

(N51) Shank Injuries in Prison: More than Skin Deep

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Introduction: While emergency physicians are trained at length in trauma associated with traditional weapons, such as knives, guns, and blunt objects, they may be largely unfamiliar with the non-traditional weapons employed by prisoners, known as shanks. Otherwise innocuous items turned into weapons have the potential to cause life-threatening injuries which may be underestimated by care providers who are unfamiliar with their design.

Methods: A literature search was conducted using Medline Search terms included "prison", "shanks", "stab wounds", "trauma", "violence", and "wounds and injuries." References were hand-searched, and when appropriate, secondary references were obtained.

Results: Four out of five weapons confiscated in prison are meant for stabbing or piercing. A greater percentage of prison stab wounds require hospitalization than stab wounds in the general public, and 25% of victims of shank injuries require life-saving interventions. Participants will learn about theories on the etiology of prison violence and the unique culture in which weapons are obtained, designed, concealed and employed. The speaker will highlight important aspects in evaluation and care of shank injuries, utilizing an interesting case study to emphasize key points.

Conclusions: With rising prison populations, high rates of prison violence and limited on-site prison medical care, emergency department physicians must familiarize themselves with these dangerous homemade weapons in order to more accurately predict injury patterns and provide potentially life-saving interventions.

Keywords: emergency physicians; injuries; prison; shanks; weapons
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(N52) Impact of Sexual Harassment of Female Nurses at the Workplace

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Introduction: Harassment among healthcare workers is not unusual. Both men and women working in the health sector experience harassment to certain extent, although women appear to be more vulnerable. According to the literature, 76% of the nurses in US, 66% in the UK, and 60% in Turkey have encountered sexual harassment at least once at their workplace.

Purpose: The purpose of this review is to identify various impacts of sexual harassment on the female nurses from 1998 to 2008 publications.

Methods: A systematic review of the literature from 1998 to 2008 was performed in order to identify the gender

implications on work place violence. The review included 12 literature reviews and research articles.

Results: Most of the female nurses, being the victim of sexual harassment, verbalized many psychological consequences, i.e., feelings of discomfort, embarrassment, humiliation, shame/disgust, depression, anxiety, anger, loss of self esteem, sense of helplessness, low confidence, irritability, nervousness, and disillusionment. In addition, sexual harassment also affects nurses' professional behaviors, i.e., decrease work motivation, decrease work efficiency, increase rates for transfer, resigning, and withdrawal from the workplace. Nonetheless, sexual harassment also ruins nurses' physical well-being by decreasing sexual intimation, skill level, increasing rates of error, nausea, headaches, and tiredness.

Recommendations: Awareness sessions regarding sexual harassment or violence should be conducted frequently. Ongoing training regarding the handling and reporting of such incidents should be performed. Policy-makers also should maintain a zero tolerance policy for the institutions. Prompt and strict actions should be taken against the employee who is abusing others. In this way, we will be able to create a safe and healthy workplace environment.

Keywords: job performances; nurses; sexual harassment; workplace
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(N53) Preliminary Study on Prehospital Use of Airway Scope®

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Introduction: The Airway Scope® (AWS; Pentax, Tokyo, Japan), which was developed to facilitate the management of difficult airways, is a new rigid laryngoscope for tracheal intubation. Use of the AWS as compared with the use Macintosh laryngoscope (MAL) in simulated easy and difficult laryngoscopy.

Methods: This study was conducted in six institutions. The participants were grouped into four categories: (1) skilled anesthesiologists or emergency physicians (26); (2) trainee doctors (25); (3) tracheal intubation-certified paramedics (25); and (4) non-certified paramedics (25). None of the participants had used the AWS, but studied the DVD that explained how to use it, the used it to a first success. Using two devices, they intubated SimMan® or AirMan® (Laerdal, Stavanger, Norway) mannikin placed on the floor in a supine position as is typical in the prehospital settings. The scenarios used were: (1) normal airway; (2) neck rigid-

ity; (3) tongue edema; and (4) during chest compression. Intubation was performed consecutively in all scenarios with the two devices. The time required for all of the procedures, the intubation success rate, and the incidence of adverse events were recorded.

Results: The time to tube passing through the vocal cord was shorter with the AWS than the MAL in almost all of the scenarios. The success rate in tongue edema setting was higher with the AWS than the MAL. The adverse events occurred more often with the use of the MAL than with the AWS.

Conclusions: The AWS is easy to use and safe, and should be considered as a useful device in the prehospital settings.

Keywords: Airway Scope®; difficult airway; emergency health; intubation; prehospital

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(N54) Awareness of Overseas Disaster Relief Activities among Undergraduate Emergency Medical Technician Candidates

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Students in the paramedic course were giving questionnaires regarding their motivation and necessary skills for international disaster relief. Additionally, participating in the training course provided by non-governmental organizations confirms necessary skills in international disaster relief.

All 77 students in the paramedic course answered the questionnaires. A total of 92% students were interested in international disasters. The skills they thought were most necessary for such an activity were surgical knowledge (22%) and communication (18%). A total of 46% students intended to participate in the activity in the future, while 36% students answered that they would participate "with conditions". They felt most anxious about communication (38%) and sanitary conditions (27%). They thought the most important roles for paramedics were first-aid treatment (41%) and triage (15%).

In general, students have relatively high motivation and interest for international disaster relief, but they still do not have enough skills and knowledge for it. It is important for students to participate in this type of training course to gain knowledge and skills for international disaster relief and emergency medical service.

Keywords: education; emergency medical technician; disaster relief; international; training; undergraduate students

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(N55) Incidence of Chest Tube Malposition in Emergency Patients

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Introduction: Malposition of chest tubes (CT) is considered a rare complication in emergency patients. In Germany, physicians in the field perform the procedure. However, its incidence remains uncertain. The aim of this study was to assess the true incidence of CT malposition in

emergency patients. In addition, a possible coincidence of endotracheal tube (ETT) malposition and CT malposition was investigated.

Methods: A five-year retrospective study was conducted using records of 1,081 patients admitted to the emergency room at a University Hospital. Within 30 minutes of admission, a chest radiograph or whole body computed tomography was performed routinely, and used to identify the CT and ETT position. The chi-square test was used for statistical analysis.

Results: Eighty-eight CTs were percutaneously inserted in 67 of 1,081 patients, 49 (57%) CTs were placed in Monaldi (MCL), and 37 (43%) in Buelau (MAL) position. A total of 19 (22.1%) malpositions were identified, 13 in Monaldi and six in Buelau position. No statistical difference of malposition could be found between the two positions. Detailed data on endotracheal intubation (ETI) was available in 435 patients, 346 (79.5%) with correct ETI and 89 (20.5%) with incorrect ETI. With the CT in place, 56 (84.8%) patients were intubated correctly and 10 (15.2%) incorrectly. Without CT, 290 (78.1%) were intubated correctly and 79 (21.4%) incorrectly. No statistical difference of correct or incorrect ETI could be found, depending on CT malposition.

Conclusions: Malposition of percutaneously inserted chest tubes occurred in 22.1% of cases and is independent from the position of insertion or endotracheal intubation in emergency patients.

Keywords: chest tube; endotracheal tube; intubation

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(N56) Functional Decline of Elderly Patients with Acute Illnesses Requiring Emergency Admission

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Background: Advancing age and co-morbid illnesses result in a loss of ability to perform activities for daily living (ADL). These factors are important determinants of loss of independence and autonomy among the elderly. Acute illness reduces the functional status of previously healthy, community dwelling, elderly persons. However, the decline of function following an acute illness has not been quantified. The aim of the current study was to determine the change in ADL due to acute destabilization in the elderly one month following discharge.

Methods: Elderly subjects transported by emergency medical services and admitted to general medical wards of the All India Institute of Medical Sciences in New Delhi between August and December 2008 were included. The Barthel index of ADL was assessed in a longitudinal design at the time of admission and one-month post discharge. The values of the indices were compared using a paired samples *t*-test.

Results: Of the 68 subjects who were treated by emergency geriatric services at the hospital, 11 were excluded due to incomplete records, inability to follow-up, incorrect telephone numbers, or they were dead-on-arrival. Advancing age did not show significant correlation with pre-morbid