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ABSTRACTS

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gency department (ED) with acute cocaine-related medical problems. *Methods:* Retrospective case-series of 166 analytically-confirmed acute cocaine intoxications admitted to the ED between January 2007 and March 2011. *Results:* Mean age \pm SD of patients was 33 ± 9 years, 121 (73%) were male and 108 (65%) patients had no employment at time of presentation. Twenty-six patients (16%) abused cocaine only and 140 (84%) used at least one additional substance, most commonly opioids (45%), alcohol (41%), or cannabis (36%). The most commonly reported symptoms in the ED were chest pain in 58 patients (35%), palpitations in 33 patients (20%), anxiety in 61 patients (37%), and restlessness in 60 patients (36%). Hypertension and tachycardia were observed in 87 (52%) and 108 (65%) patients, respectively. Severe complication of cocaine abuse included 2 cases of acute myocardial infarction, one ischemic stroke, and 4 cases of generalized seizure. Most patients (124 or 75%) could be discharged home within 24 h after admission. Thirty-one patients (19%) needed emergency psychiatric evaluation. *Conclusion:* Patients presenting with acute cocaine-related medical problems to the ED were mostly young unemployed men who used cocaine together with other drugs, most often alcohol and cannabis. Co-use of other stimulants was very rarely observed. Most frequently reported signs and symptoms included hypertension, tachycardia, chest pain, palpitations, anxiety, and restlessness. Severe complications of acute cocaine use included myocardial infarction, stroke, and generalized seizure. A remarkably high number of patients needed emergency psychiatric evaluation and/or referral.

264. Successful Endoscopic Removal of Cocaine Concealed in a Colostomy

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Objective: While concealing of containers in the rectum or vagina is common among body packers, other visceral cavities are rarely used for this purpose. *Case report:* We report on a 25-year old male patient who was admitted due to alcohol intoxication and abdominal pain during the time of Octoberfest. Physical examination of the abdomen was unremarkable with regular bowel sounds and absence of localized tenderness. Noteworthy was the existence of a colostomy on the left lower abdomen. Neurological check-up was impaired by alcohol but despite that fact unremarkable. Lab results were unremarkable except for a high blood-alcohol level (2.7 g/L) and positive screening for cocaine. The patient complained of worsening abdominal pain during the following hours. Abdomen was still soft, but the area of the colostomy exit now appeared to be swollen and painful. It was not possible to perform ultrasonic examination due to pain. The patient agreed to an x-ray of the abdomen. Abdominal film showed several foreign bodies visible near the colostomy exit. The patient confessed to being a drug courier using the colostomy as concealment for cocaine capsules ("body packing"). Due to severe abdominal pain and impaction near the colostomy exit an emergency removal was necessary. Despite several authorities recommending surgical removal, a non-surgical attempt at removal was attempted here as the capsules were seen near the colostomy exit. Finally a successful endoscopic

removal under intensive care supervision was performed. In total eight intact cocaine capsules (10 g each) were removed. Further investigation showed no remaining foreign bodies. The patient was stable during endoscopic treatment, recovered well and left the hospital the following day. *Conclusion:* Body packing is a rare cause of abdominal pain but should be considered as a differential diagnosis, especially in otherwise healthy patients. The extremely rare use of colostomy concealment for drugs and the promising non-surgical opportunities to remove these containers by experienced endoscopists should be considered in special situations. The major risk of rupture of the cocaine capsules resulting in life-threatening overdose must be considered, however.

265. Gamma-Hydroxybutyrate Acute Intoxication in Italy: Recreational Drug Intoxication or Medication Overdose?

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Objective: Gamma-hydroxybutyrate (GHB) and analogues are known worldwide as substances of abuse and rape drugs. In Italy GHB is also a medication used in the treatment of alcohol dependence. This study evaluates a case series of GHB overdoses referred to Italian emergency departments (EDs) in order to identify the characteristics of this intoxication in our country. *Methods:* A retrospective analysis of all cases of GHB intoxication referred to the Pavia Poison Center over a four-year period (2007–2010) was performed; all cases of admission to EDs for a confirmed and voluntary GHB poisoning were evaluated, while accidental or malicious intoxications (i.e. administration by another person as rape-drug) were excluded. Characteristics of the poisoned patients and clinical features were evaluated. *Results:* 178 of the 237 cases of GHB intoxication met the inclusion criteria (M/F ratio 1.6; median age 38.4 ± 8.9); 28% of the patients were admitted to the EDs during the weekend. Ninety-two per cent of the patients (164/178) ingested GHB in the trade pharmaceutical formulation (Alcover®). Eighty-two patients ingested only the street-GHB or the Alcover®, while other agents were co-ingested in 96 cases (53.9%), medications (78/96), substances of abuse (13/96) and ethanol (40/96) (more than two types were co-ingested in 34 cases). Severe neurological impairment (GCS < 9) was present in 56.7% of all the cases (101/178) and in 56.1% of the GHB/Alcover® pure intoxications (46/82). Agitation or seizure was present respectively in 12.4% (22/178) and in 15.8% (13/82 pure intoxications) of the cases, severe respiratory failure in 7.9% (14/178) and 6.1% (5/82). The 37.8% (62/164) of all the patients who had ingested Alcover® were in treatment with GHB for alcohol addiction. One patient died. *Conclusion:* Compared to the previously published studies on GHB intoxication, this case series shows some peculiarities such as higher average of age, high percentage of co-ingestion of medications and ethanol, lower percentage of excitatory symptoms, homogeneous distribution of the cases during the week. The use of GHB in Italy for the treatment of alcohol addiction should result in an easier availability for patients at risk of abuse and could explain the peculiarities of our case series.

266. Prevalence of Intoxication by New Recreational Drugs: Preliminary Data by the Italian Network of Emergency Departments Involved in the National Early Identification System

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Objective: In recent years, "old drugs of abuse" have been joined by "new recreational drugs of abuse" (NeDA). The number and the severity of patients admitted to the emergency departments (EDs) for NeDA is unknown in Italy and in most cases the standard toxicological screening results are negative. The underestimation of this phenomenon could have direct implications on early diagnosis and clinical management. A study was conducted through the EDs' network referring to the Pavia Poison Centre (PPC) in order to evaluate the actual prevalence and clinical features of NeDA intoxications. *Methods:* All consecutive cases referred to the PPC (January 2010–October 2011) for suspected/confirmed substances of abuse poisoning were evaluated; cases presenting history for NeDA or atypical clinical pictures after old drugs of abuse were included. All cases were assessed for age, history, acute clinical manifestations, evolution and toxico-analytical investigations. Cocaine, opiates, cannabis, amphetamine/methamphetamine were defined as "old drugs"; all the others were considered NeDA. Ethanol intoxication and body-packers were excluded. *Results:* Among 665 cases of substances of abuse intoxication, 192/665 (29%) met the inclusion criteria. In 52/192 (27%) NeDA were declared; 7% of patients were unable to report the substances taken. The most common clinical manifestations were agitation (42%), tachycardia (37%), coma (22%), mydriasis (19%), gastrointestinal discomfort (18%) and hallucinations (14%); two fatal cases were registered. Laboratory investigations were performed in 94% of cases (181/192); 70% of biological samples/products were delivered to PPC by courier for non-urgent analysis. The NeDA identified were: MDMA (25 cases), synthetic-cannabinoids (17), ketamine (16), GHB/GBL (6), caffeine (6), atropine-scopolamine (6), butylone (2), MDPV (1), harmine/dimethyltryptamine (1), MDA (1), 4-MEC (1). *Conclusions:* The network of EDs referring to PPC and the support of the advanced toxicological analysis are useful for the identification of sentinel/atypical cases; however, this cannot quantify the phenomenon. Toxicological evaluation, the identification of lab-confirmed NeDA intoxications permits regulatory actions by the Department for Antidrug Policies (DPA) and Ministry of Health aimed at prevention and control, such as the inclusion of the NeDA in the list of controlled substances. *Acknowledgements:* Study carried out with the support of DPA – Presidency of the Council of Ministers.

GHB acute intoxication in Italy: recreational drug intoxication or medication overdose?

Petrolini VM, Keser E, Vecchio S, Giampreti A, Lonati D, Rognoni C, Bigi S, Manzo L, Locatelli CA.
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BACKGROUND



Gamma-hydroxybutyrate (GHB) and analogues are worldwide known as substances of abuse and rape drugs. It's available in solid or liquid form, colorless, tasteless and odorless.

In Italy GHB is also a medication used in the treatment of alcohol dependence. Alcover® is a colorless liquid, sold in bottles (140ml-24.5g or 10ml-1.75g), cherry-flavored.



OBJECTIVE

This study evaluate a case series of GHB voluntary overdoses referred to Italian emergency departments (EDs) in order to identify the characteristics of this intoxication in our country.

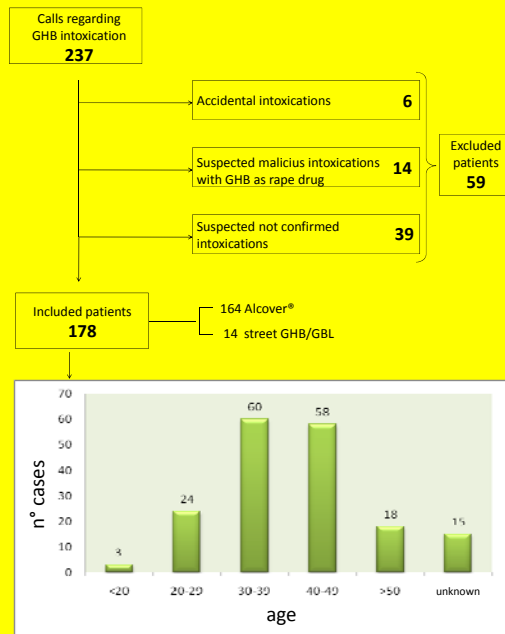
METHODS

Design retrospective analysis over a four-year period (2007-2010)
Setting cases referred to Pavia Poison Center
Inclusion criteria admission to EDs for a confirmed voluntary GHB poisoning (administration by another person as rape drug were excluded)
Evaluated data characteristics of the poisoned patients and clinical features were evaluated

RESULTS

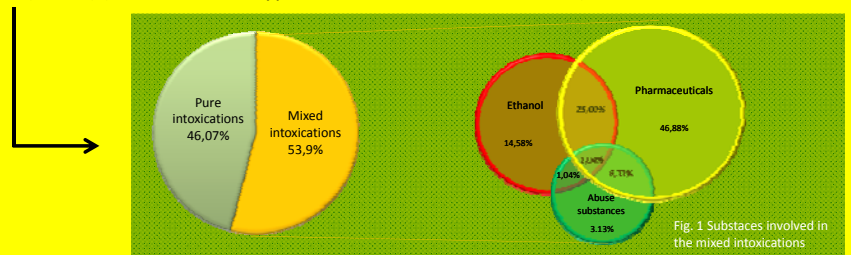
Included patients

178 of the 237 cases of GHB intoxication met the inclusion criteria (M/F ratio 1.6; median age 38.4 +/- 8.9). Ninety-two per cent of the patients (164/178) ingested GHB in the trade pharmaceutical formulation (Alcover®).



Pure / mixed intoxications

Eighty-two patient ingested only the street-GHB or the Alcover®, while other agents were co-assumed in 96 cases (53.9%) [Fig. 1]: medications (78/96), substances of abuse (13/96) and ethanol (40/96) (more than two type were co-assumed in 34 cases).



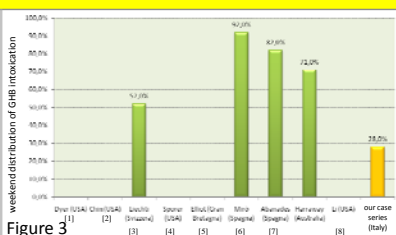
Clinical features

Severe neurological impairment (GCS<9) was present in 56.7% of all the cases (101/178) and in 56.1% of the GHB/Alcover® pure intoxications (46/82). Agitation or seizure were present respectively in 12.4% (22/178) and in 15.9% (13/82) of the cases, severe respiratory failure in 7.9% (14/178) and 6.1% (5/82) (Tab. 1). The 37.8% (62/164) of all the patients who had ingested Alcover® was in treatment with GHB for alcoholism addiction. One patient died.

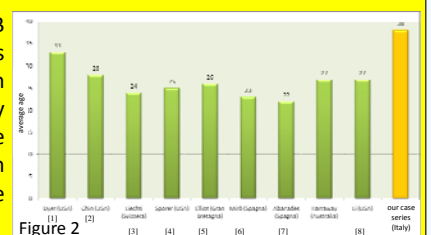
Table 1 - Clinical features of GHB poisoned patients

Clinical features	All patients N=178	Pure intoxications N=82
GCS 3	39	18
GCS 4-9	62	28
drowsiness, confusion	25	13
seizures	4	3
agitation	18	10
respiratory failure	9	3
mechanical ventilation	5	2
nausea/vomiting	14	
hypotension	2	
bradycardia	5	
hypothermia	5	
mydriasis	5	
cardiac arrest	2	

CONCLUSION



Compared to the previously published studies on GHB intoxication, this case series shows some peculiarities such as higher average of age (Fig. 2), high percentage of co-assumption of medications and ethanol, lower percentage of excitatory symptoms, homogeneous distribution of the cases during the week (Fig. 3). The use of GHB in Italy for alcoholism addiction should result in an easier availability for patients at risk of abuse and could explain the peculiarities of our case series.



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