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Fact sheet: Rosacea



Red patches of skin on your face, tiny visible blood vessels and spots: many people know these problems well. They may be caused by rosacea – a common inflammation of facial skin. Skin diseases can be difficult to cope with and often affect people’s confidence and wellbeing. Rosacea is no exception. But there is a lot that people can do themselves. This fact sheet describes what exactly rosacea is, how it is treated and what can be done to relieve the symptoms.

### **What is rosacea?**

Rosacea is a chronic inflammation of the skin on the face which can last for many years. It often develops into a rash, with papules and pustules (red and yellow pimples) and spidery red veins. It comes and goes in bouts: sometimes the symptoms get worse and sometimes they get better or go away on their own.

It usually starts over the age of 20, affecting about 1 in 10 adults, and is more common in fair-skinned people and women. Many do not realize that they have a skin condition.

There are four different stages of rosacea:

- stage 1: mostly redness,
- stage 2: papules, pustules and patches,
- stage 3: edemas (swelling due to fluid retention) and inflammatory bumps on the nose, and
- stage 4: symptoms affecting the eyes.

Rosacea does not necessarily always get worse: in many people, the symptoms stay the same over long periods of time.

The lumps and swelling are often particularly unpleasant, and can lead to a swollen and bulbous nose, usually in men (a condition called rhinophyma).

Rosacea can be especially problematic if it affects the

eyelids or eyes. Inflammation around the eyelids, dryness in the eyes and corneal inflammation can be painful. In very rare cases, if the eyes are regularly affected badly, rosacea can cause serious damage to the eyes.

### **What causes rosacea?**

The exact cause of rosacea is not clear. Some types of rosacea seem to run in families. It is more common in people who have fair hair and fair skin. However, we know that rosacea is not contagious. Although the symptoms include pimples, rosacea is not acne. Acne is caused by too much sebum (oil) in the skin, but this is not what causes rosacea.

Rosacea is believed to be caused by several things: problems in the blood vessels in the skin, sun damage of the connective tissue, and an abnormal inflammatory reaction. Rosacea may also be an adverse effect of some medications.

### **What can I do to avoid outbreaks of rosacea?**

Over time, people often learn that certain things trigger their outbreaks. The triggers can be different from person to person. In general, though, anything that makes the face flush might make rosacea worse. Some people react to certain foods or alcohol, others react to cosmetics or particular medications. Getting to know what these triggers are and avoiding them may help, although it is not known if any particular dietary changes work.

Sunlight is believed to be one of the potential triggers. Although the effects of sunlight on rosacea symptoms vary from person to person, sunburn stresses the skin and may even damage it.

Keeping a diary for a few weeks or months can help to find out what is triggering outbreaks. A diary like this can be used to record:

- how much of certain foods and drinks (such as spicy meals or alcohol) you had,
- what other factors your skin was exposed to (like the sun, wind, exercise, hot water),
- how bad your rosacea symptoms were, and
- when you used medication, what kind of medication, and how much.

You will find a printable version of a rosacea diary for you to use here (URL: <http://www.informedhealthonline.org/index.510.en.html>).

If you suspect that something is triggering your rosacea flare-ups, you can observe whether your symptoms are really affected by it. For example, if you think that a facial cream you are using is making things worse, you can stop using it for a while and keep track in your diary of whether your rosacea symptoms get better.

## What are the treatment options?

There are a lot of creams, lotions and gels recommended for the treatment of rosacea but not all of them have been studied sufficiently in trials.

The treatments with the most evidence so far are creams and gels with either azelaic acid or the antibiotic metronidazole in them. They have been shown to help relieve the symptoms of rosacea. It can sometimes take a few weeks before a clear improvement is seen.

Antibiotics such as erythromycin, clindamycin or drugs belonging to a group called tetracyclines are also used. There are indications that the antibiotic drug doxycycline from the group of tetracyclines can help to relieve skin redness in rosacea. Other drugs that are taken by mouth have not been studied enough. Drugs that are swallowed have an effect on the entire body, so they have more adverse effects than ointments or creams. The adverse effects include diarrhea, nausea and sensitivity to light. We have summarized detailed information about the research on medications for rosacea here (URL: <http://www.informedhealthonline.org/index.85.en.html>).

You can read about things that should generally be kept in mind when taking antibiotics here (URL: <http://www.informedhealthonline.org/index.472.en.html>).

The hormone-like substance isotretinoin is a very powerful drug. In Germany, it has only been approved for use against severe acne. It is associated with a lot of adverse effects, such as skin and mucous membrane irritations, some of which are serious. Because of this, isotretinoin is only used very cautiously in the treatment of rosacea, particularly for more serious cases, in the form of capsules. It cannot be used by women who might get pregnant because it can harm unborn babies. You can read more about the use of medication for a purpose for which it has not been licensed (so-called "off-label use") here (URL: <http://www.informedhealthonline.org/index.151.en.html>).

Treatment poses a particular problem if rosacea affects the eyes. No treatments have been shown to help against this form of the skin condition. If lumps and swelling on the nose become very serious, surgery and certain laser treatments are options. Enlarged blood vessels on the face may also be treated by laser therapy.

## What effects does rosacea have and how can I cope with it?

Although rosacea is normally harmless, facial redness can be very difficult to handle emotionally. Many people with the condition will have experienced unpleasant situations, like being stared at or realizing that others suspect that their nose is red because they drink too much alcohol. This usually happens due to a lack of knowledge about rosacea. Some people find it helpful to be open about their skin condition and explain it to their family, friends and colleagues.

Even though rosacea is such a common condition, many people know very little about it. Other common skin conditions like acne are much better known, and so more people understand how difficult it can be. The people around you may not find the problem as noticeable as you do yourself: we often look at our own faces much more closely and critically than others do. If the redness in your face is obvious and makes you self-conscious, then cosmetics could help make the problem less obvious. You need to be careful, though, that the cosmetics that you use do not themselves make the rosacea worse. If the symptoms keep returning, learning how you can avoid some outbreaks and cope with the symptoms when they do occur are both key to helping you manage the condition.

## This additional information has been provided by the U.S. National Medical Library:

The U.S. Food and Drug Administration (FDA) has approved the use of isotretinoin for the treatment of severe recalcitrant nodular acne. Because FDA does not regulate the practice of medicine, doctors are not prohibited from prescribing isotretinoin for conditions other than severe recalcitrant nodular acne.

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**Next planned update:** April, 2014. You can find out more about how our health information is updated here (URL: [http://www.gesundheitsinformation.de/our-methods.643.en.html?bab\[subpage\\_id\]=0-8](http://www.gesundheitsinformation.de/our-methods.643.en.html?bab[subpage_id]=0-8))

## Glossary

### antibiotics

Antibiotics are medicines that can be used for bacterial and some fungal infections. Antibiotics do not work against viruses. Well-known antibiotics include penicillin, tetracycline and chloramphenicol.

### evidence

Evidence is what we call scientific proof from well-conducted, good-quality scientific trials that have been carefully designed to answer specific questions. Depending on the types of questions, different scientific research methods (types of study) are most appropriate to find reliable answers to these questions. Randomized controlled trials (RCTs), for example, are the best way to get reliable evidence on the effectiveness of medical treatments (interventions). This type of study, however, is not the best form of evidence for all possible questions, and does not provide the best answers to all kinds of questions, either. Epidemiological studies, for example, are very suitable for establishing well-founded proof for the spreading of a disease in the population.

### inflammation

An inflammation is a (defense) reaction of the body to an injury, irritation or infection. More blood is brought to the respective body part to protect the body. This is why this body part feels warmer, becomes swollen and red and is usually more sensitive. If the inflammation affects the mucous membranes, they secrete more fluid than usual. This helps to wash out the germs that have entered.

## Sources

IQWiG health information is based on research in the international literature. We identify the most scientifically reliable knowledge currently available, particularly so-called “systematic reviews”. These summarize and analyze the results of scientific research on the benefits and harms of treatments and other health care interventions. This helps medical professionals and people who are affected by the medical condition to weigh up the pros and cons. You can read more about systematic reviews and why these can provide the most trustworthy evidence about the state of knowledge here (URL: <http://www.informedhealthonline.org/index.61.en.html>) . The authors of the major systematic reviews on which our information is based are always approached to help us ensure the medical and scientific accuracy of our products.

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Van Zuuren EJ, Kramer S, Carter B, Graber MA, Fedorowicz Z. Interventions for rosacea. *Cochrane Database of Systematic Reviews*: Version 2011, Issue 3. CD003262 [Cochrane summary (URL: <http://onlinelibrary.wiley.com/o/cochrane/clsysrev/articles/CD003262/frame.html>) ]

**The German Institute for Quality and Efficiency in Health Care (IQWiG)**

The German Institute for Quality and Efficiency in Health Care (IQWiG) was established by legislation to provide evaluations of the effectiveness, quality and efficiency of healthcare services. This includes the assessment of medicines as well as the publication of health information for consumers and patients.

**Evidence basis of our health information**

Our information is based primarily on systematic reviews of the effects of health care. Systematic reviews are necessary to gain an objective picture of health care. In order to do this, a clear question is formulated. Researchers then find all the relevant studies that could answer this question. They then evaluate those studies.

You can find a list of the evidence and other scientific literature on which this information is based at **[www.informedhealthonline.org](http://www.informedhealthonline.org)**

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