## (A3) Locally Brewed Alcohol—A Recipe for Disaster! An Alcohol Explosion in Benin City, Nigeria

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An alcohol explosion involving eight persons, killing three of them, occurred in Benin City, Nigeria. Five of the victims were <12 years of age, and they were just "innocent bystanders". The explosion resulted from the adulteration and decanting of locally brewed alcohol to be sold the next day in a village market. A power outage promted one of the children to use a lantern to assist his/her mother, when suddenly the unexpected occurred! A neonate was deadon-arrival to the hospital (>95% total body surface area (TBSA) burned). Another child died after failed attempts at intubation and lack of bed space in the intensive care unit. A third died eight days after the incident after a bilateral below knee amputation following the development of gangrenous feet due to compartment syndrome. The two adults ages 25 and 36 years respectively, sustained major burns of 35% and 32% TBSA respectively, and both were discharged after several weeks, but defaulted surgical outpatient follow-up. The remaining three patients had <10% TBSA burned and were treated on an out-patient basis. The need for adequate preparedness against disasters, emergency medical services, and prompt expert intervention and care is emphasized.

Keywords: alcohol; alcohol explosion; Benin City; burns; disaster; explosion; Nigeria; preparedness Prebosp Disast Med 2009;24(2):s2

## (A4) Case Study: Fiberoptic Bronchoscopic Sealing of a Bronchopleural Fistula

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We present the case of a 40 year old male with a history of gun shot injury to the back with traumatic paraplegia. After four days of non-operative management in the ward with an intercostal drainage, the patient developed respiratory distress. CT scan chest revealed esophageal perforation with esophagopleural fistula and pyopneumothorax. He underwent esophagectomy and left upper lobe lung repair. The patient was moved to the ICU for elective postoperative ventilation. On the third post operative day (POD), an air leak was detected in the left thoracostomy tube (TT). Bronchoscopy revealed broncho-pleural fistula in the medial wall of the left third generation bronchus. The presence of broncho-pleural fistula was confirmed by CT chest. The survival in a case of spine injury with esophageal perforation with subsequent mediastinitis and broncho-pleural fistula is low. The broncho-pleural fistula was sealed under bronchoscopic guidance using tissue glue N-butyl cyanoacrylate under general anesthesia. The closure of the fistula was confirmed by the absence of air leak in the TT. Post procedure, the patient received pressure support ventilation. On POD11, the patient was tracheostomised. He underwent one more application of tissue glue on the POD21. His left TT was removed on the POD29. He electively underwent dorsal spine fixation one week later under general anesthesia and tracheostomy was decannulated four weeks later.

Keywords: broncho-pleural fistula; bronchoscopy; esophegeal perferation; pneumothorax; thoracostomy tube; tissue glue *Prebosp Disast Med* 2009;24(2):s2

## (A5) Unilateral Pulmonary Edema in a 55-Year-Old Man

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Introduction: Unilateral pulmonary edema is an uncommon, if not rare, entity that can be mistaken for other causes of unilateral alveolar and interstitial infiltrates, especially pneumonia. Methods: A 55-year-old man presented in the emergency department with progressive dyspnea and orthopnea. His condition deteriorated in a few minutes and he was intubated, mechanically ventilated and transferred to the intensive care unit (ICU) for further evaluation and management. The initial clinical diagnosis was pulmonary edema.

**Results:** Chest x-ray was taken after the initiation of aggressive treatment for pulmonary edema and revealed density in the right lung. Twelve hours later, the patient's condition improved with a reduction of fractional concentration of inspired oxygen and his artrial oxygen saturation stabilized between 96–97%. A repeat chest x-ray was almost normal. A transthoracic echocardiogram performed two days later showed a dilated and hypertrophied left ventricle with a reduced ejection fraction, but a CT scan angiography did not show any abnormalities. The patient was discharged from the ICU 10 days later. The final diagnosis was unilateral pulmonary edema.

**Conclusion:** Unilateral pulmonary edema represents a rare entity, that tends to be initially diagnosed as another disease such as pneumonia, and could be managed as another clinical entity. The clinical manifestation is the cornerstone of these situations.

Keywords: dyspnea; emergency health; orthopnea; unilateral pulmonary edema Prebosp Disast Med 2009;24(2):s2

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