

CASE REPORT

# Catheter-based local analgesia for the fractured mandible in a patient with a history of hereditary angioedema

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## Abstract

Hereditary angioedema is a rare genetic condition causing episodes of angioedema—including life-threatening laryngeal oedema. Episodes can be unpredictable, or triggered by factors such as trauma, drugs or dental treatment. When faced with a patient with a fractured mandible, who has had a severe attack of angioedema when prescribed either ibuprofen or codeine based analgesia, this required an alternative approach to analgesia. Using a catheter and local anaesthesia, we were able to keep the patient comfortable, and pain free.

## INTRODUCTION

Hereditary angioedema is caused by a deficiency or malfunction of the protein C1 inhibitor (C1-INH)—also called C1 esterase inhibitor. C1-INH is part of the complement system, coagulation system and fibrinolytic system.

Symptoms include [1]:-

- Localised subcutaneous swelling:
  - The oedema is circumscribed and non-pitting.
  - There is no urticaria or itching.
- Abdominal symptoms:
  - There may be prodromal burning, tingling, erythema or a serpiginous rash (erythema marginatum).
  - May give a clinical picture of intestinal obstruction or an acute abdomen with tenderness and guarding.
  - Symptoms include abdominal pain (can be severe or sudden in onset), nausea and vomiting, diarrhoea, constipation and abdominal distention.
  - Large fluid shifts with ascites or hypovolaemic shock may occur.

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for long term analgesia, and does not have to be administered by a doctor/dentist once the catheter is *in situ* (Fig. 3).

### CONFLICT OF INTEREST STATEMENT

None declared.

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