



Title	Retrospective patient evaluation of supra-occluding cast restorations
Author(s)	Botelho, MG
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<p>41 Retrospective Patient Evaluation of Supra-occluding Cast Restorations. M. BOTELHO Discipline of Oral Rehabilitation. Prince Philip Dental Hospital, Hong Kong.</p> <p>The use of supraoccluding restorations has been described in the management of the worn dentition when insufficient interocclusal space is present for the provision of conventional cast restorations. In this clinical study 14 patients who had received supraoccluding restorations were retrospectively evaluated by way of a questionnaire to assess possible problems with such treatment. The restorations were either cemented as definitive castings that were placed approximately 1-2mm in supraocclusion or provided as an interim prosthesis to create space before final restoration (two cases). Eight of the patients were female and six male with the average age of 40.6 years. A total of 47 definitive cast restorations were provided, 33 of these were posterior onlays for 11 patients and 14 anterior palatal veneers for 3 patients. Using a questionnaire that included a ten-point Likert scale, patients were asked about craniomandibular pain, difficulty with eating, thermal sensitivity, whether the restorations affected speech, sleep, concentration at work or if they lost any weight. The common symptoms included: difficulty with eating food (10 patients, 5.9 mean), in particular meat and solid foods. Ten patients reported taking longer to chew food and 1 patient, experienced pain from their teeth during eating (mean 2.75), six of these patients reported pain of thermal origin while eating, however this pain disappeared with time. Excluding previous symptoms no pain was reported from the neck and low levels of pain reported from the face (mean 2.25) and head (1.0). Two patients reported higher levels of pain from the TMJ (mean 5.5) although this disappeared in one patient and reduced in the other. Four patients reported difficulty speaking (mean 2.0), three patients difficulty with sleeping (mean 3.6), although these disappeared in a few days and two patients difficulty concentrating at work (mean 2.0). Three patient reported weight loss (mean 2.1 kg). Two patients who expressed higher than average ratings to adverse symptoms disclosed that they did have work related stress which may have been a contributing factor. Six patients experienced no pain at any time from the teeth, TMJ, head neck or face during or after the treatment. <u>Further investigations are necessary to compare outcomes of such treatment with a control group to determine which differences are significant.</u></p>	<p>42 Longterm Results of Taperhead Osseointegrated Compression Screw Implants (OCSI). W.G. KOEPP* and K.-W. BUTOW Department of Maxillo-Facial and Oral Surgery, University of Pretoria, South Africa.</p> <p>In 1990 the OCSI was introduced as a non-submergible pure titanium implant. It's design was a further development of the narrow ridge implant and of the Cherbchev-Bauer type. The OCSI has been used extensively in patients with partial edentulous ridges (crown and bridgework), complete edentulous ridges (denture construction) and in implant-orthognathic reconstructive surgery.</p> <p>One-stage surgery is being advocated more often in order to save time and to decrease surgical morbidity. The Brånemark System* claims a success rate of 95.6% after loading the two-stage type. The long-term results published are those which were prothodontically rehabilitated in one Namibian practice. Between 1991 and 1994 72 implants were placed under GA and 15 under local anaesthesia. 37 of the former and seven of the latter were followed up in December 1997. Forty-three out of the 50 implants followed up were functioning clinically - 86% success rate. These numbers also reflect implants lost prior to loading. 37 implants could not be followed up in 1997. This success rate compares well with the critical review of the Swedish osseointegrated literature done by James <i>et al</i> (1986). <i>Five failures were the result of fractured implants - one fractured intra-operatively. It is striking that 83.7% of failures were in the mandible and of these 71% resulted from incorrect prosthodontic treatment. The remainder of the failures was due to peri-implantitis prior to loading.</i></p> <p><u>In conclusion, the OCSI compares well with other implant systems and a higher success rate still is expected with the new improved generations of the OCSI.</u></p> <p>This study was supported by Southern Implants, Centurion South Africa.</p>
<p>43 Relation of Calcification of the Styloid Chain and Eagle's Syndrome. DC BRUMMER* and CP OWEN. Dept of Prosthodontics, MEDUNSA</p> <p>Calcification of the styloid chain may cause pain in the head and neck area. This often plays a role in the presentation of Eagle's syndrome, and has been implicated in various cases of otalgia and other cases of atypical facial pain. There are however, no radiographic features that can be used to identify or distinguish symptomatic from non-symptomatic elongated processes and the diagnosis of Eagle's syndrome must be made clinically. We investigated the prevalence of calcification of the styloid chain and its relationship with Eagle's syndrome. If a high prevalence of calcification could be related to a high incidence of signs and symptoms of Eagle's syndrome, it may be advisable to examination patients routinely for such signs and symptoms. The orthopantomographs of 71 new patients, eighteen years and older, attending the MEDUNSA Oral Health Care Centre were examined for signs of calcification. Consenting patients were examined for signs of Eagle's syndrome and were requested to fill out a questionnaire related to symptoms of Eagle's syndrome. <u>The results of this study show that there is a high prevalence (69%) of calcification of the styloid chain amongst the patients examined. This is higher than earlier studies. Although 10% of patients with calcification showed some of the symptoms of Eagle's syndrome, none of them could positively be diagnosed as having the syndrome. The findings of this study also indicate that calcification of the styloid chain is not related to Eagle's syndrome.</u></p>	<p>44 Influence of Educational Level on Perceptions of Water fluoridation. U. M. E. CHIKTE, AA. BRAND and A. J. LOUW* Department of Community Dentistry, University of Stellenbosch, Tygerberg.</p> <p>Fluoridation of drinking water remains a most practical, economical and effective measure for the prevention and subclinical treatment of caries. The successful implementation of such a measure will however strongly be influenced by public perceptions. The purpose of this report was to review the influence of educational level on public perceptions of water fluoridation. A questionnaire was designed and administered through the Human Sciences Research Council (HSRC) to a random sample of 2220 individuals over the age of 18 years as part of a national household survey. Sampled individuals had to respond to questions relating to current knowledge, sources of information, the purpose of water fluoridation, and desirability thereof. Knowledge about water fluoridation increased with educational level from 13.5% in the up to grade 5 group, to 58% in the grade 12 plus group and unawareness decreased from 76% to 37% respectively. In the educational levels up to grade 12 the electronic media dominated, being the source of information among 40-50% of respondents, whereas in the grade 12 plus group the printed media (37%) dominated. Only 28% in the educational level up to grade 5 thought the purpose of water fluoridation was to protect against tooth decay. This gradually increased with educational level to 55% among individuals in the grade 12 plus category. Respondents who thought that water should be fluoridated, increased with level of qualification from 58% to 70% while those who disagreed, decreased with improved qualifications. <u>Since higher educational qualifications seem to influence perceptions on water fluoridation positively, information programmes on the issue of water fluoridation should be aimed at groups with lower educational levels with the electronic media the dominant source of information.</u></p>
<p>45 An analysis of pro and anti fluoridation attitudes in South Africa. BRAND A.A.* and CHIKTE U.M.E. Department of Community Dentistry, University of Stellenbosch, Tygerberg.</p> <p>A survey on attitudes to water fluoridation in South African population (n=2220) was undertaken in 1998. The purpose of this study was to evaluate responses and reasons of persons favouring and opposed to water fluoridation. In response to a structured questionnaire, 61.9% of respondents favoured fluoridation and 9% were against it. Of those who favoured the measure, 30% of respondents said it was because it would reduce tooth decay and 30% said it 'affects health', presumably positively. Other reasons include 'it purifies water' (10.3%), 'more people will be reached' (9.8%), 'it strengthens bones' (8%), 'it prevents plaque' (4.8%) and 'it improves the taste of water' (3.1%). There was a 1.3% 'don't know' response. Those opposed said that 'water should stay as it is' (28.1%), 'if it stays in the system it will create other problems' (15.8%), it 'affects health', presumably negatively (12.3%) and 'it will increase the cost of water' (8.8%). The 'don't know' response was 10.5%.</p> <p>Possible reasons for these findings could include: the differences between knowledge and beliefs, alternate health and lifestyle practices, levels of education, resistance to change and personality factors among others. <u>Understanding the assumptions people make about fluoridation would help to structure education programmes to provide accurate and comprehensive information.</u></p>	<p>46 Water Fluoridation Perceptions in South Africa. Analysis by income and occupation. U.M.E. CHIKTE and I. SARVAN* Dept of Community Dentistry, University of Stellenbosch.</p> <p>The purpose of this presentation is to report on the influence of income and occupation levels on the perceptions of water fluoridation in South Africa. A survey was conducted in 1998 by the Human Sciences Research Council in order to assess the attitudes towards water fluoridation of the South African population. A questionnaire was designed and administered in a national household survey. A representative sample of 2220 persons over the age of 18 years was interviewed. Questions relating to current knowledge, sources of information, the purpose of water fluoridation and its desirability as a public health measure were put to respondents. Knowledge levels varied from 19% to 68% across the occupational spectrum and from 13% to 88% across the income spectrum. Sources of knowledge on fluoridation were largely obtained from the printed and electronic media for both categories. More than a quarter of the population in both the occupational and income categories indicated the purpose of water fluoridation to be to purify water and to protect teeth from decay. The lower and middle income groups were more supportive of water fluoridation than the very high income groups. Persons in high administrative professional and executive positions were more opposed (27%) to water fluoridation than were semi-skilled and unskilled workers (5%). <u>Higher income and occupation seem to influence public perceptions of water fluoridation positively.</u></p>
<p>47 Attitudes to Water Fluoridation in South Africa 1998. U.M.E. CHIKTE* and A.A. BRAND Department of Community Dentistry, University of Stellenbosch.</p> <p>The successful implementation of water fluoridation (WF) in South Africa depends upon support from the public. A survey was conducted in 1998 by the Human Sciences Research Council in order to assess the attitudes towards water fluoridation of the South African population. A questionnaire was designed and administered in a national household survey. A representative sample of 2220 persons over the age of 18 years was interviewed. Questions relating to current knowledge, sources of information, the purpose of water fluoridation and its desirability as a public health measure were put to respondents. Only 25 % of the population had heard or read of WF. The major sources of information were the electronic and printed media (40% and 27% respectively), while 2.5% heard about it from dentists. Just over a third of the sample (35.5%) identified the purpose of WF as protecting teeth from decay; 28 % said it was to purify water and 28.5% were uncertain or, or did not know its purpose. Nearly two thirds (61.9%) indicated that fluoride should be added to drinking water if it can reduce tooth decay, while 9 % were not in favour of this measure and 29% were uncertain. The results suggest that <u>most people do not know what water fluoridation is or does, though most were in agreement that it should be implemented to reduce tooth decay.</u> Since a large number of people do not know what WF is, or what it does, health education programmes are recommended.</p>	<p>48 The Effect of Triclosan and PVM/MA Copolymer on Plaque Regrowth. H. VOLSCHENK*, J.B. DU PLESSIS, I.C. DU PREEZ and L. MATZNER Medical University of Southern Africa.</p> <p>Bacterial plaque is generally regarded as the primary etiological factor in the development of plaque-associated gingivitis and dental caries. Tooth brushing is not always effective in removing plaque, therefore, the use of antimicrobial and anti-plaque agents to control supra-gingival plaque formation is justified. The objectives of this study were to determine the clinical efficacy of a dentifrice containing 0.3% Triclosan and 2,0% PVM/MA copolymer in a 0.243% sodium fluoride/silica base versus a placebo to inhibit plaque regrowth over a 12-hour fasting period and to test the protocol using the methodology of a randomized double blind clinical trial. Subjects were examined twice daily for 7 consecutive days at 19h00 (pm) after dinner and brushing their teeth and again at 07h00 (am) before brushing their teeth, allowing for the 12 hour fasting period. A total of 35 subjects completed the study; 19 in the experimental and 16 in the control group. The six Ramfjord index teeth were evaluated using the Modified Navy plaque index. The McNemar test was used to test for symmetry between experimental and control groups and the Chi² and Fishers Exact test for association between the two groups. No significant differences were found in the plaque levels between the two groups at baseline. The mean differences in plaque scores between the pm and am readings for the experimental group were from Sunday pm to Sunday am; 2,8; 3,5; 4,5; 9,1; 2,7; 1,1; 1,0 and for the control group; 3,7; 9,5; 6,7; 4,3; 2,5; 3,3; 3,5. These differences were significantly different on two occasions for the experimental and four occasions for the control group. Although differences between pm and am values seemed to be greater in the control group than the experimental group, the differences were not significant. The inter-examiner variation of the three participating examiners were high. <u>In conclusion, the results indicate that the dentifrice containing Triclosan and PVM/MA Copolymer inhibits plaque regrowth over a 12-hour fasting period. The protocol was effective in measuring the latter. The inter-examiner variation can be eliminated by using only one or at the most two well-trained examiners.</u></p>