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Topical anti-inflammatory agents for seborrhoeic dermatitis of the face or scalp.

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Abstract

BACKGROUND: Seborrhoeic dermatitis is a chronic inflammatory skin disorder affecting primarily the skin of the scalp, face, chest, and intertriginous areas, causing scaling and redness of the skin. Current treatment options include antifungal, anti-inflammatory, and keratolytic agents, as well as phototherapy.

OBJECTIVES: To assess the effects of topical pharmacological interventions with established anti-inflammatory action for seborrhoeic dermatitis occurring in adolescents and adults.

SEARCH METHODS: We searched the following databases up to September 2013: the Cochrane Skin Group Specialised Register, CENTRAL in The Cochrane Library (2013, Issue 9), MEDLINE (from 1946), Embase (from 1974), LILACS (from 1982), and the GREAT database. We searched five trials databases and checked the reference lists of included studies for further references to relevant randomised controlled trials (RCTs).

SELECTION CRITERIA: We included RCTs in adults or adolescents (> 16 years) with diagnosed seborrhoeic dermatitis of the scalp or face, comparing topical anti-inflammatory treatments (steroids, calcineurin inhibitors, and lithium salts) with other treatments.

DATA COLLECTION AND ANALYSIS: Pairs of authors independently assessed eligibility for inclusion, extracted data, and evaluated the risk of bias. We performed meta-analyses if feasible.

MAIN RESULTS: We included 36 RCTs (2706 participants), of which 31 examined topical steroids; seven, calcineurin inhibitors; and three, lithium salts. The comparative interventions included placebo, azoles, calcipotriol, a non-steroidal anti-inflammatory compound, and zinc, as well as different anti-inflammatory treatments compared against each other. Our outcomes of interest were total clearance of symptoms, erythema, scaling or pruritus scores, and adverse effects. The risk of bias in studies was most frequently classified as unclear, due to unclear reporting of methods. Steroid treatment resulted in total clearance more often than placebo in short-term trials (four weeks or less) (relative risk (RR) 3.76, 95% confidence interval (CI) 1.22 to 11.56, three RCTs, 313

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participants) and in one long-term trial (lasting 12 weeks). Steroids were also more effective in reducing erythema, scaling, and pruritus. Adverse effects were similar in both groups. There may be no difference between steroids and calcineurin inhibitors in total clearance in the short-term (RR 1.08, 95% CI 0.88 to 1.32, two RCTs, 60 participants, low-quality evidence). Steroids and calcineurin inhibitors were found comparable in all other assessed efficacy outcomes as well (five RCTs, 237 participants). Adverse events were less common in the steroid group compared with the calcineurin group in the short-term (RR 0.22, 95% CI 0.05 to 0.89, two RCTs, 60 participants). There were comparable rates of total clearance in the steroid and azole groups (RR 1.11, 95% CI 0.94 to 1.32, eight RCTs, 464 participants, moderate-quality evidence) as well as of adverse effects in the short-term, but less erythema or scaling with steroids. We found mild (class I and II) and strong (class III and IV) steroids comparable in the assessed outcomes, including adverse events. The only exception was total clearance in long-term use, which occurred more often with a mild steroid (RR 0.79, 95% CI 0.63 to 0.98, one RCT, 117 participants, low-quality evidence). In one study, calcineurin inhibitor was more effective than placebo in reducing erythema and scaling, but there were similar rates in total clearance or adverse events for short-term treatment. In another study, calcineurin inhibitor was comparable with azole when erythema, scaling, or adverse effects were measured for longer-term treatment. Lithium was more effective than placebo with regard to total clearance (RR 8.59, 95% CI 2.08 to 35.52, one RCT, 129 participants) with a comparable safety profile. Compared with azole, lithium resulted in total clearance more often (RR 1.79, 95% CI 1.10 to 2.90 in short-term treatment, one RCT, 288 participants, low-quality evidence).

AUTHORS' CONCLUSIONS: Topical steroids are an effective treatment for seborrhoeic dermatitis of the face and scalp in adolescents and adults, with no differences between mild and strong steroids in the short-term. There is some evidence of the benefit of topical calcineurin inhibitor or lithium salt treatment. Treatment with azoles seems as effective as steroids concerning short-term total clearance, but in other outcomes, strong steroids were more effective. Calcineurin inhibitor and azole treatment appeared comparable. Lithium salts were more effective than azoles in producing total clearance. Steroids are similarly effective to calcineurin inhibitors but with less adverse effects. Most of the included studies were small and short, lasting four weeks or less. Future trials should be appropriately blinded; include more than 200 to 300 participants; and compare steroids to calcineurin inhibitors or lithium salts, and calcineurin inhibitors to azoles or lithium salts. The follow-up time should be at least one year, and quality of life should be addressed. There is also a need for the development of well-validated outcome measures.

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