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Emma Tavender

Review Group Co-ordinator, Cochrane Oral Health Group, MANDEC, University Dental Hospital of Manchester, Manchester, UK
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The following Cochrane systematic reviews were published in issue 1, January 2002, of *The Cochrane Library*. For a full list of reviews/protocols published by the Cochrane Oral Health Group, see the website: www.cochrane-oral.-man.ac.uk

Worthington HV, Clarkson JE, Eden OB. Interventions for treating oral mucositis for patients with cancer receiving treatment (Cochrane Review). In: *The Cochrane Library*, Issue 1, 2002 Oxford: Update Software.

Background: Although treatment of cancer is increasingly effective it is still associated with short and long-term side effects. One of the oral side effects, oral mucositis (ulceration), remains a major source of illness despite the use of a variety of agents to treat it.

Objectives: To assess the effectiveness of interventions for treating oral mucositis or its associated pain in people with cancer receiving chemotherapy and/or radiotherapy.

Search strategy: Computerised searches of Cochrane Oral Health Group Specialised Register, Cochrane Clinical Trials Register (CCTR), MEDLINE and EMBASE were undertaken. Reference lists from relevant articles were searched. Authors of eligible trials were contacted to identify trials and obtain additional information. Searches were made until May 2001 (CCTR 2001, issue 3).

Selection criteria: All randomised controlled trials comparing agents prescribed to treat oral mucositis in people receiving chemotherapy and/or radiotherapy. Outcomes were oral mucositis, oral pain, dysphagia, systemic infection, amount of analgesia, length of hospitalisation, cost and quality of life.

Data collection and analysis: Data were independently extracted, in duplicate, by two reviewers. Authors were contacted for details of randomisation, blindness and withdrawals. Quality assessment was carried out on these three criteria. Cochrane Oral Health Group statistical guidelines were followed and relative risk (RR) values calculated used fixed effects models as no significant heterogeneity was detected ($P > 0.1$).

Results: Fifteen trials involving 876 patients satisfied the inclusion criteria. Two agents, each in single trials, were found to be effective for improving [allopurinol RR, 0.63; 95% confidence interval (CI), 0.42–0.96] or eradicating mucositis (allopurinol RR, 0.59%; 95% CI, 0.42–0.84; vitamin E RR, 0.38; 95% CI, 0.14–0.97). The following agents were not found to be effective: benzydamine hydrochloride, sucralfate, tetrachlorodecaoxide, chlorhexidine and 'Magic' (lidocaine solution, diphenhydramine hydrochloride and aluminium hydroxide suspension). Three trials compared patient-controlled analgesia (PCA) to the continuous infusion method for controlling pain. There was no evidence of a difference, but less opiate was used per hour in PCA. One trial demonstrated that pharmacokinetically-based analgesia (PKPCA) reduced pain compared with PCA, but more opiate was used with PKPCA.

Reviewers' conclusions: There is weak and unreliable evidence that allopurinol mouthwash and vitamin E improves or eradicates mucositis. There is no evidence that PCA is better than the continuous infusion method for controlling pain although less opiate was used per hour for PCA. Further well-designed, placebo-controlled trials assessing the effectiveness of allopurinol mouthwash, vitamin E and new interventions for treating mucositis are still required.

Clarkson JE, Worthington HV, Eden OB. Interventions for treating oral candidiasis for patients with cancer receiving treatment (Cochrane Review). In *The Cochrane Library*, Issue 1, 2002. Oxford: Update Software.

Background: Treatment of cancer is increasingly effective but is associated with short- and long-term side effects. Oral side effects, including oral candidiasis, remain a major source of illness despite the use of a variety of agents to treat them.

Objectives: To assess the effectiveness of interventions for the treatment of oral candidiasis in people with cancer who were receiving chemotherapy and/or radiotherapy.

Search strategy: Computerised searches of Cochrane Oral Health Group Specialised Register, CCTR, MEDLINE and EMBASE were undertaken. Reference lists from relevant articles were searched and the authors of eligible trials were contacted to identify trials and obtain additional information. Searches were made until May 2001 (CCTR 2001, issue 3).

Selection criteria: All randomised controlled trials comparing agents prescribed to treat oral candidiasis in people receiving chemotherapy or radiotherapy for cancer. The outcomes were eradication of oral candidiasis, dysphagia, systemic infection, amount of analgesia, length of hospitalisation, cost and patient quality of life.

Data collection and analysis: Data were independently extracted, in duplicate, by two reviewers. Authors were contacted for details of randomisation and withdrawals and a quality assessment was carried out. The Cochrane Oral Health Group statistical guidelines were followed and RR values calculated using random effects models where significant heterogeneity was detected ($P < 0.1$).

Results: Eight trials, involving 418 patients, satisfied the inclusion criteria and are included in this review. Only two agents, each in single trials, were found to be effective for eradicating oral candidiasis. A drug absorbed from the gastrointestinal tract, ketoconazole, was more beneficial than placebo in eradicating oral candidiasis (RR, 0.35; 95% CI, 0.20–0.61). Clotrimazole, at a lower dose of 50 mg, was more effective than a lower 10 mg dose in eradicating oral candidiasis, assessed mycologically (RR, 0.47; 95% CI, 0.25–0.89). Another trial demonstrated no difference between a 10 mg dose of the partially absorbed drug, clotrimazole, and placebo. No differences were found when comparing different absorbed drugs; and comparing absorbed drugs with drugs which are not absorbed.

Reviewers' conclusions: There is weak and unreliable evidence that the absorbed drug, ketoconazole, may eradicate oral candidiasis and that a high (50 mg) dose of the partially absorbed drug, clotrimazole, may give greater benefit than a lower (10 mg) dose. Researchers may wish to prevent rather than treat oral candidiasis, however. Further well designed, placebo-controlled trials assessing the effectiveness of old and new interventions for treating oral candidiasis are needed.