAC), methyl ethyl ketone (MEK), ethanol, and isopropyl alcohol (IPA) for printing and laminating plastics.

Results: Workers were exposed to high concentrations of solvents that may cause damage, such as cancer or repro-

ductive health problems. Therefore, there is a need to develop a control device to clean the ambient air, both indoors and outdoors. To do this, an experiment was conducted using adsorbents, activated alumina, and activated carbon. The results were as follows: after including the activated carbon, the effectiveness of cleaning the polluted air with organic solvents was 91.9% for EAC, 99.6% for IPA, and 99.98% for MEK. For the activated alumina, it was 93.2% effective for MEK, 92% for IPA, and 93.2% for EAC. **Conclusion:** The results showed that both adsorbent tubes were effective in reducing concentrations of solvent fumes. Environmental damage from solvents in factories can be reduced by using adsorbents in the ducting system as an air control device.

Keywords: adsorbents; ducting systems; factories; industrial emissions; organic solvents

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Oral Presentations—Theme 14: Psychosocial Aspects

Session 1: Prevention

Chairs: Gloria Leon; Carol Amaratunga

Children at Risk

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Helping children who are victims of violence is a challenge for health providers. Children who have had violent experiences are prone to develop intense or immediate personality disorders. It is possible for those who use the appropriate techniques for handling such situations to provide these children with effective help.

The aim of psychosocial support is to promote mental health and human rights protection with strategies that contain and increase the existing psychosocial protection factors.

Achieving an understanding of traumatic situations depends not only on accurate and on-the-spot scientific work, but also on the child's experience, resilience, and capacity for tolerance to frustration, complementary series, and the current environment.

When children are encouraged to participate in puppet plays, they may be able to deal with their own tragedy and overcome their own suffering. Additionally, cultural understanding of the situation and the child's feeling are needed in order to provide assistance. This may be achieved through the use of local songs and children's stories.

Both the child and patient receiving bio-psychosocial help and the healthcare provider should both be part of the endeavour to overcome the impact of violence.

Keywords: children; mental health; personality disorders; psychosocial stress; violence

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The Israel Trauma Coalition (ITC): Turning Distress and Despair into Hope—Cooperation and Preparedness in the Face of Trauma

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The Israel Trauma Coalition (ITC) was founded in 2002, in partnership with the United Jewish Federation of New York. The ITC is a collaborative network, including >50 trauma service providers/organizations, key government ministries, and funding bodies. The ITC and its partners are committed to the development of a continuum of trauma services, and provide direct services, training and supervision of mental health professionals/volunteers in the health, education, and welfare system, and development of trauma policy. Collective knowledge, training, and expertise have been used to develop both protocols and evidence-based data. Through collaborative efforts with specialists in both Israel and abroad, the ITC has established an integrated community preparedness model. This model was used to enhance community recovery capabilities when responding to disasters. The model was used when the ITC worked with the United Nations Children's Fund (UNICEF) and local service providers in Beslan, Chechnia, Sri Lanka, Turkey and the US. The ITC has been working in Sderot since 2004, providing community resilience programs that ensure levels of knowledge, training, and networks are in place. During the disengagement from the Gaza Strip, the ITC developed partnerships between the evacuees, government ministries, and non-government organizations (NGOs). In the recent Lebanon War, 1.5 million residents north of Israel suffered significant trauma. However, four years of coalition building, cooperation, and preparedness ensured that the ITC and its partner agencies were ready to provide cutting-edge trauma care.

Keywords: community preparedness model; Israel; Israel Trauma Coalition (ITC); training; trauma care

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Reporting as a Source of Trauma after the Armavia Jet Crash in May 2006

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The aim of this presentation is to demonstrate the influence of trauma on the psychological well-being of the general population after mass media reporting following the Armavian jet crash in Sochi in May 2006.

To assist families and the public in the grieving process, the following steps were undertaken: creation of a "Hot Line" to provide psychological services for the families of the victims as well as the general population; public education; professional education; and the publication of materials dealing with grief issues.

The following manifestations of the different stages of post-traumatic stress reactions were observed: a 40th Day memorial mass was held; family members came to accept