Most patients (89.7%) had type I C1-INH-HAE. Twenty-five (67.6%) of the 37 dental procedures had rhC1-INH.

**BACKGROUND**

- Hereditary angioedema (HAE) due to functional C1 esterase inhibitor deficiency (C1-INH-HAE) is characterized by recurrent episodes of painful and often disabling swelling in subcutaneous and/or submucosal tissues.
- C1-INH-HAE attacks are generally unpredictable, but triggers for an attack can include having a dental or medical procedure (eg, surgery), other trauma, or stress.

- A pre-emptive management plan for patients undergoing these types of situations may reduce the risk of C1-INH-HAE attacks.

- Recommendations include administration of short-term prophylaxis in patients with frequent attacks of C1-INH-HAE, although data are lacking for other dental procedures.

- Recombinant human C1 esterase inhibitor deficiency (C1-INH-HAE) is characterized by recurrent episodes of painful and often disabling swelling in subcutaneous and/or submucosal tissues.

**AIM**

To evaluate rhC1-INH as short-term prophylaxis prior to dental procedures in patients with non-hemorrhagic angioedema (eg, C1-INH-HAE).

**METHODS**

In this retrospective study, patients diagnosed with angioedema due to C1-INH deficiency from Europe and the United States received rhC1-INH prior to dental procedures.

- Patients from this study population who were not receiving long-term prophylaxis and had a dental procedure conducted without short-term prophylaxis were included in a self-control group and these procedures were included in the control analyses.

- Angioedema attacks were recorded through 2 days and 7 to 7 days post-procedure.

**RESULTS**

- 29 patients (Table 1) were treated for 37 dental procedures.

- Most patients (89.7%) had type I C1-INH-HAE.

- 5 patients had type II C1-INH deficiency.

- In an analysis of 70 procedures (eg, dental, surgical, endoscopy) in which rhC1-INH short-term prophylaxis was administered (median, 60 min prior), 97.1% were HAE attack-free during the first 2 days post-procedure.

- Additional data are needed on the efficacy and safety of rhC1-INH as short-term prophylaxis.

**DISCUSSION**

**Figure 1. Median rhC1-INH Prophylactic Dose and Timing of Administration**

- During ≥7 to 7 days post-procedure, 3 attacks were observed in the rhC1-INH group (91.9%, 34/37) and 1 attack occurred in the self-control group (the only procedure that did not have an attack occur within the first 2 days).

- Thus, within 7 days post-procedure, 89.9% (33/37) of dental procedures remained attack free in the rhC1-INH group compared with none of the 16 dental procedures in the self-control group (Figure 2).

- No adverse events were reported.

**CONCLUSION**

Short-term prophylaxis with rhC1-INH, administered within ≥60 minutes before a dental procedure, was efficacious and safe in adults and reduced the risk of an attack post-procedure.

**REFERENCES**

10. Disclosures

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