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New obstacles in the continuing opioid epidemic: tapentadol skin popping

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Introduction

Subcutaneous or intradermal injection of illegal substances is known as skin popping. Some people like this method of using illegal drugs. Intravenous injections may potentially unintentionally burst the skin if the injector is not careful or if the veins are inaccessible because of thrombosis.[1] The opioid market in India is one of the biggest in the world. In the past ten years, there has been a noticeable rise in the worldwide trend of seized prescription opioids. The most common synthetic opioid confiscated between 2016 and 2020 was tramadol. Following its nationalization, both production and confiscated amounts of tramadol in India decreased. Nevertheless, there is a lack of prevalence statistics on tramadol usage, and the trafficking of this drug persists. In certain locations, the more established opioid tramadol is being replaced with the more recent opioid tapentadol.[2] in Rare cutaneous nodules caused by tapentadol skin popping have been reported.

A 30-year-old man who had been experiencing several cutaneous nodules for the previous seven months came to see us in our outpatient department. His habit of injecting himself with tapentadol every day was exposed in his extensive medical history. A mixture of crushed 50 mg tablets of Tapentadol and distilled water was administered using an insulin syringe. The tablet's packaging identified titanium dioxide as the active ingredient. Nodules appeared at the injection location, but they disappeared after a week or two, leaving behind skin discolouration, according to his report. He said that he always used new needles for injections. The injection sites did not exhibit any signs of infection, such as discomfort or discharge, in the past. He worked as a manual laborer and said that stopping the injection would leave him too exhausted to do his job. Figure 1a and b show that the patient's upper limbs and shoulders had a few puckered scars, hyperpigmented macules, and many nodules that were skin-colored, hyperpigmented, or

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erythematous. The injection site scars were seen under polarized dermoscopy (Dermlite 4, ×10). The scars had a core white region, a brown pigment network around the edges, and irregular and arborizing capillaries that ran in a linear fashion. He was found to be HIV negative in addition to negative for hepatitis B and C. Being aware of the nodules' source, the patient choose not to have a skin biopsy. Opioid dependency therapy was recommended for the patient. Someone else who is now receiving treatment for opioid abuse also had a similar experience with tapentadol-induced self-limiting skin nodules. An insulin syringe was used to inject the 22-year-old man with a mixture of crushed tapentadol pills, distilled water, and other substances. Unfortunately, the individual noted that the only occurrence of nodule development was due to unintentional extravasation.

Tapentadol is an analgesic that acts centrally and has the dual activity of being an α-opioid receptor agonist and an inhibitor of nor-adrenaline reuptake. In 2011, India authorized an immediate-release medication for moderate to severe acute pain, and in 2013, they approved an extended-release medication for severe acute pain. There are no parenteral formulations of tapentadol and no safety data available for this administration method. Because the medication is heavily metabolized during the first pass, administering it intravenously may result in three times the blood levels seen with oral administration. Intravenous administration has been associated with respiratory depression and fatalities. Warning signs of abuse often arise from case reports or case series since there are no rigorous monitoring systems in place. Reports indicate that both the number of people using tapentadol for the first time and the number of people switching from previous opioids to tapentadol have increased. Possible factors contributing to the issue of tapentadol misuse include its low cost, availability, and convenience of usage.the third November 2021 saw the addition of tapentadol to Schedule H1.[4]

Substance misuse may lead to serious health problems or even death. Itchy skin is a common symptom among drug abusers. Scars that are uneven, atrophic, or punched-out are often the result of skin popping with illegal substances.[1] But the medicine or its excipients might be to blame for the cutaneous nodules our patient developed. The tablet strip identified titanium dioxide as the colorant.

Tablet excipients are inert filler components that help with binding, protecting, shape, and swallowing by acting as lubricants.There have been reports of cutaneous foreign-body granulomas associated with excipient injections.Lung fibrosis, pulmonary hypertension, and respiratory failure may result from excipients when administered intravenously, which is known as pulmonary foreign-body angiogranulomatosis. Finding excipient crystals in the arterioles of the retina may be possible with the use of fundoscopy. It is possible to identify the excipients with the use of histopathology, polarized microscopy, and infrared spectroscopy.[5]

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An underappreciated obstacle in the Indian opioid problem is the repurposing of oral prescription opioids for topical use. The symptoms could be different for each patient, and they might show up late or provide an inaccurate medical history. In order to make early referrals and avoid problems, it is vital to be aware of the readily apparent cutaneous characteristics.

Statement of the patient's agreement

By signing this document, the writers attest that they have collected the necessary patient permission paperwork. The form signifies that the patient or patients have granted permission for their photos and other clinical data to be published in a peer-reviewed publication. Although every attempt will be taken to ensure the patients' confidentiality, they are aware that their names and initials will not be published.

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