

The abstracts are available free online at
www.karger.com/doi/10.1159/000350670



60th ORCA Congress

July 3–6, 2013, Liverpool, UK

Abstracts

Contents

Session 1	
434 Microbiology	
Session 2	
450 De- and Re-Mineralization and Caries Risk	
Session 3	
465 Diagnostics and Fluoride	
Session 4	
480 Epidemiology	
Session 5	
495 Clinical Studies	
Session 6	
505 Erosion	
Session 7	
515 Fluoride and Clinical Studies	
Session 8	
521 Erosion and Clinical Studies	
527 Author Index	

was 2.07 ± 1.78 (SD) per patient. After 10 years, there was a reduction of 29% amalgam fillings and an increase of 75% resin and other materials. An average of 1.86 ± 1.80 restorations per patient was found. 78 (57%) restorations were made due to recurrent caries. 41 restorations were not replaced. After 20 years there has been a replacement of 71 restorations (70 due to recurrent caries and 1 fracture), 62 remained acceptable, 28 restorations were restored with amalgam, 29 photo polymerizable resins; 8 with cast metal restorations and 4 teeth were extracted. An average of 2.8 ± 1.80 restorations per patient were found. Recurrent caries were most often the reason for replacement of the fillings ($p < 0.05$, chi-square). Amalgam fillings were less frequently replaced than resin fillings ($p < 0.05$, chi-square). The criteria of renewal of dental restorations were mainly secondary caries. Restorations made by photo polymerizable resin showed more recurrent caries during their lifetime than amalgam. Since the initial treatment until the 20-year follow-up, there was a repetitive restoration cycle showing the need for a re-orientation to replace disease focus to oral health promotion both in teachers and dental students in UERJ.

165

Use of Conscious Sedation in the Management of Carious Lesions in Paediatric Dental Patients

C. Cucchi^{a,b}, G. Callejas^{a,b}, M. Muller-Bolla^{a,b}, L. Lupi-Pegurier^{a,b,*}

laurence.lupi-pegurier@unice.fr

^aNice Sophia Antipolis University, Odontologie URE01, and

^bNice University Hospital, Pôle Odontologie, Nice, France

Objective: In paediatric dentistry, anxiety or behavioural impairments often challenge dental treatments. Sedation procedures can then be a helpful tool. The present study aimed to evaluate the success rate of dental procedures of a 50% nitrous oxide in oxygen premix for the management of dental caries and their complications on children scheduled for dental treatments under sedation in the Nice University hospital, in France. **Methods:** This one-year (2012) clinical study examined first-visit sedation performed in healthy children who were in compliance with dental treatment. They were aged between 2 and 16 years, ASA I or II, had no mental or motor retardation. Parents gave their informed consent. The type of dental treatment performed was recorded. The session was considered successful if the planned dental treatment could be carried out whereas it was considered as a failure otherwise. Logistic regression analysis, conducted using SPSS 18.0 for Windows, using a stepwise selection of independent variables. The dependent variable was the success of sedation. **Results:** Among our 60 patients, 53.3% were male. The average age was 6.0 ± 3.3 years and the mean sedation time was 23.5 ± 9.2 min. The overall success rate was 85.0%. Only minor side effects were reported (6.7%) and they were more frequent for females (Fisher exact test $p = 0.041$). In multivariate modelling, the association between gender and success disappeared and side effects were shown to negatively affect the success rate ($p = 0.042$). **Conclusion:** Provided this technique is used by dentists skills in sedation, with the appropriate staff and equipment at their disposal, moderate sedation can be successfully used in the clinical management of paediatric dental patients and represents a reliable alternative to general anesthesia.

166

Caries Incidence and Progression in Young Adults: Baseline Clinical Data

J.C. Carvalho^{a,c,*}, A.T. Guimarães^b, H.D. Mestrinho^c

joana.carvalho@uclouvain.be

^aFaculty of Medicine and Dentistry, Catholic University of Louvain, Louvain, Belgium; ^bPostgraduate program in

Sustainable Development, Federal University of Paraná, Curitiba, and ^cFaculty of Health Sciences, University of Brasília, Brasília, Brazil

This is a prospective cohort study on oral health of young adults aged 18–30 years. The aims were: (1) to analyze caries incidence and progression at clinical as well as radiographic levels; (2) to identify predictors for caries incidence and progression in early adulthood. The subjects were 612 new patients seeking treatment at the University Hospital, Brussels, Belgium in 2010–2011. The participants answered a validated questionnaire about their socio-demographics, oral health related behavior and attitudes, and patient-reported outcomes. Caries experience was summarized in DMFT/S scores ($D_{\geq 1}$ = decayed active and inactive at non-cavitated and cavitated levels; $D_{\geq 3}$ = decayed active and inactive at cavitated dentine level; M = missing due to caries, F = filled, T = tooth, S = surface). Inter-examiner reliability of caries scores showed kappa of 0.86. Belgian citizens represented 80% and non-west European 10% of the sample (55.7% female and 44.3% male). Patients were residents in the three regions of Belgium: Brussels (57.4%), Wallonia (22.3%) and Flanders (20.3%). Poor oral health was perceived by 13.0% of patients. About half of the sample had experienced pain or discomfort due to caries whereas periodontal conditions were mentioned in 15.5% of cases only. A limited number of patients were diagnosed as caries-free at $D_{\geq 3}$ MFS level (13%). Difference between means $D_{\geq 1}$ MFT 7.05 (± 2.94) and $D_{\geq 3}$ MFT 5.51 (± 4.75) was significant (t test, $p < 0.0001$). The same trend was observed at surface level, 13.58 (± 14.14) and 11.43 (± 12.85), respectively ($p < 0.0001$). Occlusal surfaces had significant higher $D_{\geq 1}$ MFS mean scores of 5.19 (± 3.97) compared to approximal surfaces of posterior teeth with a mean of 4.00 (± 5.25) ($p < 0.0001$). In conclusion, our baseline data indicate that the oral health of individuals deteriorates considerably in early adulthood, i.e. between the age of 18 and 30 years.

167

Caries Incidence and Progression in Young Adults: Baseline Radiographic Data

H.D. Mestrinho^{a,*}, A.T. Guimarães^b, J.C. Carvalho^{a,c}

hdmestrinho@uol.com.br

^aFaculty of Health Sciences, University of Brasília, Brasília, and

^bPostgraduate Program in Sustainable Development, Federal University of Paraná, Curitiba, Brazil; ^cFaculty of Medicine and Dentistry, Catholic University of Louvain, Louvain, Belgium

The oral health status of populations changes from adolescence to early adulthood with a considerable reduction of the percentage of caries-free individuals. Studies examining caries incidence and