

ABSTRACT

Non-Infectious Rhinitis - Epidemiology and clinic

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We have assessed self-reported rhinitis in the absence of common cold, called "Non-infectious rhinitis", (NIR).

The occurrence of NIR was investigated in a population sample of 2,044 individuals, aged 21-51, in an industrialised county in Sweden who answered a questionnaire relating to NIR and occupational exposure to potential irritants and sensitisers.

For the clinical evaluation of NIR we compared four different, objective methods to assess nasal obstruction in 41 subjects without current nasal symptoms. Two of these methods, peak nasal inspiratory flow (PNIF) and acoustic rhinometry were used to assess objective signs of rhinitis in 37 workers exposed to paper dust compared with 36 controls in a soft-paper industry. Finally we assessed subjective and objective signs of rhinitis, including the quality of life, in a population sample of 184 individuals with asthma, compared with controls.

The prevalence of NIR in a general population was 40% while the incidence rate was 13.5/1,000 person-years. Smokers, subjects with atopy and women had a higher incidence rate of NIR. Men exposed to fire fumes, male cleaners and women exposed to paper dust also ran an increased risk of NIR. The clinical study confirmed that workers exposed to paper dust had more symptoms of nasal blockage and nasal crusts that deteriorated during the working day, but we found no objective signs of nasal inflammation. Among the subjects with asthma we found an increased reversible swelling of the nasal mucosa. Subjects with asthma and NIR also experienced more deterioration in their quality of life than those without NIR.

Conclusion: these results indicate that NIR is common in a general population. Occupational exposure to paper dust and asthma was associated with an increased risk of NIR.

Key words: Non-infectious rhinitis, Paper dust, Asthma, Quality of life, Acoustic rhinometry
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