

Rosacea: Which medications have been well studied?



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Rosacea is a common chronic skin condition that affects the face. About 1 in 10 people (10%) have it. It can cause flushing and redness, papules (red pimples) and pustules (pus pimples), as well as enlarged blood vessels. In its more severe forms it can cause swelling and bumps, and it often affects the eyes and eyelids, too.

A wide variety of creams, lotions and gels are available for the relief of rosacea symptoms. For more severe forms, stronger oral medications are also used, some of which can have serious adverse effects. You can learn more about rosacea, including the non-drug treatment options, in our fact sheet (URL: <http://www.informedhealthonline.org/index.102.en.html>).

In order to try to find out what the most effective treatments for rosacea are, researchers from the Cochrane Collaboration (an international network of researchers) systematically analyzed the available trials. Practically all of the trials found tested medications for rosacea, and hardly any of the trials looked at non-drug treatments.

Creams containing azelaic acid and metronidazole can reduce symptoms

The researchers analyzed 58 trials on the treatment of rosacea. Many of the trials were not very reliable. But overall, they found evidence for some drugs that they can relieve the symptoms of rosacea. These drugs include one cream with the substance azelaic acid, and creams with the antibiotic called metronidazole.

Azelaic acid was the substance that was studied best. Here are some figures on the treatment success:

- Symptoms got better in 64 out of 100 people who used the drug (64%).
- In comparison: In people who used a cream without azelaic acid, symptoms improved only for 40 out of 100 people (40%).

In other words, 24 out of 100 people had a benefit from using azelaic acid (24%). Creams containing azelaic acid and metronidazole also proved to be rather well tolerated:

There were not many adverse effects, or they were not especially severe. When using creams, however, it can sometimes take a few weeks before a clear improvement is seen.

Of the oral medications, the antibiotic drug doxycycline seems to be able to reduce skin redness. Research results indicate that lower doses (40 mg) are not less effective than higher doses, but that they lead less commonly to adverse effects.

Other frequently used treatments have not been adequately tested. This is also true of several oral medications that are used for serious widespread skin changes caused by rosacea. Those medications can also cause adverse effects, including diarrhea, nausea and – in some cases – sensitivity to light.

You can find more information on how to use medications safely in our section Choosing between treatment options (URL: <http://www.gesundheitsinformation.de/index.667.56.en.html>). You can read more about things that should generally be kept in mind when taking antibiotics here (URL: <http://www.informedhealthonline.org/index.472.en.html>).

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Next planned update: March, 2014. You can find out more about how our health information is updated here (URL: <http://www.gesundheitsinformation.de/our-methods.643.en.html>).

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.

Cochrane Collaboration

The Cochrane Collaboration is an international network of thousands of researchers and others. They work together in teams called Cochrane Review Groups to answer questions about health care by doing systematic reviews of evidence. To achieve this, the members of the Collaboration have developed systems and methods for systematically finding and analysing the results of trials of health care interventions. The goal of the Cochrane Collaboration is to help patients, health care practitioners and others make more informed decisions about health care. You can read more about the Cochrane Collaboration at their website.

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.

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. 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.

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)

Disclaimer

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