



# Teaching Image: Cutaneous Signs of Illicit Drug Abuse

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Chronic pain is common among patients with illegal drug use. In a recent study, 87% of percent of patients who were screened positive for illegal drug use suffered from chronic pain [1]. It is therefore important for pain physicians to recognize cutaneous signs of drug abuse. Injections with some illicit drugs can result in skin scarring, dark pigmentation in the puncture site, which are called track marks [2]. Figure 1 shows a picture of the arm of a 33-year-old male, who has a history of heroin abuse and was noted to have the characteristic linear hyperpigmented track marks on his non-dominant forearm. Heroin is well known for creating these track marks [3]. Heroin is sold in the US drug market as white powder (snorted) or black tar heroin (intravenous or intramuscular) [4]. Black tar heroin is usually mixed with quinine, mannitol, dextrose, lactose, and/or baking soda, which can cause sclerosis in the veins [5]. The most common site for track marks is the forearm of the non-dominant hand. Interestingly, intravenous use of cocaine usually does not induce track marks. It is important to note that the lack of track marks does not preclude IV drug use.

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**Figure 1:** Photo of a 33 year old white male, who presented to the hospital with a perforated gallbladder requiring cholecystectomy. He has a history of heroin abuse and was noted to have the characteristic linear hyperpigmented track marks on his non-dominant forearm.

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