thrombosis. This is despite a weight-adjusted application of low molecular weight heparin during a plane descent toward Santiago, Chile on 02 October 2007. Due to a permanent open foramen ovale, a thromboembolic clot closed the right internal carotid artery. The resuscitation began immediately at the gate and the patient was transferred to Clinica Alemana, where a cerebral computed tomography (CT) was performed within an hour. The decision was made for immediate lysis (loval and systemic) with rTPA. A vena cava umbrella was inserted and the lysis began. During the lysis, the patient developed brain pressure signals. Another CT was performed and the neurosurgical team was informed. Despite the lysis treatment, the neurosurgical team decided upon a decompression craniectomy. During the surgery, the patient received transfusions. Otherwise, the procedure was successful. After 16 days on the Neuro-ICS/IMC, the patient returned to Germany’s Intensive Care Unit of Lufthansa.

In May, the patient received a recraniectomy with implantation of a palacos bone. In October, the patient received a closure of the patent foramen ovale with a 25 mm Starflex-Occluder. An incomplete left-sided hemiplegia remains at that time, but the patient recovered within a year. The patient began working full-time as an internal medicine doctor in a cardiology department exactly one year after the event. The etiology of the clot had been due to increased Lipoprotein (a).

Keywords: airplane passenger; Chile; emergency health; lysis; treatment

(N42) In-Flight Vital Signs Blackbox for Trauma Care
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Introduction: A prompt and adequate medical response following an injury is the predominant goal in trauma care. Advances in telemedicine technology have made it easier to record patient vital signs (VS), events, and life-saving interventions (LSI) in real-time in the hostile terrain of emergency medical services (EMS) practice. The results of vital signs blackbox (VSB) used for aero-medical transfer to a major trauma center for collecting real-time vital-signs trends, waveforms, and events are reported in this presentation.

Methods: The VSB uses a personal digital assistant (HP-IPaq) with an embedded box (Inovamar Inc.) to capture VS from a field patient VS monitor (Propaq 206). Real-time electrocardiogram (ECG), Heart Rate, SPO2, End-Tidal CO2 trends and waveforms are recorded continuously on a memory card (240 hours, 2GB). Nine on-board LSI events were configured for rapid in-flight documentation.

Results: Six Medevac helicopters were equipped with the VSB systems, which have consistently captured waveforms (182 Hz) and numerical data (1 Hz) for 163 patients in a six-month period. The average duration of VS data was 25.9 minutes (±5 minutes). Patients were monitored constantly during the air transfer. Specific VS monitored during the transfer were ECG/ECG-electrocardiogram-heart rate/RR (95%), SpO2/SPO2-PR (87%), systolic blood pressure/mean blood pressure/dias-

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tolic blood pressure (76%), CO2/ETCO2 (5%) for all cases. Prehospital care standards were assessed and captured waveforms and trends are being analyzed in association with patient outcomes.

**Conclusions:** A fully operational VSB system has been effective in collecting prehospital trauma VS.

Further mapping the pre-hospital physiologic trends with outcomes show promise in improving patient triage and standards of trauma care.

**Keywords:** air transport; emergency medical services; trauma; vital signs

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(N44) Epidemiologic Profile of Victims of Firearms and Cutting Weapons in the Emergency Room in the Outskirts of Brasilia

**Introduction:** Violence management is one of the most important challenges in the Latin America health system. This study describes the epidemiologic profile of victims of trauma by firearm and cutting weapons with the intention of improving the hospital routines and allocation of resources, thereby increasing the efficiency of healthcare services.

**Methods:** Age, gender, type of injury, day of the week, and time of the day were considered in this study. The data were collected in 2005 from an emergency department at a hospital in Gama, located in the outskirts of Brasilia, the Brazilian capital.

**Results:** The first three months of the year had the highest average number of patients presenting to the emergency room, with 72 cases documented. Approximately 50% of the patients presented during the weekend and almost 66% of all of the incidents occurred during the nocturnal period. Adult males between 18–60 years of age had a higher prevalence (80%). Injuries caused by firearms were responsible for the majority of the presentations (66%).

**Conclusions:** It was possible to determine the epidemiologic profile of the victims of injuries from firearms and cutting weapons. This information will help to provide better assistance to the provision of care in emergency rooms.

**Keywords:** Brazil; cutting weapons; emergency medical services; epidemiologic profile; firearm; violence; trauma

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(N45) Fastrach Laryngeal Mask Airway Management in Out-of-Hospital Critical Care Patients

**Introduction:** The epidemiologic profile of Fastrach Laryngeal Mask (FLM) intubations in out-of-hospital critical care patients attended by the Emergency System (ES) staff.

**Methods:** An observational, descriptive, and retrospective study of patients attended by the ES staff that required a FLM for airway management January 2002 to December 2007. Data were collected analyzing computerized clinical histories, including: (1) age; (2) gender; (3) medical or traumatic etiology; (4) first cardiac rhythm; (5) survival until hospital admission; and (6) the percentage of usage of this technique in the total amount of patients that required airway management.

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