NICE guidance

Intranasal phototherapy for allergic rhinitis

Interventional procedures guidance
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www.nice.org.uk/guidance/ipg616

1 Recommendations

1.1 Current evidence on the efficacy and safety of intranasal phototherapy for allergic rhinitis is limited in quantity and quality. Therefore, this procedure should only be used in the context of research. Find out what only in research means on the NICE interventional procedures guidance page.

1.2 Further research should include: details of patient selection including medication use; underlying medical conditions; the intensity, duration and wavelength of light used; patient-reported outcomes; comparison with existing treatments; and the effects of repeated long-term use. NICE may update the guidance if further evidence is published.

2 The condition, current treatments and procedure

The condition

2.1 Allergic rhinitis is inflammation of the inside of the nose caused by an allergen such as pollen, house dust mites or mould. It causes symptoms such as sneezing, itchiness and a blocked or runny nose. Most people with allergic rhinitis have mild symptoms that can be easily and effectively treated. For some people, however, symptoms can be severe and persistent and have a significant impact on quality of life.

Current treatments

2.2 First-line treatments for allergic rhinitis include medication such as antihistamines and intranasal corticosteroids. For more severe or persistent symptoms that do not respond to medication, immunotherapy (sublingual or subcutaneous) is sometimes used.

The procedure

2.3 Intranasal phototherapy involves using a device with light-emitting probes, which are inserted into the nasal cavity for several minutes at a time. Some devices are designed to be self-administered, whereas others are administered by a clinician. There are different devices available and the duration and dose of treatment varies. The devices use different frequencies of light, ranging from ultraviolet to infrared.

2.4 Intranasal phototherapy is claimed to increase local blood flow and suppress inflammation. The aim is to reduce the symptoms of allergic rhinitis.

3 Committee considerations

The evidence

3.1 To inform the committee, NICE did a rapid review of the published literature on the efficacy and safety of this procedure. This comprised a comprehensive literature search and detailed review of the evidence from 9 sources, which was discussed by the committee. The evidence included 1 meta-analysis, 7 randomised controlled trials (4 of which were also included in the meta-analysis) and 1 case series (also included in the meta-analysis), and is presented in table 2 of the interventional procedures overview. Other relevant literature is included in the appendix of the overview.

3.2 The specialist advisers and the committee considered the key efficacy outcomes to be: quality of life, patient-reported improvement of rhinitis symptoms, and reduction in medication use.

3.3 The specialist advisers and the committee considered the key safety outcomes to be: epistaxis, damage to the epithelia of the nose, and malignancy.

3.4 Patient commentary was sought but none was received.

Committee comments

3.5 The committee was informed that there is a theoretical risk of intranasal malignancy with this procedure.

3.6 The published research used a variety of different devices with differing wavelengths and treatment protocols, although most of the evidence came from the use of ultraviolet light.

3.7 Allergic rhinitis is a very common condition.

3.8 The mechanism of action of this procedure is poorly understood.

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Endorsing organisation

This guidance has been endorsed by Healthcare Improvement Scotland.