Effective Angioedema Treatment:From Prophylaxis to NovelTherapeutic Optionsaa

[redacted]

Hereditary, Idiopathic, and Acquired Angioedema

Angioedema is a medical condition characterized bylocalized swelling ofthe deeper layers of the skin and mucous membranes.There are three main types of angioedema based on its underlying cause –hereditary angioedema (HAE), idiopathic angioedema, and acquired angioedema.

Hereditary angioedema (HAE) is caused due to adeficiency or dysfunction of C1-esterase inhibitor (C1-INH), a protein thatregulates certain inflammatory pathways. Symptoms typically appear in childhoodor adolescence. Idiopathic angioedema has no identified triggering factor andaccounts for majority of cases. Acquired angioedema is caused due tomedications, medical conditions, or autoimmune disorders that reduce C1-INH levelssimilar to HAE.

Treatment Goals and Considerations

The principal goals in Angioedema Treatment include promptly stopping an ongoingattack, preventing future attacks, managing long-term control, andimproving patient’s qualityof life. Treatment options used will depend on the typeand severity of attacks, previous treatment responses, and patientpreferences.

Safety and adherence are also important factors toconsider given that angioedema treatments involve lifelongmanagement. Cost and insurance coverage posed due to the expensive specialty therapiesavailable further influence treatment decisions. The complexity of the conditionrequires coordinated care from specialists.

Prophylactic Therapies

Regular use of prophylactic medications can effectively reduce attack frequency in HAE patients. The options include C1-INH concentrates administered via intravenous or subcutaneous routes. A new oral drug, berotralstat, that inhibits plasma kallikrein is also approved for prophylaxis.

These targeted therapies are highly effective and convenient treatment options.
However, their high drug acquisition costs and need for refrigeration to preserve shelf life may pose challenges. Anti-fibrinolytics like tranexamic acid are less expensive alternatives but are associated with risks like blood clots. Prophylactic attacks are ideally driven by attack history, severity of