# Differentiate with 8

## Consider 8 questions to identify a potential HAE patient<sup>1</sup>

It's important to determine the difference between GI problems, allergic angioedema, and HAE because the pathophysiology and the treatment of the diseases are different.

HAE patients are often subjected to nonessential medical procedures, such as unnecessary surgeries, ineffective treatments, or administration of antihistamines.<sup>2</sup>

### Questions

1. Unexplained edema?	○ Yes	○ No
2. Asymmetric swelling attacks to the extremities?	○ Yes	○ No
3. Unexplained abdominal pain?	○ Yes	○ No
4. Recurrent attacks?	○ Yes	○ No
5. Family history of similar episodes?	○ Yes	○ No
6. Symptoms (eg, tingling or nausea) signaling the onset of an attack? <sup>3</sup>	<b>○</b> Yes	○ No
7. Antihistamines, epinephrine, or corticosteroids provide little relief? <sup>4</sup>	○ Yes	○ No
8. Angioedema without urticaria?	○ Yes	○ No

Answering **yes** to multiple questions may suggest a diagnosis of HAE.

## **Confirm the diagnosis**

"All patients suspected to have HAE-I/II (ie, recurrent angioedema in the absence of a known cause) should be assessed for blood levels of C1, C1-INH protein, and C1-INH function, and these tests, if abnormally low, should be repeated to confirm the diagnosis." –World Allergy Organization<sup>5</sup>



#### **Important Safety Information**

BERINERT is a plasma-derived concentrate of C1 Esterase Inhibitor (Human), indicated for the treatment of acute abdominal, facial or laryngeal attacks of hereditary angioedema (HAE) in adult and pediatric patients. The safety and efficacy of BERINERT for prophylactic therapy have not been established.

BERINERT is contraindicated in individuals with a history of life-threatening systemic reactions to C1 esterase inhibitor preparations (including anaphylaxis).

Monitor patients for early signs of allergic or hypersensitivity reactions (including hives, generalized urticaria, chest tightness, wheezing, hypotension, and anaphylaxis). If hypersensitivity is suspected, immediately discontinue administration of BERINERT and initiate appropriate treatment. Epinephrine should be immediately available for treatment of acute severe hypersensitivity reactions.

Serious arterial and venous thromboembolic (TE) events have been reported following administration of recommended doses of C1 Esterase Inhibitor (Human) products to patients with HAE. Risk factors may include presence of an indwelling venous catheter/access device; prior history of thrombosis; underlying atherosclerosis; use of oral contraceptives or certain androgens; morbid obesity; and immobility. Weigh benefits/risks before administering to patients with known risk factors for TE events and closely monitor such patients during and after BERINERT administration. TE events also have been reported with C1 Esterase Inhibitor (Human) products when used for unapproved indications at higher than recommended doses.

Appropriately trained patients may self-administer BERINERT upon recognition of an HAE attack. Advise patients to seek medical attention immediately following self-administration for laryngeal attacks, and to seek medical attention if progress of any attack makes them unable to properly prepare or administer dose of BERINERT.

BERINERT is derived from human plasma. The risk of transmission of infectious agents, including viruses and theoretically, the agents of Creutzfeldt-Jakob Disease (CJD) and its variant form (vCJD), cannot be completely eliminated.

The most serious adverse reaction reported in subjects who received BERINERT in clinical studies was an increase in severity of pain associated with HAE. Dysgeusia was the most common adverse reaction reported in over 4% of subjects and more frequently than in the placebo group.

BERINERT has not been evaluated in pregnant women or nursing mothers, and should be used only if clearly needed. In clinical trials, the half-life of BERINERT was shorter and clearance was faster in children than in adults; the clinical implication of this difference is not known.

Please see full prescribing information on BERINERT.com.



References: 1. Bork K, Meng G, Staubach P, Hardt J. Hereditary angioedema: new findings concerning symptoms, affected organs and course. Am J Med. 2006;119(3):267-274. 2. Nzeako UC, Frigas E, Tremaine WJ. Hereditary angioedema: a broad review for clinicians. Arch Intern Med. 2001;161(20):2417-2429. 3. Prematta MJ, Kemp JG, Gibbs JG, Mende C, Rhoads C, Craig TJ. Frequency, timing, and type of prodromal symptoms associated with hereditary angioedema attacks. *Allergy Asthma Proc.* 2009;30(5):506-511. **4.** Zuraw BL. Clinical practice: hereditary angioedema. N Engl J Med. 2008;359(10):1027-1036. 5. Craig T, Aygören-Pürsün E, Bork K, et al. WAO guideline for the management of hereditary angioedema. World Allergy Organ J. 2012;5(12):182-199.

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