

## “Pressed” Etizolam



Three boys, aged 6, 9, and 10 years, presented to the emergency department (ED) with altered mental status after eating Pez candy. Their mother had left the boys under an aunt's supervision at approximately 8:30 AM on the day of symptom onset. She returned home at 10:45 AM to find them “drowsy and wobbly.” The aunt also had altered mental status, and she owned the candy container.

On arrival to the ED, the patients were sleepy, drooling, mydriatic, and ataxic. All 3 patients received naloxone without mental status improvement. One child had detectable benzodiazepines on a qualitative ED urine drug screen. Two patients became somnolent over 2 hours, and the ED team considered intubating them for airway protection.

The pills brought to the ED were brightly colored and unlabeled and resembled Pez candy (Figures 1 and 2). In consultation with the toxicologist, 2 of the patients were given 0.2 mg of flumazenil, leading to improved mental status. These patients were transferred by air transport to the pediatric intensive care unit (PICU) for monitoring. They received additional doses of flumazenil before

transport and during transport to the PICU. They were discharged from the PICU after 72 hours observation. The third patient was admitted to the local hospital for monitoring and was discharged after 24 hours. Gas chromatography-mass spectroscopy of 1 patient's urine sample detected etizolam.

Designer benzodiazepines, including etizolam, are being increasingly detected in the US.<sup>1</sup> Etizolam is a thienodiazepine, a short-acting benzodiazepine derivative prescribed in Japan, Italy, and India for anxiety and sleep disorders. Etizolam is illegal in the US but easily purchased on the “dark web.”<sup>2</sup> Etizolam was the fourth most commonly detected benzodiazepine on forensic testing in 2019, accounting for nearly 6% of submitted samples.<sup>3</sup>

Previous reports have noted counterfeit benzodiazepines pressed to imitate the structure of prescription benzodiazepines.<sup>4-6</sup> This case is unique, because etizolam was disguised as a known candy. To date, no reports have described designer benzodiazepines disguised as a commercial food product. In this case, drug concealment efforts resulted in a significant toxicologic exposure in children. ■



**Figure 1.** Pressed etizolam pills consumed by patients.

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**Figure 2.** Additional etizolam pills obtained from patients.

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## References

1. Carpenter JE, Murray BP, Dunkley C, Kazzi ZN, Gittinger MH. Designer benzodiazepines: a report of exposures recorded in the National Poison Data System, 2014-2017. *Clin Toxicol* 2019;57:282-6.
2. Shapiro AP, Krew TS, Vazirian M, Jerry J, Sola C. Novel ways to acquire designer benzodiazepines: a case report and discussion of the changing role of the internet. *Psychosomatics* 2019;60:625-9.
3. US Drug Enforcement Administration, Diversion Control Division. National Forensic Laboratory Information System: NFLIS-Drug 2019 Annual Report. 2019. Accessed September 25, 2020. <https://www.nflis.deadiversion.usdoj.gov/DesktopModules/ReportDownloads/Reports/NFLIS-Drug-AR2019.pdf>
4. Arens AM, Van Wijk XMR, Vo KT, Lynch KL, Wu AHB, Smollin CG. Adverse effects from counterfeit alprazolam tablets. *JAMA Intern Med* 2016;176:1554-5.
5. Blumenberg A, Hughes A, Reckers A, Ellison R, Gerona R. Flualprazolam: report of an outbreak of a new psychoactive substance in adolescents. *Pediatrics* 2020;146:e20192953.
6. Jurásek B, Čmelo I, Hájková K, Kofroňová E, Kuchař M. Counterfeit benzodiazepines—a phantom menace. *Int J Clin Pract* 2020;74:e13575.

## A Neonate with Feathery Scales



A female neonate was referred to the dermatology clinic for evaluation of skin lesions. Streaks of large feathery scales that were tightly adherent to the skin with distribution along the Blaschko lines were apparent (**Figure, A**) along with an atrophic erythematous track on the dorsomedial aspect of the left foot (**Figure, B**). The proximal portion of the left arm

was shorter and the fourth and fifth fingers of the left hand were fused (**Figure, C**).

The constellation of findings suggested chondrodysplasia punctata, also known as Conradi-Hunermann-Happle syndrome. Genetic testing revealed a heterozygous mutation on the *Emopamel binding protein (EBP)* gene consistent with the clinical diagnosis.

Chondrodysplasia punctata is an X-linked dominant disorder characterized by the presence of stippled calcification of the epiphyses accompanied by other skeletal, cutaneous, and ocular abnormalities.<sup>1</sup> Skin lesions include transient linear ichthyosiform erythroderma that resolve within the

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