



ASOCIACIÓN NACIONAL  
DE  
MÉDICOS FORENSES

# Spanish Journal of Legal Medicine

## Revista Española de Medicina Legal

[www.elsevier.es/mlegal](http://www.elsevier.es/mlegal)



### EDITORIAL ARTICLE

## Chemical submission: Current situation ☆

## Sumisión química: situación actual

Oscar Quintela Jorge\*

National Institute of Toxicology and Forensic Sciences, Las Rozas de Madrid, Madrid, Spain



*Chemical submission* (CS) is the term used to refer to crimes which are facilitated by psychoactive substances. The majority of these crimes involve sexual violence, robbery and extortion, as well as deliberate maltreatment of individuals who are elderly, have mental illness or are minors. This phenomenon is a real challenge for society in general and for Forensic Science in particular, because of its legal importance. Cases which are associated with CS often figure strongly in the media, and this has an undeniably positive aspect. Public opinion is now aware that sexual assault is a crime, even when the victim has voluntarily consumed a toxic substance which makes them more vulnerable. On the other hand, the way the media cover news of this type does not always comply with the necessary scientific rigor, spreading disinformation and erroneous beliefs which create alarm in society. One example of this is the over-estimated use of *burundanga* in CS-related crimes, which does not correspond to toxicological chemical findings in forensic laboratories. Within the Forensic context, the contribution by the *Revista Española de Medicina Legal* was of key importance in spreading scientific knowledge about the phenomenon of CS. The Institutes of Legal Medicine and Forensic Science have also played an important role in this, together with the National Institute of Toxicology and Forensic Science (INTCF). The recent contributions by the Ministry of Justice should also be mentioned here: the "Good Practice Guide for forensic procedure in the case of a victim of a crime facilitated by psychoactive substances: intervention in case

of suspicion of chemical submission";<sup>1</sup> the development and distribution of sample-taking kits for toxicological analysis in cases where chemical submission is suspected also stands out here.

The 2021 report by the INTCF on "Toxicological findings in sexual assaults with suspicion of chemical submission"<sup>2</sup> refers to 950 cases of sexual crimes investigated judicially. This study clearly shows the high prevalence of alcohol, illegal drugs and psychoactive drugs in sexual assaults against women (93.4%), where 82.5% of cases were positive of the total number of cases where there was a suspicion of chemical submission. Although the different scientific societies agree that urine is the best sample to use as it offers a longer window for detection, the INTCF report states that more blood samples are sent (823 blood samples vs. 729 urine samples). The need to collect this sample should be widely emphasised, as almost all of the victims are alive. On the other hand, we should underline the fact that a very high number of files on sexual assaults using CS are eventually closed due to a lack of proof in the courts. When the victim and suspect verbally describe the events, the judicial authorities often reject the lawsuit if other evidence or witnesses are lacking. This is mainly because DNA and toxicological analyses are not considered to be sufficient to support the declaration of the victim or suspect.

It is still difficult to gain in-depth knowledge of many aspects of chemical submission. Although there is a large *black hole* in the number of sexual assaults due to the high percentage of cases which go unreported, this situation is

☆ Please cite this article as: Quintela Jorge O. Sumisión química: situación actual. *Revista Española de Medicina Legal*. 2022. <https://doi.org/10.1016/j.reml.2023.02.002>

\* Corresponding author.

E-mail address: [oquintela@gmail.com](mailto:oquintela@gmail.com).

thought to be far worse in the case of crimes involving the maltreatment of the elderly, individuals with mental illness or children. The incapacity of these groups to first recognise and then to report crimes involving CS means that there is a very large deficit in how they are identified and taken to court.

Toxicological laboratories should have validated methods of detecting substances that may be involved in cases of CS. This requires the use of methodologies which permit broad toxicological screening for substances, even when they are at low concentrations. It is evident that in toxicological studies of this type, low concentrations of substances found in the blood or urine may be relevant because of the delay between the events and sample-taking. When interpreting these findings it is important for the laboratory receiving CS cases to have information that is as exact as possible about the time which passed after the events until samples were taken, as well as the drugs which the victim may have received.<sup>3</sup> The law recognises the role which psychoactive substances may play in crimes of sexual assault. When consumed voluntarily or involuntarily by the victim these

substances can directly influence their ability to give their consent, a key aspect of the recent *Organic Law for the complete guarantee of sexual freedom*, which is better known as the law of "only yes means yes".

## References

1. Hallazgos toxicológicos en agresiones sexuales con sospecha de sumisión química. Memoria 2021. Instituto Nacional de Toxicología y Ciencias Forenses. Madrid: Ministerio de Justicia; 2022.
2. Guía de buenas prácticas para la actuación forense ante la víctima de un delito facilitado por sustancias psicoactivas: intervención ante la sospecha de sumisión química. Madrid: Ministerio de Justicia, Secretaría General Técnica; 2022.
3. Wille SMR, Van Dijck K, Van Assche A, Di Fazio V, Ramírez-Fernández MDM, Vanvooren V, Aryn N. The interest of a systematic toxicological analysis combined with forensic advice to improve the judicial investigation and final judgment in drug facilitated sexual assault cases. *Pharmaceuticals*. 2021;14:432.