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The Epidemiology of Clinical and Health Effects Associated With Cocaine

Epidemiología de los efectos clínico-asistenciales asociados al consumo de cocaína

To the Editor,

For the first time in Spain, a large population-based multicenter study confirmed the prolongation of hospital stay and has quantified the related costs in patients admitted for acute myocardial infarction associated with cocaine use. Moreover, the report provides complementary data on annual hospital admissions attributable to cocaine (0.44%) and on the incidence of acute myocardial infarctions due to its consumption (2.2%).[1] However, we would like to comment on certain aspects that we believe could complement the epidemiological data provided in that report.

As the authors indicate in their article, there may be a risk of underreporting and underestimation of the prevalence, as we do not know whether the diagnosis of cocaine use was corroborated by an analytical study or was based solely on the patient's medical history. In the series described by Rodríguez-Esteban et al[2] involving hospitalized patients with acute coronary syndrome, the prevalence of cocaine use was somewhat higher (3.7%), although that study showed the same methodological bias. These authors carried out a greater number of coronary angiographies (94% vs 82.4%; $P < .01$), but most of the patients had no significant coronary lesions or had single-vessel disease. Unfortunately, the authors did not evaluate the length or costs of the hospital stays.

The 1996-2009 Report on Emergency Hospital Care for users of psychoactive substances issued by the Spanish National Plan on Drugs,[3] based on data from 2009, included patients with diagnoses coded according to the 10th revision of the International Classification of Diseases (ICD-10) and whose medical history made reference to cocaine consumption. In this report, the latter was the most commonly used drug (61.3%), and the incidence of hospital admission ranged between 7.2% and 9.8%, depending on whether there was a direct or a secondary relationship between cocaine use and the need for hospital care. In a review carried out by our group based on data on emergency care in cocaine users,[4] cardiovascular symptoms were detected in 30% (standard deviation, 22.7%).

As the authors point out, there may also be cases of undisclosed cocaine use which, according to our findings in emergency departments, ranges between 6.4% and 21%, depending on the populations studied and the diagnosis or the reported reason for consultation.[5–7] Likewise, some patients may have taken a substance other than cocaine.[8] However, in this case, it would have no bearing on the phenomenon of cardiovascular risk associated with chronic use or on prevention strategies. As the authors indicate, all this may increase the impact of cocaine, although perhaps the economic costs could go in the opposite direction.

In cost analyses, it is also necessary to take into account previous visits to the emergency department by these patients, with the resulting health care expense or cost associated with cocaine consumption. Other elements to consider are cases of sudden death in the out-of-hospital setting[9] and repeat emergency department visits.[10] Lastly, since the study covered a 3-year period, some patients probably experienced more than one coronary ischemic event requiring hospital readmission.[11]

Finally, we agree with Gili et al that interventions aimed at identifying the risks associated with the use of these substances and the treatment of addiction are essential for the prevention of recurrence of cardiovascular events in this patient group, and an important part of the hospital stay should be devoted to these aims, although it may prolong hospitalization.[10]

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The Epidemiology of the Clinical and Health Effects Associated With Cocaine. Response

Epidemiología de los efectos clínico-asistenciales asociados al consumo de cocaína. Respuesta

To the Editor,

Gironés-Bredy et al have carried out an extremely interesting analysis of the impact of cocaine-related disorders in patients treated in hospital emergency departments. We agree with these authors that the costs of the care of these patients are higher than those calculated for inpatients, due to both the out-of-hospital circumstances and the emergency department setting, as the authors point out in their article, and to other factors such as worker absenteeism (number of absences and their duration), loss of productivity, drug dependence treatments, social assistance, and others. The application of a minimum data set for emergencies treated in hospitals is imminent in some Spanish autonomous communities, which will help to more accurately assess the true impact of these disorders on patient prognosis and on the cost overruns associated with their care.

Gironés-Bredy et al suggest the possibility that our series may have included readmitted patients. As we explain in the methods section,[1] a first episode of acute myocardial infarction was defined as that in which the code appeared in the primary diagnosis (ICD-9 code 410 with a fifth digit = 1). We excluded other cases of acute myocardial infarction with codes not indicating a first episode in the primary diagnosis, as well as those cases in which the 410.x1 code corresponded to a secondary diagnosis. These criteria, recommended by the Agency for Healthcare Research and Quality of the United States,[2] were designed to ensure that readmissions for acute myocardial infarction not be recorded as first episodes.

Gironés-Bredy et al stress the importance of investigating drug consumption in all patients and of undertaking interventions to provide information and to treat dependence for primary and secondary prevention of the problems associated with substance use. We agree with these authors that this course of action is an exercise in professionalism and should not be limited to emergency departments and inpatients, but should be extended systematically to all health care settings.

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Red Cell Distribution Width and Coronary Artery Disease

Amplitud de distribución eritrocitaria y enfermedad coronaria

To the Editor,

Red cell distribution width (RDW) has traditionally been considered useful in the differential diagnosis of anemia. RDW, which is routinely reported in complete blood counts as a statistical concept, is a measure of the variation in red blood cell volume.[1]

In recent years, interest has significantly increased in RDW as a risk marker in cardiovascular research. Several studies have shown that high RDW levels are associated with higher mortality among patients with heart failure,[2] coronary artery disease,[3] or myocardial infarction,[4] and in those undergoing percutaneous coronary intervention.[5]

In a recent study published in *Revista Española de Cardiología*, Sánchez-Martínez et al[6] showed that in non–ST-segment elevation acute coronary syndrome patients, elevated RDW values were predictive of increased major bleeding risk and provided additional information to the CRUSADE scale. The authors studied 293 consecutive patients with an established