A Patient Who Prefers to Imbibe Ethanol-Based Hand Sanitizer over Traditional Alcoholic Beverages

Riley Jones, MD, Lee Schuhmann, MD, Rif El-Mallakh, MD
Department of Psychiatry, University of Louisville School of Medicine, Louisville, Kentucky

Ethanol-based hand sanitizers are a convenient, affordable product employed in healthcare settings to prevent the spread of nosocomial infections. In recent years, there have been several reports of intentional ingestion of ethanol-based hand sanitizers.1-3 We present the first report of an individual whose preferred, and indeed only, alcoholic substance to imbibe is ethanol-based hand sanitizer.

A 44-year-old male patient was brought to the emergency department after being found unconscious lying next to several empty containers of hand sanitizer in the bathroom of a homeless shelter. Emergency services were requested and he was intubated at the scene. Upon arrival at the hospital, laboratory studies revealed a blood-ethanol level of 426 mg/dl. After stabilization and transfer to the medical intensive care unit, the patient recovered and self-extubated 24 hours after admission. The patient confirmed that he ingested the hand sanitizer and was transferred to inpatient psychiatric services on hospital Day 2 for further evaluation after being medically cleared.

On initial examination in the inpatient psychiatric unit, the patient was clean and calm; alert; oriented to person, place, time, and situation; displayed moderate judgment and insight; and reported feeling “depressed about everything.” The patient’s speech was fluent, spontaneous, and clear with normal rate and tone. The physical examination was unremarkable for motor, sensory, perceptual, or significant cognitive impairments. Furthermore, the patient failed to demonstrate any perceptible psychotic thought processes. The patient’s past medical history was significant for alcoholism, occasional tobacco and marijuana use, and several episodes of depression treated medically with poor compliance; the patient denied any current suicidal ideations or previous suicide attempts.

On the evening he was admitted to the inpatient psychiatric ward, the patient was noted to smell of alcohol. A search revealed four empty 500 ml bottles of hand sanitizer hidden in his bed linens. Subsequently, the patient admitted that he had ingested hand sanitizers stolen from the nurse’s station in an effort to become intoxicated. The patient described that he has been “addicted to hand sanitizers for years…some of them taste better than vodka and you get drunk faster, too.”

For the last year the patient’s exclusive source of alcohol has been “more than a gallon (3.75 L) per week” of hand sanitizer stolen from his homeless shelter which he states is “an unlimited supply and free…no one suspects the stuff, and it’s just sitting out on the counter. I don’t even drink beer or liquor anymore.” When asked of his preference of hand sanitizer the patient remarked, “Purell® is too thick. I like Germ-X® because it’s thinner and easier to drink.” He stated that he usually mixes the sanitizer with cola and ice and prefers unscented products emphasizing that scented products “taste terrible and burn your throat.” The patient also described how foaming sanitizer products, although not his preference, must be consumed as a liquid before being foamed by the dispenser.

Subsequent interviews into the patient’s history of alcoholism revealed a 30-year span of alcohol abuse of primarily vodka liquors and occasionally beer. The patient reported several sporadic attempts to stop drinking through community-based support group services without any lasting success greater than “a few days.” The patient estimates that he has been consuming hand sanitizers exclusively for approximately 3 years, but would not disclose his initial impetus for consuming the hand sanitizer. At the time of interview, the patient denied any interest in receiving services for alcohol cessation.

Ingestion of ethanol-based hand sanitizers related to alcohol dependency and self-injurious behavior has been previously described.1-3 These reports demonstrate the relative ease by which persons with alcohol dependency can obtain large quantities of alcohol in “dry” environments. However, ethanol-based hand sanitizers imbibed as the primary and preferred alcoholic substance for consumption has not been reported.
Previous recommendations to discourage the inappropriate use of such products have been made such as placing large volume (>500 ml) dispensers in secured holders\(^1\) and temporary removal of wall dispensers from rooms of high risk individuals.\(^2,3\) In light of the reports of ingestions and growing public awareness for the recreational potential of ethanol-based hygiene products, we recommend that, with high-risk individuals, hand sanitizers should be regarded as a substance of abuse and their access be supervised. Staff education of misuse potential, signs of intoxication versus other causes of acute mental status change, development of management protocols, and identification of risk areas (eg, unlocked storage closets) should be considered.

**Declaration of Interest**

The authors report no conflicts of interest. The authors alone are responsible for the content and writing of this paper.

**REFERENCES**