



# Comparison of high-intensity focused ultrasound therapy under nasal endoscopy guidance versus first-line drug treatment in patients with persistent allergic rhinitis

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**ABSTRACT.** The aim of this study was to determine whether high-intensity focused ultrasound (HIFU) therapy under nasal endoscopy guidance could provide better efficacy and safety in patients with persistent allergic rhinitis (PAR) than the first-line drugs recommended by the World Health Organization. A total of 120 adult patients with PAR were randomly divided into 2 groups (N = 60 each). One group underwent HIFU therapy under nasal endoscopy guidance using an ultrasound rhinitis therapeutic machine. The other group served as the control group and was treated with corticosteroid nasal spray and oral cetirizine hydrochloride. All patients underwent follow-up treatment for 1 year, after which the efficacy and safety were evaluated. There was no significant difference between the two groups ( $P > 0.05$ ) in the total effective rate. Moreover, no complications such as nasal adhesion, septal perforation, mucosal atrophy, and hyposmia were observed, indicating that HIFU was as effective as the first-line drug treatments

recommended by the World Health Organization for symptom relief in PAR patients. The treatment efficacy, repeatability, safety, economical aspects, ease of performance, and few complications of HIFU therapy strongly suggest that HIFU should be routinely incorporated into clinical practice.

**Key words:** Persistent allergic rhinitis; Nasal endoscopy; High-intensity focused ultrasound; H<sub>1</sub>-antihistamines; Intranasal corticosteroids; Ultrasound's thermal effect