

## CLINICAL IMAGE

# A case of lip edema caused by the accidental ingestion of a bar of soap

Tatsuya Fujihara  | Ryosuke Ishida | Yuji Yamamori

Division of Emergency and Critical Care  
Department, Shimane Prefectural Central  
Hospital, Izumo, Japan

**Correspondence**

Tatsuya Fujihara, Department of  
Emergency and Critical Care, Shimane  
Prefectural Central Hospital, 4-1-1  
Himebara, Izumo, Shimane 693-8555  
Japan.  
Email: tatsuyahujihara898@gmail.com

**Funding information**

None

**Abstract**

The most common symptom following the accidental ingestion of a soap is lip edema. Although most cases are asymptomatic or exhibit mild symptoms, in some cases, aspiration pneumonia, oropharyngeal edema, and bronchial obstruction may be fatal.

**KEY WORDS**

accidental ingestion, lip edema, soap

## 1 | CASE

An 83-year-old woman with Alzheimer's disease presented with lip edema and dyspnea 1 h after accidentally ingesting a bar of soap. Although she complained of slight dyspnea, her respiratory rate was 24 breaths/min and O<sub>2</sub> saturation was 96% in room air. Physical examination revealed lip edema (Figure 1), but no stridor or obvious abnormalities in breath sounds. The patient was admitted for observation of her airway, respiratory, and digestive symptoms after administration of antihistamines but was discharged 12 h after the mishap, with no symptoms.

## 2 | QUESTION

What is the most common symptom following the accidental ingestion of a bar of soap?

Most body soaps have an alkaline pH (9–12), which damages tissues by saponifying the fats.<sup>1,2</sup> A study by De Pralormo et al. revealed that lip edema is the most common symptom (55% of symptomatic patients), and dementia is

the most common cause of accidental ingestion (39.8% of occurrences). In most cases, the symptoms of accidental ingestion of soap are mild. If accidental ingestion of a bar of soap occurs, patients' airway and respiratory conditions



FIGURE 1 Lip edema on admission

This is an open access article under the terms of the Creative Commons Attribution License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited.

© 2021 The Authors. *Clinical Case Reports* published by John Wiley & Sons Ltd.

should be carefully monitored, as the soap may cause aspiration pneumonia, oropharyngeal edema, vomiting, or bronchial obstruction and may even be fatal, as reported previously.<sup>1</sup>

#### ACKNOWLEDGEMENTS

None.

#### DATA AVAILABILITY STATEMENT

Data available on request from the authors.

#### CONFLICT OF INTEREST

Not declared.

#### AUTHOR CONTRIBUTIONS

TF contributed to the clinical management of the patients, wrote the first draft, and managed all the submission processes. RI contributed to the clinical management of the patient and revised the manuscript. YY organized the manuscript.

#### INFORMED CONSENT

Informed consent has been obtained for the publication of this clinical image.

#### ORCID

Tatsuya Fujihara  <https://orcid.org/0000-0003-4290-5839>

#### REFERENCES

1. De Pralormo S, Brunet M, Marquis A, Bruneau C, Le Roux G, Deguigne M. Ingestion of bar soap may produce serious injury: clinical effects and risk factors. *Clin Toxicol*. 2019;57(5):356-361.
2. Hoffman RS, Burns MM, Gosselin S. Ingestion of caustic substances. *N Engl J Med*. 2020;382(18):1739-1748.

**How to cite this article:** Fujihara T, Ishida R, Yamamori Y. A case of lip edema caused by the accidental ingestion of a bar of soap. *Clin Case Rep*. 2021;9:e04484. <https://doi.org/10.1002/ccr3.4484>