Review: topical mupirocin or fusidic acid may be more effective than oral antibiotics for limited non-bullous impetigo


Q Which treatments are effective for impetigo?

METHODS

Data sources: Cochrane Skin Group Specialised Trials Register (March 2002), Cochrane Central Register of Controlled Trials (Issue 1, 2002), National Research Register (2002), Medline (1966 to January 2003), EMBASE/Excerpta Medica (1980 to March 2000), LILACS (November 2001), and metaRegister of Controlled Trials on the Current Controlled Trials website; hand searches of Yearbook of Dermatology (1938–66) and Yearbook of Drug Therapy (1949–66); reference lists of retrieved articles; and pharmaceutical companies.

Study selection and assessment: published and unpublished randomised controlled trials (RCTs) in any language that assessed any intervention for impetigo (non-bullous, bullous, secondary, and impetiginised dermatoses) in patients with diagnosed impetigo or impetigo contagiosa, preferably confirmed by bacterial culture; studies that assessed patients with broadly defined bacterial skin infections or pyoderma were included if results for patients with impetigo were reported separately. 2 independent reviewers assessed the methodological quality of individual trials using the Jadad (3 items) and Delphi (9 items) scales.

Outcome: clinical cure or improvement (eg, clearance of crusts, blisters, and redness) assessed by investigators at 1 week after initiation of treatment.

MAIN RESULTS

57 trials (3533 evaluable patients) met the selection criteria. 38 different treatments (20 oral and 18 topical) were assessed. 12 of 57 trials were assessed as good quality (scores ≥50% on both quality scales).

Non-bullous impetigo. Topical antibiotics had better cure rates than placebo, oral antibiotics (specifically, mupirocin v oral erythromycin), and disinfecting agents (table). No single topical antibiotic was superior to another. Oral antibiotics. Oral penicillin did not differ from placebo (1 study). Several single trials compared oral antibiotics, and significant differences in cure rates were found for the following: cefuroxim v erythromycin (1 trial); erythromycin v penicillin (2 trials); amoxicillin plus clavulanic acid v amoxicillin alone (1 trial); and cloxacillin v penicillin (2 trials). Disinfecting treatments (hexachlorophene) did not differ from placebo or oral antibiotics (penicillin) (1 trial).

Bullous impetigo. Topical antibiotics (neomycin/bacitracin or chloramphenicol) had lower cure rates than oral antibiotics (erythromycin) (1 trial). A comparison of different topical antibiotics found that fusidic acid had higher cure rates than neomycin/bacitracin or chloramphenicol (1 trial). A comparison of 2 oral antibiotics (cephalexin v dicloxacillin) found no difference in cure rates.

CONCLUSIONS

Topical antibiotics (mupirocin or fusidic acid) may be slightly more effective than oral antibiotics (erythromycin) for patients with limited, non-bullous impetigo. Limited evidence suggests that disinfecting treatments are not effective.

A modified version of this abstract also appears in Evidence-Based Medicine.