After repeated questioning, the patient revealed that he had been injecting cocaine directly into his skin, a practice known as “skin popping.” He recently began injecting cocaine into his legs because of his concern about the visibility of telltale scars on his hands and arms. A nonsterilized needle had resulted in an abscess, culture positive for Staphylococcus aureus.

Skin popping is the intradermal, subcutaneous, or intramuscular injection of illicit drugs. This route of drug use is chosen after intravenous routes are no longer available as a result of scarring of easily accessible veins. The injection causes local tissue damage and ischemia, resulting in necrosis. Adulterants, such as dextrose and quinine, are highly irritating, result in severe fibrosis, and may lead to chronic lymphedema. Clinically, lesions manifest as depressed, irregular, oval scars with hypopigmentation; occasionally these scars may become hyperpigmented, nodular, and/or keloidal. Skin popping also predisposes the individual to local skin and soft-tissue infections including cellulitis and abscess formation, frequently due to a combination of aerobic and anaerobic bacteria.

Treatment consists of standard wound care including incision and drainage accompanied by appropriate antibiotic coverage under the guidance of cultures and sensitivities. Less commonly, but more worrisome, skin popping also may lead to necrotizing ulcers and necrotizing fasciitis. Repeated injections in the same area can produce muscle contractures, brachial plexus neuropathy, ankylosis, and supplicative tenosynovitis.

Chronic cocaine abuse also has been associated with pruritus and formication. Snorting cocaine and heroin predispose to the development of nasal warts and septal perforation.

In those patients who successfully recover from a habit of illicit drug use, the cutaneous stigmata of past use may be addressed via routine methods used to treat other scarring conditions. Hypertrophic lesions may respond to intraleisional corticosteroid injections, hyperpigmentation can be treated with bleaching agents or pigment-targeting lasers, and atrophied scars may improve with injectable fillers.

References