

NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

Interventional procedures consultation document

Intranasal phototherapy for allergic rhinitis

Allergic rhinitis is inflammation of the inside of the nose caused by an allergen such as pollen or dust. This procedure involves putting a special light-emitting device into the nose for several minutes at a time. The aim is to reduce inflammation and so relieve the symptoms of allergic rhinitis, such as sneezing, itchiness and a blocked or runny nose.

The National Institute for Health and Care Excellence (NICE) is looking at intranasal phototherapy for allergic rhinitis. NICE's interventional procedures advisory committee has considered the evidence and the views of specialist advisers, who are consultants with knowledge of the procedure.

The committee has made draft recommendations and we now want to hear your views. The committee particularly welcomes:

- comments on the draft recommendations
- information about factual inaccuracies
- additional relevant evidence, with references if possible.

This is not our final guidance on this procedure. The recommendations may change after this consultation.

After consultation ends:

- The committee will meet again to consider the original evidence and its draft recommendations in the light of the consultation comments.
- The committee will prepare a second draft, which will be the basis for NICE's guidance on using the procedure in the NHS.

For further details, see the [Interventional Procedures Programme process guide](#).

Through our guidance, we are committed to promoting race and disability equality, equality between men and women, and to eliminating all forms of discrimination. One of the ways we do this is by trying to involve as wide a range of people and interest groups as possible in developing our

interventional procedures guidance. In particular, we encourage people and organisations from groups who might not normally comment on our guidance to do so.

To help us promote equality through our guidance, please consider the following question:

Are there any issues that require special attention in light of NICE's duties to have due regard to the need to eliminate unlawful discrimination, advance equality of opportunity, and foster good relations between people with a characteristic protected by the equalities legislation and others?

Please note that we reserve the right to summarise and edit comments received during consultations or not to publish them at all if in the reasonable opinion of NICE, there are a lot of comments, or if publishing the comments would be unlawful or otherwise inappropriate.

Closing date for comments: 22 March 2018

Target date for publication of guidance: June 2018

1 Draft 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.
- 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.

Committee comments

- 3.4 The committee was informed that there is a theoretical risk of intranasal malignancy with this procedure.
- 3.5 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.
- 3.6 Allergic rhinitis is a very common condition.

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

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Chairman, interventional procedures advisory committee

February, 2018

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