

Incidence, Profile, and Evolution of Suicide Attempts Seen in Emergency Wards in France: Results of a Multicenter Study

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Introduction: The suicide prevention is a public health priority in France; there are approximately 12,000 deaths by suicide (prevalence 24 cases for 100,000 inhabitants) and 150,000 suicide attempts per year; these data probably are an underestimate. The purpose of this work is to identify the incidence and profile of patients following a suicide attempt examined in Emergency Departments (ED), and to develop a different epidemiological aspect.

Methods: This was a one-week prospective study conducted in ED of various sizes, situated all over the French territory. This inquiry has been realised with the help of a questionnaire filled in at the patient's bedside. Data concerned the patient, the suicidal gesture, and the patient's evolution.

Results: Data for a total of 640 patients following suicide attempts were collected from 57 EDs; the mean suicide attempts rate per ED was 11.2 ± 9 (range 0–51) and the number of patients in one week was ≥ 7 in 75.4% of the EDs. Except for ≤ 15 -year old patients, the number of females predominated (64.5%). The mean age was 34.8 ± 13.6 years (range 12–95 years); only 21 (3.3%) of the patients were ≥ 65 years old, and the majority (77%) were 15 to 44 years old. The social status indicated that 35.5% of the patients were unmarried, 36.7% were married and almost quarter of them were separated from their spouse, 8.3% were divorced, 3.1% were widowers, and 13.6% were in cohabitation. Nearly 45.3% of the women were unemployed vs. 41.4% of the men. Except for those patients ≥ 65 -years old, the age brackets, which were mostly concerned by professional inactivity, were 35–44 years for women, 25–34 years for men, and 55–64 years in both. Employees, students or schoolkids, and civil servants gathered almost 78% of all occupations. A psychiatric past history including suicide attempt, psychiatric hospitalization, or consultation was found in 68.8% of women and 62.1% of men. Drug addiction, HIV seropositivity, or chronic alcoholism concerned respectively 6.7, 1.1, and 12.8% of patients, and were significantly more frequent among men. A medical physician or a psychiatrist had been consulted by 40.5% of patients during the month preceding the suicidal act. The mean time interval between the suicide attempt and ED consultation was 332 ± 550 min (range: 15 min–4 days). The suicidal procedure most often (73.3%) was unique (one procedure); when two different procedures were used in 24.7%, it was mostly in association with alcohol ingestion. Voluntary drug intoxications by ingestion were employed 580 times (90.6%), associated 143 times to alcohol ingestion and/or 27 times to others suicidal gestures. Alcohol ingestion was sometimes the only suicidal gesture (1.4%). The other suicidal procedures were self-mutilation by phlebotomy (5%) or with knife (0.8%), illicit drugs abuse (1.9%), hanging (1.7%), household products or glass ingestion (1.1%), gas inhalation (0.6%), drowning (0.6%), road accident (0.5%), firearm (0.3%), jump

(0.16%), electrocution (0.16%), or immolation (0.16%). The majority of patients had been hospitalized either in short duration hospitalization units (28.3%) and medical wards (19.8%), or in intensive care units (14.7%), in psychiatric (11.2%) or surgical (3.3%) wards. Three patients died in the ED (0.005%). Of the total number of patients, 3.3 and 1.1% left the hospital either against medical and/or psychiatric advice or left without notice in respectively; 100 patients were not hospitalized after psychiatric and medical decision (15.7%).

Conclusion: This study emphasizes the important role of ED and short duration hospitalization units in the management of suicide attempts.

Key words: attempts; demography; disposition; emergency departments; epidemiology; gestures; hospitalization; outcome; suicide

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Two Cases of D-Propoxyphene Acute Poisoning with Atrial and Ventricular Conduction Abnormalities

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Propoxyphene is a compound chemically similar to methadone. Acute overdosage produces a pattern of clinical signs very similar to those of morphine poisoning with coma, respiratory failure, myosis, convulsions, and cardiogenic shock. Prolongation of atrio-ventricular conduction has been described less frequently, noted in only 20% of cases.

Case 1: A 29 year-old-man was admitted into an emergency department for ingestion of flunitrazepam, bromazepam, paracetamol and 1.3 g of propoxyphene. He took daily propoxyphene to substitute for heroin. He was restless. Suddenly, he presented with generalised tonic-clonic seizures. After resolution of the seizures, we noted: unconsciousness, low blood pressure (70/40 mmHg), pulse rate = 55 beats/min., cyanosis, bradypnea (6 breaths/min.), myosis, acidosis (pH = 7.1, $\text{HCO}_3^- = 20 \text{ mmol.l}^{-1}$, $\text{PaCO}_2 = 9.8 \text{ kPa}$, $\text{PaO}_2 = 6 \text{ kPa}$), and lactate concentration = 12 mmol.l^{-1} . After injection of diazepam and valproate, the seizures stopped; after intubation, the PaO_2 , arterial blood pressure and cardiac pulse rate normalised. A gastric lavage evacuated pills. The toxic screening for antidepressant and cocaine was negative, and for benzodiazepines and paracetamol rates were weak. Electrocardiogram before intubation showed a junctional rhythm at 55 /min, QRS complexes widened to 0.16 mm with a right bundle branch block. 15 min after the PaO_2 and blood pressure correction, the electrocardiogram showed a sinus rhythm at a rate of 90 /min, and persistence of a widened QRS complex and right bundle branch block. Electrocardiogram became normal by 4 hours.

Case 2: A 21 year-old-woman drug addict was admitted to the emergency department for ingestion of flunitrazepam. We noted regular respiration to 12 breaths/min., arterial blood pressure of 120/90 mmHg, cardiac pulse rate of 84, normal level of consciousness and myosis; 30 minutes later

she became sleepy and then 20 minutes later she became unconscious with bradypnea to 6 breaths/min. An awakening of short duration was obtained after intravenous flumazenil. Toxic screening showed the presence of benzodiazepine; 8 hours later she was sleepy, but responded to stimuli without bradypnea, but with myosis. Administration of intravenous naloxone resulted in complete awakening and disappearance of the myosis. The patient confessed the ingestion of propoxyphene and sniffing of heroin. In the urine, the concentration of opiates and propoxyphene were high. The initial electrocardiogram showed PR interval to 0.24 mm persisting after naloxone; 16 and 20 hours later, it was respectively to 0.18 mm, then 0.16 mm. The patient left the hospital without anomalies.

Conclusion: Studies in laboratory animals suggest that the propoxyphene can cause cardiac failure and prolong atrioventricular conduction; propoxyphene is a strong negative inotropic and chronotropic agent that also dilates the systemic and coronary vascular beds. A decrease in the rate of rise and a shortening of the duration of the Purkinje fiber potential are observed experimentally. These cardiac side-effects are due to a local anaesthetic effect. The effectiveness of naloxone in propoxyphene poisoning is well-established and it has been shown to reverse all the opiate features. However, experimentally and most often in man, naloxone failed to reverse propoxyphene cardiotoxicity. Adrenergic and dopaminergic agonists usually are used against cardiac failure. Propoxyphene intoxication must be known because of the associated high mortality rate.

Key words: clinical signs; conduction defects; intoxication; poisoning; propoxyphene; treatment
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The Rallye Rejiz Project

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The Rallye Rejiz (RR) Project is a professional exercise and competition for EMS teams. Following the inaugural Rally Rejiz in 1997, the concept of testing emergency medical, driving, and management skills in a playful, yet competitive, but foremost a real-life setting, has met with increasing enthusiasm, both nationally as well as internationally. Building on existing experience, this project aims to bring international emergency teams together in a non-threatening environment to compare performances and exchange information about techniques and approaches, whilst building friendships and opportunities for cross-border cooperation.

Key words: competition; driving; emergency medical services; information, exchange of; management; performance; testing

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International Cooperation in Disasters

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International cooperation in disasters has been discussed for a long time. However, is it realistic to expect effective and timely help from abroad? Past experience is discussed with particular regard to the possible international medical help in the case of an earthquake in Ljubljana, the capital of Slovenia. Ljubljana is the economic and governmental centre of Slovenia and, with a population of 300,000, it also is the largest city in Slovenia. The major teaching hospital (Medical Center Ljubljana) and other hospitals comprise almost one third of the hospital beds in Slovenia, and some important specialist treatments only can be provided in Medical Center Ljubljana.

In the case of a major earthquake, we would face several problems and, among them would be the provision of adequate medical treatment for casualties. This article analyses what we can expect, and the possible solutions for future work.

Key words: urban; cooperation international; earthquake; hospitals; preparedness

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Local Microcirculatory Changes of Primary Bone Lengthening Using External Fixator for Bone Defects from Gunshots

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Objective: To observe the changes in the local microcirculation associated with primary bone lengthening for bone defects from gunshots using an external fixator.

Methods: The experimental study was carried out using a canine model of bone defect produced by a gunshot to the extremities. Sixteen mongrel dogs were randomly assigned into 2 groups: Group I, we executed early callus distraction by external fixator; and in Group II, plaster immobilization was used. The local microcirculation of two groups was measured.

Results: In relation to normal fractures, the local blood flow of gunshot fractures was reduced during the first 3 days, and then increased. At the 6th week, it was restored to the normal level. There was no significant difference in the restoration of blood flow between the groups of external fixation and plaster immobilization.

Conclusion: Primary bone lengthening for gunshot bone defect by external fixator exhibited no detrimental effects on the restoration of the local blood flow.

Key words: bone defect; external fixator; gunshot; microcirculation; plaster; primary bone lengthening

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