Commentary on "A new drug with a nasty bite: A case of krokodil-induced skin necrosis in an intravenous drug user"

To the Editor: In a recent article in *JAAD Case Reports*, Haskin and colleagues[1] implicate krokodil as the cause of skin lesions in a young woman with ongoing intravenous drug abuse. The only evidence supporting krokodil as the cause is the history from the patient. With no analytical confirmation, either from bodily fluids from the patient or from the injected substance, it is difficult to accept that krokodil (illegally synthesized desomorphine) caused the lesions in question. There are no substantiated cases of krokodil use in North America, despite a flurry of lay media reports in 2013 and one similarly unsubstantiated case report here in Saint Louis.[2]

The US Drug Enforcement Agency's 2014 Drug Threat Assessment Report stated that "there are no confirmed cases of krokodil abuse in the United States."[3] The 2015 report, released on November 4, 2015, had no further mention of krokodil.[4]

Levamisole, a common adulterant in cocaine, can produce skin lesions similar to those described by Haskin and colleagues.[5-7] The US Drug Enforcement Agency has found levamisole in some samples of seized heroin.[8] Likewise, soft-tissue infections and contaminants in injected heroin can cause similar findings.

With no objective proof of krokodil use and with other possible explanations, we conclude that it is unlikely that krokodil caused this patient's skin lesions. We assert that krokodil use in the United States remains unproven and unlikely.[9,10]

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