
Poster

[P26-3] P26-3: Central nervous system drugs (2)

Chair: Chiyo Imamura, Japan

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[P26-3-2] Suspected criminal use of flunitrazepam tablets: a case report

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Background

In Western countries, tablets of flunitrazepam, a benzodiazepine, has been sometimes used for criminal purposes such as coma robbery by secretly resolving them in drinks or foods.

Methods

A 30-year-old woman was found comatose in her apartment by her boyfriend and transferred to the Emergency Medical Center and Poison Center. According to his observation, she dressed up for going out and her wallet with enough money was left on the table. On admission, she was comatose but other vital signs, blood laboratory tests, and a brain imaging of computed tomography were not remarkable. Notably, her lips, teeth, tongue, and oral cavity were stained blue. Triage DOA®, a urinary screening test, suggested the ingestion of benzodiazepines and an intravenous administration of flumazenil, a benzodiazepine receptor antagonist, induced transient arousal. Benzodiazepine poisoning was diagnosed and she was treated supportively with intravenous infusion. In a half day, she became alert. She strongly denied the ingestion and prescription of any medicine. However, she admitted having drunk a bottle of Ramune®, a bluish soft drink, with a person. As criminal use of hypnotics was suspected, we advised her to consult the police. She was discharged without any sequelae.

Toxicologic analysis was performed using her urine samples. A main metabolite of flunitrazepam was detected by LC-MS/MS (Prominence, Shimadzu Co. Ltd.).

Results

Since July, 2015, the pharmaceutical companies in Japan have colored an inner core of flunitrazepam tablets with blue dye so that drinks or foods would be stained blue if these tablets were resolved in them. As the mouse of the patient was stained blue and a main metabolite of flunitrazepam was detected in urine, it may be possible that she took some drink or food where flunitrazepam tablets were resolved.

Conclusions

Flunitrazepam poisoning should be suspected, if comatose patients are transferred to emergency facilities with their mouse stained blue.