



# **Nasal flow variability measured by optical rhinometry in the course of an early allergic reaction**

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## **Introduction**

Optical rhinometry is a newly standardized technique for assessing nasal obstruction in nasal allergen provocation testing. It is one of the few techniques that accurately determine the beginning of an allergic reaction as it measures optical density, which is consistent with the degree of response.

## **Aim**

To evaluate the usefulness of optical rhinometry in nasal allergen provocation testing.

## **Material and methods**

The study population was a group of 45 subjects (25 diagnosed with an allergy to common environmental allergens and 20 controls). Nasal allergen provocation testing was conducted with the use of *Dermatophagoides pteronyssinus* and *Dermatophagoides farina* (5,000 SBU/ml).

## **Results**

The onset of the nasal mucosa allergen response in the form of nasal obstruction was observed at 10.40 min. The subsequent reaction developed rapidly, with only 53 s from the initial stage of nasal obstruction to complete obstruction (optical density 0.4552).



# XV MIĘDZYNARODOWY KONGRES

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## Conclusions

Due to its informative potential, optical rhinometry is a valuable tool in assessing the nasal mucosal response to topical allergen application