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Visual Case Discussion

Skin popping

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A 42 year old female presents with a complaint of back pain and is requesting opioid analgesics. On physical examination, her hand findings are noted in the figures. She denies trauma. On review of her prescription monitoring record, she is found to be obtaining opioids from multiple medical sources. When confronted, she admits to opioid use, including the subcutaneous injection. Skin popping is the injection of substances via subcutaneous injection. Subcutaneous tissue has few

blood vessels so the drug injected into the space diffuses slowly into blood circulation for more sustained rates of absorption than intravenous or intramuscular injections. Skin popping has been associated with a high risk of skin infections, including abscesses.¹ Rare wound infections have been associated with skin popping, including tetanus and botulism (Figs. 1 and 2).^{1,2}



Fig. 1. Skin popping scars on left hand.



Fig. 2. Skin popping scars on right hand with protrusion 5th proximal phalanx.

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Supplementary materials

Supplementary material associated with this article can be found, in the online version, at [doi:10.1016/j.visj.2019.01.003](https://doi.org/10.1016/j.visj.2019.01.003).

References

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2. Qureshi IA, Qureshi MA, Rauf Afzal M, et al. Black tar heroin skin popping as a cause of wound botulism. *Neurocrit Care.* 2017 Dec;27(3):415–419.

Questions

1. “Skin popping” is a slang term referring to what mode of substance delivery?
 - a. Intravenous
 - b. Central
 - c. Subcutaneous
 - d. Intramuscular
 - e. Intraosseous

2. Rare skin infections such as clostridial have been reported in drug users who engage in skin popping.
 - a. True
 - b. False

Answers

1. Subcutaneous. Explanation: Skin popping is performed by injection drug users after peripheral and, sometimes, central venous access is no longer available secondary to scleriosis, thrombosis, dissection, or overlying infection. The techniques employed are often non-sterile and involve the deposition of fillers and other particulate matter subcutaneously leading to a nidus of infection. Skin popping is a strong predictor for abscesses and cellulitis.
2. True. Explanation: Skin popping is a noted risk factor for developing deadly clostridial infections including tetanus, botulism, sordellii- and perfringens-related necrotizing fasciitis. Staphylococcus, Streptococcus, and Bacillus species among others have been isolated from wounds.