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New challenges in the ongoing opioid crisis: skin bursting from tapentadol

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Introduction

Skin popping refers to the practice of injecting illicit drugs subcutaneously or intradermally. Using illicit substances in this way is appealing to some. If the injector isn't cautious or if thrombosis prevents the veins from being accessible, an intravenous injection might accidentally break the skin.[1] India has one of the world's largest markets for opioids. The global trend of confiscated prescription opioids has been steadily increasing over the last decade. Between 2016 and 2020, tramadol was the synthetic opioid that was seized most often. In India, the production and confiscated quantities of tramadol both dropped once it was nationalised. The trafficking of tramadol continues, however, and there are no data on its prevalence. Tramadol, an older opioid, is giving way to tapentadol, a newer opioid, in certain areas.found in It has been noted that tapentadol skin bursting may induce rare cutaneous nodules.
In our outpatient clinic, we saw a 30-year-old guy who had been seeing many skin nodules for the last seven months. According to his detailed medical history, he used to inject himself with tapentadol daily. An insulin syringe was used to give a combination of crushed 50 mg Tapentadol pills and distilled water. The active component listed on the tablet's package was titanium dioxide. According to his account, nodules developed at the injection site, which faded away after a couple of days but left behind some discolouration of the skin. When asked about injecting himself, he insisted on using only fresh needles. Injection sites have never previously shown symptoms of infection, including pain or drainage. He said he was too worn out to continue his job as a manual labourer if he stopped getting injections. Several skin-colored, hyperpigmented, or erythematous nodules as well as a handful of puckered scars and hyperpigmented macules were seen on the patient's upper limbs and shoulders (Figure 1a and b). Under polarised dermoscopy (Dermlite 4, ×10), the scars at the injection sites could be seen. Uneven and arborising capillaries ran in a straight line around the scars, which had a white centre and a brown pigment network around them. He tested negative for hepatitis B and C and HIV as well. The woman opted out of a skin biopsy since she knew where the nodules were coming from. It was suggested that the patient undergo opioid dependence treatment. Similar symptoms of tapentadol-induced self-limiting skin nodules were reported by another individual now undergoing treatment for opiate misuse. Crushed tapentadol tablets, distilled water, and other

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drugs were injected into the 22-year-old man's veins using an insulin syringe. The only instance of nodule formation, the person lamented, was because of accidental extravasation. Being both an α-opioid receptor agonist and an inhibitor of nor-adrenaline reuptake, tapentadol is a centrally acting analgesic with dual function. An immediate-release medicine for moderate to severe acute pain was authorised in India in 2011, while an extended-release drug for severe acute pain was authorised in 2013. There is a lack of information on the safety of administering tapentadol intravenously, and no such formulations exist. When given intravenously, the drug may reach blood levels three times higher than when taken orally due to its high hepatic metabolism on the first pass. There have been reports of respiratory depression and deaths linked to intravenous injection. Since there aren't any strict monitoring mechanisms in place, warning indicators of abuse may frequently be found in case reports or case series. The number of individuals using tapentadol for the first time has reportedly risen, as has the number of persons transitioning from other opioids to tapentadol. Its accessibility, cheap cost, and ease of use are potential contributors to the problem of tapentadol abuse.Tapentadol was added to Schedule H1 on November 3, 2021.[4]

Serious health complications or even death may result from substance abuse. A typical symptom among those who take drugs is itchy skin. Skin popping with illicit drugs typically results in scars that are irregular, atrophic, or punched-out.[1] However, our patient may have acquired cutaneous nodules as a result of the medication or its excipients. Titanium dioxide was recognised as the colourant by the tablet strip.

Inert filler components called tablet excipients aid in binding, protecting, shaping, and swallowing by functioning as lubricants.It has been reported that excipient injections may cause cutaneous foreign-body granulomas.When excipients are injected intravenously, it may cause pulmonary foreign-body angiogranulomatosis, which can lead to lung fibrosis, pulmonary hypertension, and respiratory failure. Fundoscopy has the potential to reveal excipient crystals inside the retina's arterioles. Histopathology, polarised microscopy, and infrared spectroscopy may be used to detect the excipients.[5]

The conversion of oral prescription opioids to topical usage is an overlooked barrier to solving the opioid crisis in India. Each patient may have unique symptoms, and there's always a chance that they'll be late or provide a false medical history. It is important to be knowledgeable of the easily noticeable skin traits in order to prevent issues and make recommendations early.

Statement of the patient's agreement

By their signatures hereon, the authors confirm that they have obtained all required patient consent forms. By signing this form, the patient or patients are giving their consent for their medical records and images to be published in a peer-reviewed journal. Patients understand that their identities (names and initials) will remain secret notwithstanding our best efforts to protect them.

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