Dear Editor

A 33-year-old woman presented to the emergency department because of "pain and swelling in upper extremity" with no history of trauma and fever. She was a known case of diabetes mellitus for 12 years who was under insulin therapy. She had separated from her husband and was living alone. On physical examination, she was afebrile with no abnormality in general examination but had multiple local erythema on her left upper extremity skin with tenderness and crepitation. There were small red macules and papules over sites of erythema which were crusted in some areas. Her left hand x-ray (Figure 1) was significant for subcutaneous emphysema. All laboratory studies were within normal limits. On further questioning, she had multiple admissions during the previous year with the same complaint and all the diagnostic workups were inconsequential.

Since the patient was right-handed and all the presentations were on the left arm, and there were no signs of gas-forming infections or visceral perforations, the skin lesions were attributed to air injection sites and the diagnosis of factitious subcutaneous emphysema was made.

Isolated subcutaneous emphysema of an extremity is a rare finding and in majority of cases gas-forming infections, either traumatic or non-traumatic, are the primary etiology. There are however cases, in which it may develop following tears of the gastrointestinal, genitourinary, and respiratory systems. Factitious subcutaneous emphysema is another cause which is very rare. The presence of small puncture marks, localized multiple sites of involvement, and recurrent presentations (as in our case) are clues to this diagnosis. Most of the patients had an underlying psychiatric condition or relevant history. After psychiatric consultation, the patient transferred to psychiatric ward with the diagnosis of personality and mood disorder for further treatment.

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References