Survey on the attitude of Italian allergologists concerning the topical nasal therapy

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To the Editor,

topical nasal therapy includes a broad list of drugs and non-pharmacological remedies that may be used to manage different upper airway diseases (1). In addition, intranasal therapies may be administered using various kinds of devices. Therefore, this topic is particularly complex and tangled, so many allergologists are discouraged from topical therapies, limiting themselves to prescribing predestined sprays (2). To clarify the matter, an intersocietal Delphi Consensus tried to define a series of recommendations on this issue (3). This initiative was promoted by 14 Italian scientific societies, including allergological ones. Successively, an intersocietal survey was conducted to portray specialists' attitudes about using intranasal therapy in clinical practice (manuscript under review). As the global results were multifaceted and complicated to interpret per a single discipline, the present *post hoc* study aimed to analyze the responses provided by allergologists alone.

The survey was administered using a web platform that guaranteed anonymity and was proposed to the fellows of allergological Italian societies: the Italian Association of Allergologists and Immunologists of Territory (AAITO), the Italian Society of Allergology Asthma and Immunology (SIAAIC), and the Italian Society of Pediatric Allergology and Immunology (SIAIP).

A panel of experts, who prepared the Delphi Consensus, drafted the questionnaire.

Table I reports the single questions and the answers. One hundred thirty-eight allergists participated in the survey. Most of them were from Northern Italy. Almost all allergists (95%) use topic nasal therapy. The most common disease topically treated is allergic rhinitis (82.3%), followed by chronic rhinosinusitis with nasal polyps (80.5%), chronic rhinosinusitis without nasal polyps (73.2%), and non-allergic rhinitis (69%). As regards the used device, the most preferred nasal irrigation was the simple syringe with nozzle (37.4%) and high-volume/low-pressure device (34%); for nebulization, pre-dosed spray (79.4%) and atomizer nasal spray (35.2%).

As concerns the used substances, the most commonly used were corticosteroids (74.9%), isotonic saline (60.4%), antihistamines (43.4%), and combined corticosteroids/antihistamines (41%).

Participants usually prescribe a cycle of topical therapy; half use it continuously, and 46.4% use it as needed. Finally, almost all allergists (90%) train patients to perform topical nasal therapy correctly.

Topical nasal therapy has some advantages compared to systemic one as it is more rapid and effective, allows a better distribution into the nasal cavity, and considerably reduces the dosage and, consequently, side effects (4). However, topical nasal therapy is a complex and multifaceted matter that embraces different molecules, devices, and diseases (5).

Allergists usually manage allergic diseases, mainly concerning allergic rhinitis and type 2 inflammatory diseases, such as chronic rhinosinusitis with nasal polyps and non-allergic rhinitis, mostly the non-allergic rhinitis with eosinophils (NARES) (4,5). Consistently, the results of this survey confirmed that these immune-mediated disorders represent the most common diseases topically treated by allergists. Pre-dosed spray is the most used device by allergists. This choice is probably derived from the most used medications, corticosteroids, and antihistamines, usually available as pre-dosed nasal sprays.

Comparing the present results with the global sample of participants, including also ENT specialists and pediatricians, the most common diseases topically treated were allergic rhinitis (79.1%), chronic rhinosinusitis with or without nasal polyps (78.6% and 73.1%, respectively). Pre-dosed spray is the most frequently used device (66%). Corticosteroids are the most commonly used medication (67.2%), followed by isotonic saline solution (63%), hyaluronic acid (39.6%), hypertonic saline solution (39.3%), and antihistamines (39.1%). These findings underlined the primary commitment of allergists, such as managing inflammatory and immune-mediated upper airways based on corticosteroid use. In this regard, an important issue to be considered in the clinical practice is the adherence to intranasal corticosteroids, mainly before and during biological tgherapy for nasal polyposis, as recently addressed (6). Allergists less commonly prescribe other treatments (hyaluronic acid and saline solutions) as they could believe to be less specific for dampening type 2 inflammation.

In conclusion, this survey demonstrated that a group of Italian allergists use topical nasal therapy essentially for type 2-mediated diseases, prefer a pre-dosed nasal spray, and prescribe primarily corticosteroids.

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Table 1 Questions included in the Intersocietal Survey on use of topical nasal therapy in Italy and answers.

Questions	Main answers
In which geographical area do you practice: North-West, North-East, Centre, South, Islands?	North: 56.4% Centre: 19.3% South and Islands: 24.3%
Do you use topical nasal therapy?	Yes: 95% No: 5%
In which disease you use it (% of patients):	Allergic rhinitis (82.3%) Chronic rhinosinusitis with nasal polyps (80.5%) Chronic rhinosinusitis without nasal polyps (73.2%) Non-allergic rhinitis (69%) Acute rhinosinusitis (64.5%) Vasomotor rhinitis (48.2%)
What devices do you use? If yes, in what % of patients? <u>Nasal Irrigation:</u> <u>Nebulization:</u>	 <u>Nasal Irrigation:</u> Simple syringe with nozzle (37.4%) High-volume and low-pressure devices (34.1%) <u>Nebulization:</u> Pre-dosed sprays (79.4%) Atomizers as nasal spray (35.2%) Nasal douches as pneumatic micronized (34.3%)
What substances do you prescribe? If yes, in what % of patients?	Corticosteroids (74.9%) Isotonic saline solution (60.4%) Antihistamines (43.4%) Combined antihistamines/corticosteroids (41%) Hypertonic saline solution (33.8%) Hyaluronic acid (30.9%)
Do you use topical treatment in cycles?	Yes: 92.1%
Do you use topical therapy continuously?	Yes: 50%
Do you use topical treatment as needed?	Yes: 46.4%
Do you explain to the patient how to use the various devices, their maintenance and durability?	Yes: 90%