Dear Editor,

Hand and forearm injuries caused by high-pressure fluid injection are underreported and often diagnosed late.1,2 In certain professional activities such as construction work, there is an increased risk of these injuries, especially in the index finger of the non-dominant limb, due to the use of tools such as paint guns or air compressors.3

This article reports the case of a 57-year-old man, who presented to the emergency department with a punctiform entry, combined with local ischemia, promotes infection.1,3

The patient had a good postoperative course, with no signs of infection or ischemia throughout the follow-up period. At eight weeks post-trauma, there was complete resolution of symptoms, and the patient was able to resume his professional activity.

When faced with a high-pressure fluid injection injury, early assessment and treatment are essential since these injuries can have devastating consequences even though their external appearance can often seem innocuous.4 The rates of amputation described in the literature can exceed 50%, even when injuries are treated within the first six hours.5 In cases where amputation is avoided, the resulting sequelae prevent more than half of individuals from returning to their professional activities. Injected substances can progress through tissues along paths of least resistance, such as neurovascular bundles, triggering inflammatory reactions that contribute to tissue irrigation compromise and eventual necrosis. In addition, the presence of a portal of entry, combined with local ischemia, promotes infection.1,3

High-pressure fluid injection injuries are a surgical emergency. Prompt diagnosis is very important to avoid serious complications such as amputation. Given the severity of this condition and the associated consequences, clear and thorough communication with patients is crucial.

AUTHOR CONTRIBUTIONS
FS, MR: Conception and design of the work, data acquisition, analysis, and interpretation, drafting of the work.
MJL: Data analysis and interpretation, drafting of the work.
AS: Critical review of the manuscript.
VV: Critical review and approval of the final version of the manuscript.

PROTECTION OF HUMANS AND ANIMALS
The authors declare that the procedures were followed

Keywords: Amputation, Surgical; Decompression, Surgical; Hand Injuries
Palavras-chave: Amputação Cirúrgica; Descompressão Cirúrgica; Lesões da Mão

REFERENCES

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Figure 1 – Punctiform wound on the volar surface of index finger (A). Thick and adhesive consistency of plaster adherent to the neurovascular bundle (B).

according to the regulations established by the Clinical Research and Ethics Committee and to the Helsinki Declaration of the World Medical Association updated in 2013.

DATA CONFIDENTIALITY
The authors declare having followed the protocols in use at their working center regarding patients’ data publication.

PATIENT CONSENT
Obtained.

REFERENCES
3. Rosenwasser MP, Wei DH. High-pressure injection injuries to the hand.

COMPETING INTERESTS
The authors have declared that no competing interests exist.

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