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# **Interventions for rosacea (Review)**

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Cochrane Database of Systematic Reviews 2003, Issue 4. Art. No.: CD003262.

DOI: 10.1002/14651858.CD003262.pub2.

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#### [Intervention Review]

# Interventions for rosacea

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Editorial group: Cochrane Skin Group.

**Publication status and date:** Unchanged, published in Issue 2, 2005.

**Citation:** van Zuuren EJ, Graber MA, Hollis S, Chaudhry MMMC, Gupta AK. Interventions for rosacea. *Cochrane Database of Systematic Reviews* 2003, Issue 4. Art. No.: CD003262. DOI: 10.1002/14651858.CD003262.pub2.

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#### **ABSTRACT**

#### **Background**

Rosacea is a common skin condition affecting the face, characterised by flushing, redness, pimples, pustules and dilated blood vessels. The eyes are often also involved. The cause of rosacea is unclear. It is a chronic disease, which can be controlled in most cases with appropriate treatment. Numerous treatments are in use although it is unclear which are best, and which are most appropriate for the different types of rosacea.

### **Objectives**

To assess and summarise current evidence for the efficacy and safety of treatments for rosacea.

#### Search methods

We searched the Skin Group Specialised Trials Register (March 2002), Cochrane Central Register of Controlled Trials (CENTRAL, March 2002), MEDLINE (from 1966 to March 2002), EMBASE (from 1980 to March 2002), Biosis (from 1970 to March 2002) and the Science Citation Index (from 1988 to March 2002). Reference lists of trials and key review articles were also searched. Relevant manufacturers and experts were contacted.

#### **Selection criteria**

Randomised controlled trials in people with moderate to severe rosacea were included. Studies judged by the reviewers to have seriously flawed methodology were excluded.

## Data collection and analysis

Study selection, assessment of methodological quality, data extraction and analysis were carried out by two independent reviewers.

#### **Main results**

The evidence provided by twenty-two included studies was generally weak because of poor methodology and reporting. One of our primary outcome measures, 'quality of life', was not assessed in any of the studies. Only two studies of ocular rosacea could be included.

Pooled data from two trials involving 174 participants indicated that topical metronidazole is more effective than placebo (odds ratio 5.96, 95% confidence interval 2.95 to 12.06). Data from a between-patient trial (114 patients) and a within-patient trial (33 patients) of azelaic cream versus placebo were not pooled, but both showed good evidence of efficacy. Data pooled from three studies of oral tetracycline versus placebo involving 152 participants showed that, according to physicians' ratings, tetracycline was effective (odds ratio 6.06, 95% confidence interval 2.96 to 12.42). Some evidence of efficacy of oral metronidazole was provided by one small study.



#### **Authors' conclusions**

The quality of studies evaluating rosacea treatments was generally poor. There is evidence that topical metronidazole and azelaic acid cream have a therapeutic effect. There is some evidence that oral metronidazole and tetracycline are effective.

There is insufficient evidence concerning the effectiveness of other treatments. As many of these treatments are used for rosacea, good RCTs are urgently needed.

#### PLAIN LANGUAGE SUMMARY

#### Topical metronidazole, and azelaic acid have been shown to reduce rosacea, but more research is needed on other treatments.

Rosacea is a common skin condition causing flushing, redness, papules (red pimples on the skin) and pustules on the face. It often causes inflammation of the eyes and/or eyelids. Rosacea is not the same as acne. Treatments for rosacea include azelaic cream, several antibiotics and isotretinoin (trade name Roaccutane). The review of trials found that topical metronidazole (an antibiotic) and azelaic cream appear to be effective, but more evidence is needed on other treatment options that are widely used, for example tetracyclines and isotretinoin. Research is needed on treatments for ocular rosacea, and the role of sunscreens and dietary changes in the treatment of rosacea.