

Abstracts on this page have been chosen and edited by Dr Trevor Watts

Alternative medicine; pharmacology

Herbal medicines and perioperative care

Ang-Lee MK, Moss J et al.
JAMA 2001; 286: 208-216

This review clearly shows an important need to identify herbal medicines which patients may be taking.

Researchers examined MEDLINE and Cochrane Collaboration databases from 1966 to 2000 for studies, case reports and reviews concerning the safety and pharmacology of 8 commonly used herbal preparations: echinacea (pharmacological effects uncertain), ephedra (ma huang: contains a range of alkaloids such as ephedrine), garlic (reduces platelet aggregation and blood pressure), ginkgo (from leaves of *Ginkgo biloba*: possible benefits in certain dementias), ginseng (possible steroidal effects), kava (from *Piper methysticum*: anxiolytic and sedative), St John's wort (*Hypericum perforatum*: short-term benefits in moderate depression) and valerian (sedative and hypnotic).

The main perioperative concerns identified were: echinacea — allergy, reduced effectiveness of immunosuppressants, long-term immunosuppressive potential; ephedra — cardiac ischaemia and stroke risk; garlic and ginkgo — increased bleeding risk; ginseng — hypoglycaemia, bleeding risk, reduction of warfarin anticoagulation; kava — increased sedative effect of anaesthetics, addictive potential; St John's wort — induction of cytochrome P450 enzymes affecting a wide range of drugs; valerian — increased sedative effect of anaesthetics, acute effects of abrupt withdrawal. The authors emphasize that patients may not be forthcoming about herbal medications unless specifically asked about the matter, nor may they know exactly what they are taking.

Prosthodontics

A randomized clinical trial comparing the efficacy of mandibular implant-supported overdentures and conventional dentures in diabetic patients. Part IV: Comparisons of dietary intake

Hamada MO, Garrett NR et al.
J Prosthet Dent 2001; 85: 53-60

Denture replacement did not lead to alterations in dietary habits.

In a study of denture efficacy in diabetics, subjects were asked to complete a dietary log for 7 days prior to treatment and 7 days after completion of treatment 6 months later. Subjects received new maxillary complete dentures and were randomized to mandibular complete dentures (CD) or mandibular complete implant-supported overdentures (IOD). Dietary logs were returned by 21 of 37 CD subjects and 37 of 52 IOD subjects. These were analysed for water content and 28 nutritional variables.

All subjects had acceptable levels of metabolic control. Comparison of pre- and post-treatment logs showed no significant change in any variables, which included food energy, protein, various types of fat, car-

bohydrates, 11 vitamins and 8 essential elements. There was no difference between CD and IOD patients, or between insulin- and non-insulin-dependent diabetics. When compared with recommended dietary intakes, moderate deficiencies, particularly of fibre and carbohydrates, were noted in many patients, both before and after treatment.

Preventive dentistry

Effectiveness of a caries preventive programme in pregnant women and new mothers on their offspring

Gomez SS, Weber AA
Int J Paediatr Dent 2001; 11: 117-122

A programme aimed at mothers in Chile significantly reduced caries in their children.

Caries preventive programmes for mothers have been shown to reduce levels of mutans streptococci and caries in mouths of mothers and their children. In this study, mothers were first examined. Subsequently, they were given hygiene and dietary education specifically directed at their forthcoming children, and preventive and restorative treatment. Reinforcement occurred every 6 months at obstetric and paediatric clinic appointments.

Because of naval postings, 241 out of 930 4-months-pregnant mothers fully complied with requirements of the study. A group of 180 children (PDP) was randomly selected from those in the programme and compared with a group of 180 (C) from 228 mothers not in the programme but receiving normal dental care. Water in the area contained 1 ppm fluoride.

When the study ended, at age 1-2 yrs 96% of C children were caries-free compared with 98% of PDP children; respective figures for 2-3 yrs were 76% and 99%, and for 3-3.5 yrs, 58% and 94%. The authors consider the programme to be highly effective.

Sociology; paedodontics

Social factors associated with pediatric emergency department visits for caries-related dental pain

Von Kaenel D, Vitangeli D et al.
Pediatr Dent 2001; 23: 56-60

Emergency visit patients were predominantly poor, from single-parent families, and disproportionately from ethnic minorities.

Children from poor and minority families have more caries and experience more difficulty in accessing dental care. This study considered 984 dental emergency visits in an Ohio paediatric hospital during the year 1998, during which time 3502 visits were also made for regular dental care. In 440 of the emergencies, trauma was the cause, complaints unrelated to caries amounted to 205, and 300 of the remaining 339 had full documentation and were included in the study.

Two thirds of families were single-parent. Just under half the children were non-Caucasian and genders were approximately equally represented. Almost 60% of children did not return for follow-up care, though it was not possible to find whether these had sought it elsewhere. The percentage of uninsured patients seeking emergency care was over 6 times that in the county, ethnic minority attendance was 2.5 times as high, and single-parent families were 4.5 times as high. The authors note their findings are in agreement with a number of other studies on these disadvantaged groups.