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ORIGINAL RESEARCH

78. Ekterly (Sebetralstat): A First in Class Oral On Demand Treatment for Hereditary Angioedema

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Background: Hereditary angioedema (HAE) is a rare, potentially life-threatening genetic disorder characterized by recurrent episodes of edema affecting the skin, gastrointestinal tract, and airway. With a prevalence of only about 0.0012% globally (range 0.0007–0.01%), its rarity contributes to frequent delays in diagnosis and treatment, increasing risk of severe complications. Until recently, on-demand therapies for HAE required intravenous or subcutaneous administration, limiting accessibility and adherence.

Objective: This study evaluates the clinical significance, therapeutic efficacy, and potential impact of Sebetralstat (Ekterly), the first FDA-approved oral on-demand therapy for HAE.

Methodology: A review of recent clinical trials was conducted, assessing efficacy and safety with key parameters including symptom relief time and bradykinin levels.

Discussion: Sebetralstat is a selective plasma kallikrein inhibitor that blocks bradykinin production, the central mediator of swelling in HAE. By reducing bradykinin, it prevents excessive vascular leakage responsible for symptoms. Clinical trials demonstrated rapid relief, with a median improvement time of 1.6 hours and some patients responding within 10 minutes. In laryngeal attacks, pooled analysis showed symptom relief within a median of 1.07 hours and complete resolution within 24 hours in 64.3% of cases, especially critical outcome to prevent airway obstruction. The oral formulation provides a practical alternative to injectables, enabling timely, unobtrusive treatment and improved quality of life.

Conclusion: Sebetralstat marks a breakthrough in HAE therapy, combining convenience, rapid action, and favorable safety. Its availability is expected to enhance compliance, empower patients, and redefine standards of care.

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