Pharmacobezoar by clomipramine

Farmacobezoar por clomipramina

To the Editor,

Tricyclic antidepressant poisoning can be potentially severe and may result in patient death. There is also limited scientific literature on toxic pharmacobezoars.[1,2]

We report the case of a 62-year-old woman with a past medical history of depression on clomipramine 75 mg/12 hours. She was attended at home by an advanced life support unit due to decreased level of consciousness, urinary sphincter relaxation, and generalized tonic–clonic seizures. After administration of midazolam, she presented tetraparesis, generalized rigidity, and hypotension, with no improvement in consciousness. Orotracheal intubation was therefore performed, and she was transferred to our center with suspected subarachnoid hemorrhage. On clinical examination, she presented mydriatic pupils, generalized areflexia with flaccidity, and hypotension.

Basic laboratory tests (blood count and biochemistry) showed results within normal limits. Urine toxicology screening was positive for opioids and tricyclic antidepressants. The electrocardiogram showed prolonged corrected QT. Cranial CT ruled out acute intracranial disease. Initially, the case was managed as a possible status epilepticus, and the patient was admitted to the intensive care unit (ICU), where lumbar puncture and electroencephalogram showed no pathological findings; she was subsequently extubated.

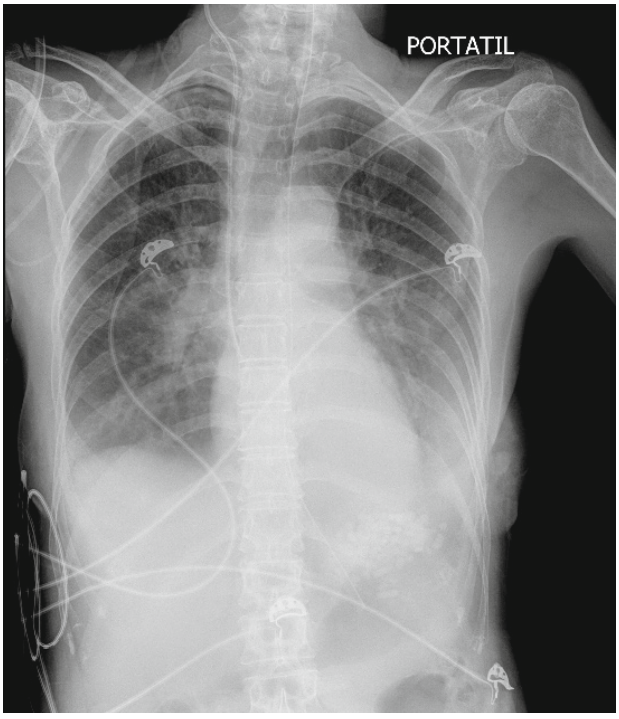

Figure 1. Chest X-ray showing radiopaque content at the level of the gastric chamber.

After 48 hours of admission, the family found empty blisters of clomipramine 75 mg at home, estimating an intentional overdose of approximately 2,250 mg.[2] The case was then reclassified as likely tricyclic antidepressant poisoning with suicidal intent. The patient remained somnolent and hypotensive, requiring vasoactive drug infusion.

A review of the chest radiograph revealed small rounded radiopaque images in the gastric region, suggestive of a pharmacobezoar caused by clomipramine tablets (Figure 1). GI decontamination was performed using activated charcoal and magnesium sulfate via nasogastric tube, but no radiological or clinical improvement was observed. Therefore, an upper gastrointestinal endoscopy was performed, successfully removing most of the tablets. The patient showed favorable clinical progress and was discharged without sequelae.

Tricyclic antidepressant poisoning can cause mydriasis, hypotension, tachycardia, coma, seizures, and electrocardiographic abnormalities. It may also produce an anticholinergic syndrome, slowing gastric emptying and favoring the formation of conglomerates (pharmacobezoar). In the presence of radiopaque images suggestive of gastric tablets, poisoning by iron salts, lithium, tricyclic antidepressants, and carbamazepine should be considered. Treatment consists of

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gastrointestinal decontamination, endoscopic extraction,[1] and in some cases surgical intervention.[3]

Finally, it is important to recall the contraindications to IV flumazenil in this case, including seizures and the use of tricyclic antidepressants—both of which were present in this patient.[4]

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Adrenalin-induced type 2 acute myocardial infarction: Kounis syndrome

Infarto agudo de miocardio tipo 2 inducido por adrenalina. Síndrome de Kounis

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To the Editor,

Allergic reactions are a common cause of emergency department (ED) visits. Kounis syndrome has been described in 175 cases and is a rare cause of type II myocardial infarction. The risk factors are previous allergies and the classic cardiovascular risk factors.[1,2]

A 45-year-old woman presented to the hospital for a contrast-enhanced chest CT angiography, during which she developed pruritus, skin rash, and general discomfort. In the radiology department, an IV adrenaline infusion and corticosteroids were administered, after which she progressed to profound hypotension and was transferred to the ED. Once there, the patient began experiencing oppressive chest pain and sweating.

The patient was allergic to tetracyclines, had no cardiovascular risk factors, and had no family history of ischemic heart disease. She was being followed for possible long COVID after a coronavirus infection in February 2021, which was the reason for the requested chest CT angiography. In the ED, an electrocardiogram (ECG) was performed (Figure 1A), and laboratory testing revealed a high-sensitivity troponin level of 5,300 pg/mL.

The patient was admitted to the cardiology department for monitoring, showed a descending troponin trend, and ECG normalization (Figure 1B), without further episodes of chest pain. The echocardiogram was normal. She was treated with corticosteroids and discontinuation of the adrenaline infusion. She was ultimately discharged with a diagnosis

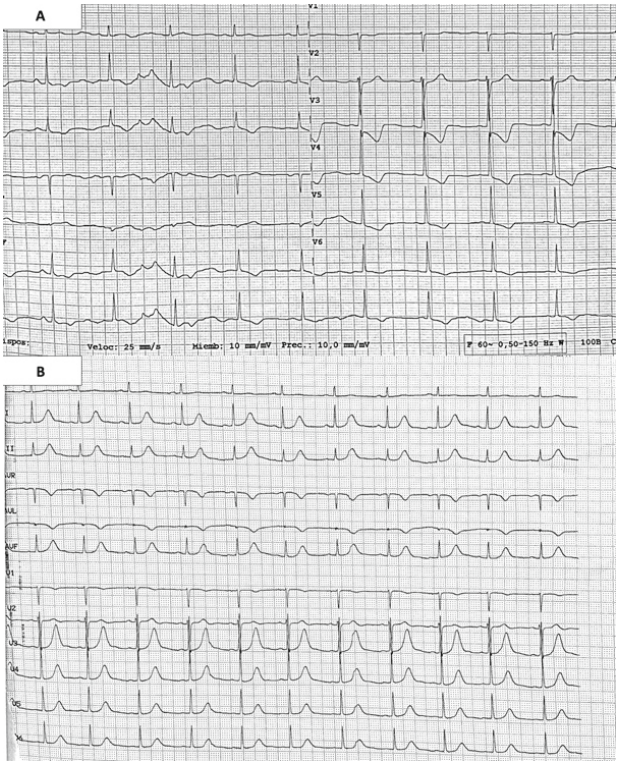

Figure 1. A: ECG on arrival to the emergency department showing negative T waves in II, III, and aVF, and ST-segment depression from V3 to V6. B: ECG at discharge from the cardiology department.

of type I Kounis syndrome, with recommendations for clinical follow-up and referral to an allergy specialist. No invasive or non-invasive coronary computed coronary angiography (CCTA) was performed due to the low probability of underlying coronary artery disease and the suspected allergy to iodinated contrast.

Kounis syndrome, first described in 1991 as "allergic angina syndrome," is a type of coronary disease related to mast cell and/or platelet activation in the context of an allergic or anaphylactic reaction. The main risk factors are allergies and traditional cardiovascular risk factors (hypertension, hyperlipidemia, diabetes, and smoking). The pathogenesis involves coronary vasospasm or rupture of an atherosclerotic plaque triggered by an allergic reaction. The main differential diagnosis is Takotsubo syndrome. There are 3 types of Kounis syndrome. Type I (most common): coronary vasospasm due to release of inflammatory mediators; cardiac biomarkers may be normal. It mainly occurs in patients without cardiovascular risk factors. Type II: coronary vasospasm due to inflammatory mediators plus plaque rupture, presenting as acute myocardial infarction. Type III: coronary stent thrombosis due to an allergic reaction. Diagnosis is based on clinical history, ECG, laboratory tests, echocardiography, and coronary angiography. Treatment for type I is based on corticosteroids to reduce vasospasm and prevent biphasic reactions. For types II and III, treatment is the same as for any acute coronary syndrome.[1,3,4]

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Serious suicide attempts associated with COVID-19 lockdown

Tentativas suicidas graves asociadas a confinamiento por COVID-19

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To the Editor,

Several Spanish authors have reported cases of patients with reactive psychosis during the lockdown imposed due to the COVID-19 pandemic. In the same vein, we would like to contribute our experience regarding their final conclusion: the high risk of suicide associated with these psychoses.[1]

During the first 30 days of lockdown, the number of patients attended in our emergency department dropped down to 75% compared with previous years, with most visits related to suspected SARS-CoV-2 infection and, to a lesser extent, other urgent organic disease.

Similarly, emergency visits for suicide attempts virtually disappeared; however, those who did present had severe attempts, resulting in death or major sequelae. Specifically, 4 patients were treated (2 men, 1 woman, and 1 transgender woman), all younger than 50 years, with the following medical diagnoses: fall from height/death (polytrauma), hanging (death), stab wound to the neck with vascular injury, and severe paracetamol poisoning. Only one had psychiatric history—specifically, dual disease.

Although both in Spain[2] and in other countries[3,4] concerns have been raised about an increased risk of suicide due to lockdown during the COVID-19 pandemic, the severity of suicide attempts has been poorly studied. Indeed, existing data on suicide attempts are inconsistent: while Puiguriguer-Ferrando *et al.* found that suicide-related poisonings increased between 4% and 12% in Palma de Mallorca and Barcelona, respectively,[3] in Madrid, Hernández-Calle *et al.* reported a significant reduction in emergency visits for psychiatric disease and suicide attempts.[5] This latter finding is consistent with our exploratory analysis: fewer suicide attempts were attended, although those that reached the hospital were severe in terms of mortality, need for hospital admission, and morbidity (development of serious sequelae). A larger sample of centers is needed to confirm these findings—an initiative already begun through the SIESTA Network.[4] On the other hand, some authors suggest a potential increase in suicides among older adults,[6] a phenomenon not observed in our series. However, cases of completed suicide attended

by Emergency Medical Services that never reached hospitals remain unknown.[8]

As other authors have warned, we believe that a preventive strategy against suicide is necessary in the event of future lockdowns in Spain—regardless of their geographic scope (neighborhoods, municipalities, islands, etc.). Such a strategy should include measures like telephone follow-up of at-risk patients, ensuring medication adherence, and reducing feelings of loneliness,[2] as well as the potential promotion of smartphone apps,[9] among others.[10] Additionally, special attention should be paid to adolescents[11] and older adults.[12]

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Emergency ultrasound: clarifying the concepts

Ecografía de urgencias: aclarar conceptos

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To the Editor,

Emergency ultrasound (EUS) is defined by the American College of Emergency Physicians (ACEP) as "the medical use of ultrasound technology for in-situ assessment of urgent or critical clinical situations," and is performed by emergency personnel wherever care is provided: hospitals, health centers, ambulances, patients' homes, remote environments, etc. It is a tool that assists in resuscitation, diagnosis, patient monitoring, and clinical procedures.[1]

On the other hand, point-of-care ultrasound, or bedside ultrasound, refers to ultrasound performed at the patient's bedside, guided by specific objectives, and

Table 1. Comparative table showing key differences between concepts

	Emergency ultrasound	Bedside ultrasound	Diagnostic clinical ultrasound
Concept	Medical use of ultrasound technology for in-situ assessment of urgent or critical clinical situations.	An examination with an ultrasound device at the patient's bedside, goal-oriented, performed to answer a specific diagnostic question or to guide an invasive procedure.	Responds to a formal request for an ultrasound study. Requires specific, accredited training. Usually performed by a radiologist and must include an associated diagnostic report.
Operator	Emergency physician.	Any physician: internist, trauma surgeon, emergency physician, family physician, etc.	Radiologist.
Clinical report	Only findings; incomplete.	By organ/system.	Structured report with clinical implications.
Formal request	No.	Sometimes.	Always, even if urgent.
Where it is performed	Anywhere. The patient may be unstable. Performed at any time when needed and if available.	Depending on the study, requires minimum conditions to be performed. Patient stable in bed or seated.	In the consultation/exam room where the ultrasound device is located (higher-power systems), usually with scheduled appointment, but urgent transfer of the patient may be required.

carried out by a health care professional to address a particular diagnostic question or to guide an invasive procedure.[2] Its applications include screening for certain conditions, as well as diagnosis, monitoring, resuscitation, and ultrasound-guided procedures. It is not exclusive to emergency medicine, as its usefulness is recognized in other fields such as traumatology, primary care, ophthalmology, etc.

Finally, diagnostic ultrasound has been used in medicine since the 1940s and responds to the request for an "urgent, priority, or scheduled ultrasound." Performing it requires specific certified training, typically by a radiology specialist. Its workflow requires a formal request including patient identification, reason for the exam, and a brief clinical history, and it provides a diagnostic report that is often an essential part of the emergency care process. Diagnostic ultrasound performed by radiologists requires higher quality standards in image acquisition, documentation, and final reporting.[4]

Although EUS is often used synonymously with bedside ultrasound, point-of-care ultrasound (POCUS), or clinical ultrasound, it is a distinct entity within emergency medicine, focused on time-dependent conditions and performed by the emergency physician—typically while standing. Therefore, the standards of quality and documentation must differ from those applied in more controlled environments (location, patient positioning, workload), and EUS may need to be complemented by other studies performed in a more comfortable, seated setting.

In countries with an official Emergency Medicine specialty, EUS is an essential technical competency during training, and its implementation is widespread and normalized. In Spain, however, emergency departments (EDs) face major challenges in implementing and evaluating EUS, mainly due to the absence of this specialty. Consequently, the degree of implementation and the characteristics of the ultrasounds performed in Spanish EDs remain unknown.[3]

We often use the term "bedside ultrasound" to refer to studies performed in the ED; however, this term should be refined, as we increasingly see ultrasound performed in emergency settings by specialists who are neither radiologists nor emergency physicians, in a seated position with a stable patient. Moreover, EUS requires a structured quality assurance program whose main goal is to provide feedback to improve performance and to foster ongoing training.[5]

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