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Treatment for oral mucositis in cancer patients

Worthington HV, Clarkson JE, Eden OB.
Interventions for treating oral mucositis for patients with cancer receiving treatment (Cochrane Review). Cochrane Library 2004; Issue 2. Chichester: John Wiley

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

Twenty-five trials involving 1292 patients satisfied the inclusion criteria. The reviewers found that there was weak and unreliable evidence that allopurinol mouthwash, vitamin E, immunoglobulin or human placental extract improved or eradicated mucositis. There was no evidence that patient-controlled analgesia (PCA) was better than a continuous infusion method for controlling pain. Less opiate was used per hour, however, and the duration of pain was shorter for PCA. Further, well-designed, placebo-controlled trials assessing the effectiveness of allopurinol mouthwash, immunoglobulin, human placental extract, other interventions investigated in this review and new interventions for treating mucositis are needed.

Impact of tobacco advertising on adolescent smoking behaviour

Lovato C, Linn G, Stead LF, Best A.
Impact of tobacco advertising and promotion on increasing adolescent smoking behaviours incisions (Cochrane Review). Cochrane Library 2003; Issue 4. Chichester: John Wiley

The tobacco industry denies that the marketing campaigns by its members target young nonsmokers, but it seems probable that tobacco advertising and promotion influences the attitudes of nonsmoking adolescents, and makes them more likely to try smoking. This Cochrane Review assesses the effects of tobacco advertising and promotion on the future smoking behaviour of nonsmoking adolescents.

Longitudinal studies were included that assessed individuals' smoking behaviour and exposure to advertising, receptivity or attitudes to tobacco advertising, or brand awareness at baseline, and assessed smoking behaviour at follow-up. Nine studies, which followed over 12 000 baseline nonsmokers, met the inclusion criteria. These studies consistently suggested that exposure to tobacco advertising and promotion is associated with the likelihood that adolescents will start to smoke.

Based on the strength and consistency of the findings across numerous observational studies, temporality of exposure and smoking behaviours observed, as well as the theoretical plausibility regarding the impact of advertising, the reviewers concluded that tobacco advertising and promotion increases the likelihood that adolescents will start to smoke.

Tissue adhesives for closure of surgical incisions

Coulthard P, Worthington H, Esposito M, van der Elst M, van Waes OJF.
Tissue adhesives for closure of surgical incisions (Cochrane Review). Cochrane Library 2004; Issue 2. Chichester: John Wiley

Sutures, staples and adhesive tapes are the traditional methods of wound closure, whereas tissue adhesives have entered clinical practice more recently. Closure of wounds with sutures enables meticulous closure, but they may induce tissue reactivity and usually require removal. Tissue adhesives offer the advantage to the patient that there are no sutures to remove later and to the surgeon that there is no risk of needlestick injury. Tissue adhesives have

been used primarily in emergency rooms, but this review examines use of tissue adhesives in the operating room, where surgeons are increasingly using these for the closure of surgical skin incisions.

Eight randomised controlled trials (RCT) were included (involving 630 patients in total). No statistically significant differences were found between various tissue adhesives and sutures (data from eight trials) for dehiscence, infection, satisfaction with cosmetic appearance (when assessed by patients), or surgeons' general satisfaction. No differences were found between a tissue adhesive and tapes (in two trials) for infection, patients' assessment of cosmetic appearance, nor between patient and surgeon satisfaction. A statistically significant difference was found, however, in the assessment by surgeons of cosmetic appearance.

Surgeons may consider the use of tissue adhesives as an alternative to sutures or adhesive tape for the closure of incisions in the operating room. However, incisions in areas of high tension such as the elbow and knee were excluded from investigation in the trials and therefore the use of tissue adhesives has not been evaluated in these situations. Similarly, patients whose general health may have had the potential to impair wound healing were excluded and so the tissue adhesive has not been evaluated in these individuals. There is a need for trials in all areas but, in particular, including patients whose incisions require closure in areas of high tension and patients whose general health may impair wound healing.

Neuroreflexotherapy for nonspecific low-back pain

Urrútia G, Burton AK, Morral A, Bonfill X, Zanoli G.
Neuroreflexotherapy for non-specific low-back pain (Cochrane Review). Cochrane Library 2004; Issue 2. Chichester: John Wiley

Of the wide range of therapeutic alternatives proposed for the management of low-back pain (LBP), there is a less widely used technique from Spain called neuroreflexotherapy (NRT). Very favourable results have been claimed following NRT, mainly in people who have chronic LBP.

This review included three RCT with a total of 125 subjects randomised to the control groups and 148 subjects receiving active NRT. NRT was the same in all three trials, whereas the control groups received sham-NRT in two trials and standard care in one. Two trials studied patients who had chronic LBP, while the third studied patients with a mix of chronic and subacute LBP. Clinical outcomes were measured in the short-term (15–60 days) in all three trials.

The authors conclude that NRT is a safe and effective intervention for the treatment of chronic nonspecific LBP. The efficacy is less clear for subacute LBP. These results, however, are limited to three trials conducted by a small number of specially trained and experienced clinicians, and carried out in a limited geographical location. No data are available on the ease of and timeframe needed for achieving that level of expertise. RCT by other practitioners in other locations that replicated the effects reported in this review are needed before recommending a broader practice.

Prolotherapy injections for chronic low-back pain

Yelland MJ, Del Mar C, Pirozzo S, Schoene ML, Vercoe P.
Prolotherapy injections for chronic low-back pain (Cochrane Review). Cochrane Library 2004; Issue 2. Chichester: John Wiley

This systematic review examined prolotherapy, an injection-based treatment for chronic LBP. Proponents of prolotherapy suggest that some back pain stems from weakened or damaged ligaments. Repeatedly injecting them with irritant solutions is believed to strengthen the ligaments and reduce pain and disability. Prolotherapy protocols usually include co-interventions to enhance the effectiveness of the injections.

Four high-quality studies (344 participants) were included, each of which measured pain and disability levels at 6 months. Three of the studies measured the proportion of participants reporting a greater than 50% reduction in pain or disability scores from baseline to 6 months. Two studies showed significant differences between the treatment and control groups for those reporting over 50% reduction in pain or disability.

Results from the trials could not be pooled, however. The authors found conflicting evidence regarding the efficacy of prolotherapy injections in reducing pain and disability in patients who have chronic LBP. Conclusions are confounded by clinical heterogeneity amongst studies and by the presence of co-interventions. There was no evidence that prolotherapy injections alone were more effective than control injections alone. In the presence of co-interventions, however, prolotherapy injections were more effective than control injections, more so when both injections and co-interventions were controlled concurrently.

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