

departments (n = 17). Most often, a nurse undertook daily (71%) or weekly (14%) systematic verification of endotracheal intubation equipments in 87 emergency departments (94.6%). The necessary drugs for the performance of endotracheal intubation and that were present in emergency rooms were: (1) midazolam, 100%; (2) diazepam, 98.9%; (3) thiopental, 83.3%; (4) propofol, 83.3%; (5) fentanyl, 81.1%; (6) succinylcholine, 77.8%; (7) etomidate, 77.8%; (8) ketamine, 57.8%; vecuronium, 55.6%; (9) rocuronium, 31.1%; and (10) other non-depolarizing agents, 26.7%. In case of difficult airway management, the emergency practitioners found these other supplies available in emergency rooms: (1) kit for cricothyroidotomy, 69.7%; (2) catheter for percutaneous transtracheal ventilation; (3) kit for retrograde intubation, 21.3%; (4) intubating laryngeal mask airway, 21.3%; (5) combitube, 14.6%; (6) fibroscope, 14.6%; and (7) fast-track, 12.4%.

Conclusion: Anaesthetic agents are present in most of emergency departments. These emergency departments are less equipped with equipment and supplies for difficult airway techniques. The presence of airway management protocols or guidelines are rare. However, in France, it is necessary to improve the endotracheal intubation training of emergency physicians. In this training, the practitioners also must learn rapid sequence intubation (RSI), which is a standard emergency department procedure, and new airway devices such as the intubating laryngeal mask airway and a Bullard laryngoscope bade.

Key words: airway management; anesthetic agents; cricothyrotomy; drugs; endotracheal intubation; equipment; emergency departments; rapid sequence intubation; supplies; ventilation

Prehosp Disast Med 2001;16(2):s70.

Consumption and Cost of Prescribed Medicines in Eight Emergency Departments in France and in Switzerland

F. Staikowsky,¹ A. Roumy,¹ I. Billottet,¹ F. Carpentier,² D. Baron,³ G. Bleichner,⁴ P. Kiege,⁵ P.F. Unger,⁶ and the Société Francophone de Médecine d'Urgence Board

Emergency Departments: 1. Caen; 2. Grenoble; 3. Argenteuil; 4. Aix en Provence; 5. Genève; 6. Marseille, FRANCE

Introduction: Monitoring of consumption and costs of prescribed medicines in emergency department (budgetary monitoring) are often unknown by the emergency teams. This work analyzes these data in different emergency departments.

Methods: For each emergency department, the annual (1999) medicine expenses have been classified according to two modes: (1) quantitative by decreasing order the 20 first per os administered products on the one hand, and the first 20 intravenously or intramuscularly administered products; (2) by cost by decreasing the orders for the 20 most expensive products. For the global quantitative analysis, the products have been classified according to their frequency of quotation in each 20 first administered products list.

Results: Eight emergency departments were enrolled in the

study (seven in France and one in Switzerland). Characteristics of these emergency departments were: five teaching departments, two medical and six trauma-medical emergency centers, with a short-term hospitalisation unit in five emergency departments. For this study, the average number of annual admissions was 43,150 ±19,360 / year (400,000 annual admissions entirely). Among the 20 first per os administered products, in all emergency departments, paracetamol (acetaminophen) was the most frequently delivered product (more than 190,000 units distributed /year), and associated paracetamol and propoxyphene constituted 37% of the shares. The other 20 first per os administered products were, in descending order: phloroglucinol, aspirin, alprazolam, amoxicillin, amoxicillin-clavulanate, prednisone, omeprazole, and activated charcoal. Among the 20 first intravenously or intramuscularly administered products, the proparacetamol was the most prescribed (36,000 units of 1 and 2 g by year); the other most current parenteral injectable molecules in descending order were: lidocaïne, amoxicillin-clavulanate, phloroglucinol, ketoprofene, methylprednisolone, morphine, furosemide, omeprazole, metoclopramide, epinephrine, trinitrine, unfractionated heparin, and low molecular weight heparin. Among the most expensive molecules, some did not belong to quantitatively prescribed products: antiretroviral drugs, sandostatine, some antidotes (flumazenil, N-acetyl cysteine), dobutamine, rt-PA; others already had been noted and included: amoxicillin-clavulanate, proparacetamol, omeprazole, activated charcoal, phloroglucinol, lidocaïne, and ketoprofene.

Conclusion: This multicenter evaluation is an interesting economic approach among French-speaking emergency departments. In each emergency department, this approach provides the data to create a budget monitoring of the consumption and costs of prescribed medications.

Key words: consumption; costs; drugs; emergency departments, France

Prehosp Disast Med 2001;16(2):s70.

Abuse of Poppers: Four Cases of Methemoglobinemia Observed in an Emergency Room

F. Staikowsky,¹ C. Zanker,² F. Pevrieri,² C. Potier,¹ A. Lepelletier,¹ I. Dandine¹

Emergency Departments in 1. Caen; and 2. Paris, FRANCE

Introduction: Methemoglobinemia is an exceptional complaint in emergency rooms. Its origin is especially toxic. Butyl and propyl nitrites "poppers" are being used increasingly as aphrodisiacs. We describe four cases of methemoglobinemia following ingestion or inhalation of nitrite poppers.

Case 1: A 36 year-old-man was admitted for cyanosis, confusion, agitation, and loss of consciousness following the ingestion of poppers. The blood pressure was 130/79 mmHg, the pulse rate was 103 beats/min., and pulse oximeter (SpO₂) read 90% (oxygen administration at 6 l/min). The patient presented with coma, agitation, dark