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Poster Session P06 – Dental Anxiety and Behavioural Management

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Poster Session P06/Dental Anxiety and Behavioural Management

P06–77

Investigation of human reliability relations between child patients and dentist

A. SUGIMOTO, M. OZAKI & W. MOTOKAWA
Division of Pediatric Dentistry, Department of Oral Growth and Development, Fukuoka Dental College, Japan

Introduction: The psychological relationship between patient and dentist has long been fully recognized as an important relationship. The reason is that child patients are immature both in mind and body. Ozaki *et al*. have been developing an original method to judge child patients' anxiety to dental treatment using a miniature dental office and dolls, and our investigation combined their methods with psychological developmental testing.
Materials and methods: We made dolls to express psychological attitudes toward dental treatment using a dental chair in the center of a miniature dental office. And we had their guardians submit to psychological developmental testing. The 74 children who received treatment were 4–7 years of age (male; 41, female; 33, average age; 5.6). We obtained informed consent.
Results: 1. Many of the children put the representative doll of the patient itself in all patterns (54%). 2. The child patients who put the representative doll itself showed a higher calendar age (5.6 years) and developmental age (5.7 years) than the other type of child. 3. The child who put dolls in line or in one place (14.8%) showed low developmental age (5.4 years), while those who didn't put the representative doll of the patient itself on the dental chair showed a high quotient (104.99) compared to the other type of child.
Conclusion: Children who scored high in developmental intelligence had a better understanding of dental treatment. These two factors, the doll's type patterns and the child's social developmental condition, were mutually related.

P06–78

Child behaviour modulation during first dental visit after administration of lemon balm

K. PARDO-ALDAVE[1], M. E. DÍAZ-PIZÁN[2], L. F. VILLEGAS[2] & E. BERNABÉ[2,3]
[1]*Universidad San Martín de Porres, Lima, Peru;* [2]*Universidad Peruana Cayetano Heredia, Lima, Peru,*[3]*Department of Epidemiology and Public Health, University College London, London, UK*

Introduction: This study set out to assess the effect of the ethanol extract of Melissa officinalis (lemon balm) at doses of 3 and 6 mg/kg on the behaviour of anxious children during dental examination.
Materials and methods: This was a double-blind, randomized, placebo-controlled trial of 90 6–7-year-old children (51 girls and 39 boys) attending a Maternal and Child Center in Lima, Peru. Children did not have any previous dental experience and were diagnosed as having dental anxiety using the Facial Image Scale. Participants were randomly allocated to three medication groups: the first two groups received a single oral dose of extract (3 and 6 mg/kg respectively) while the remaining group received a placebo. Clinical dental examinations were conducted 30 min after the administration of the corresponding medication and the child behaviour was assessed using the Frankl Behaviour Rating Scale. Kruskal–Wallis and Mann–Whitney tests were used to compare child behaviour between medication groups.
Results: There was a statistically significant difference in child behaviour during dental examination between groups ($P = 0.002$). In the *post hoc* comparisons, there were differences between children who received placebo and a dose of 6 mg/kg ($P = 0.008$) and between children who received doses of 3 and 6 mg/kg ($P = 0.017$). However, there was no significant difference between children who received placebo and a dose of 3 mg/kg ($P = 0.759$).
Conclusion: When the behaviour of anxious children was assessed during dental examination, the ethanol extract of M. officinalis had a greater effect compared with placebo, the dose of 6 mg/kg being more effective.

P06–79

Success rate and side-effects by different inhalation sedation systems in paediatric dentistry

C. VERGALLE, A. A. NEVES, D. DECLERCK & F. VINCKIER
Dental School, Unit of Paediatric Dentistry and Special Care, Catholic University of Leuven, Belgium

Introduction: The aim of this study was to evaluate treatment outcome regarding patient behaviour ('successful' or 'difficult') and possible undesirable side-effects associated with dental procedures undertaken with different sedation inhalation systems in a paediatric population.
Patients and methods: A total of 331 procedures (first-time visits) were evaluated from which 163 were performed during the year 2004 and 168 in 2008. While in 2004 the Kalinox® system was routinely used (73.6%), in 2008 it was substituted by the Quantiflex® system (74.4%). Oral pre-medication (midazolan) was equally used in both years (21.5% in 2004 and 17.3% in 2008), especially if the patient was noncooperative and refused to use the nose mask.
Results: Mean age was 6.74 years (± 2.75), ranging from 31 months (2.4 years) to 15 years with 52% of the studied population being female. There was no significant difference in the mean age of the patients among the studied years (*t*-Test, $P > 0.05$) neither among the type of sedation used (ANOVA, $P > 0.05$). Observed adverse effects included oversedation (3.2%) and overexcitation (1.3%). 70% of oversedation cases were associated with Kalinox®, 20% with Quantiflex® and 10% with oral pre-medication. 100% of the overexcitation cases were associated with oral pre-medication. Regarding treatment outcome, the use of Kalinox® was more frequently associated with 'successful' treatments (χ^2, $P < 0.05$). The type of dental treatment (fillings, extraction, endodontic treatment) was not related to the treatment outcome (χ^2, $P > 0.05$).
Conclusion: Kalinox® resulted in more successful treatment outcomes but was more frequently associated with undesirable side-effects in this population.

P06–80

Children's stress in dental treatment with salivary chromogranin A

C. MITSUHATA, J. SUZUKI & K. KOZAI
Department of Pediatric Dentistry, Hiroshima University Graduate School of Biomedical Sciences, Hiroshima, Japan

Introduction: It is well known that dental treatment can involve stress. This stress can lead to dental anxiety or fear of future dental care. Therefore, it is important to determine whether children are under a high degree of stress. It was reported that salivary chromogranin A (CgA) might be a sensitive and promising index for psychosomatic stress in adults. We investigated whether salivary CgA may also be used as an index of stress in children and suggested that CgA might be used to verify children's stress levels during dental treatment.
Patients and methods: This study investigated the magnitude of stress that children feel during dental treatment. We chose five children aged 3 or 4 years old who had cavities and needed repeated treatment requiring multiple trips to the dental office. Saliva samples were collected before and after each dental treatment using a cotton swab. CgA levels were determined by EIA. In order to evaluate the level of the children's dental anxiety and personality traits, we used the Children's Fear Survey Schedule – Dental Subscale (CFSS-DS) and a questionnaire that included a personality test.
Results: The CgA value was higher before treatment than after treatment. Therefore, children felt some stress in any dental treatment. The CgA score did not correlate with the content of the pre-arranged dental treatment and did not always affect their behavior or expression during treatment.
Conclusion: We observed that stress was influenced by what they experienced before treatment.

P06–81

Evaluation of children's pain by students during dental anaesthesia

A. MARIE-COUSIN, A. HUET, B. HINGANT, J. C. ROBERT & J. L. SIXOU
Department of Paediatric Dentistry, University of Rennes 1 and CHU of Rennes, France

Introduction: Dental anaesthesia (DA) is often feared by patients and practitioners because of the pain generated by this procedure. The way dental anaesthesia is appreciated by the children and the way practitioners can anticipate children's pain may influence the treatment session. The aim of this study was to assess the ability of students to evaluate children's pain during dental anaesthesia.
Materials and methods: Students (5th year) working at the dental hospital of Rennes were asked to evaluate the pain felt by young patients during 101 buccal infiltration anaesthesias. The pain was evaluated using a visual analogue scale, VAS, scored 0 to 10. The pain as evaluated by the patients was recorded on the same scale. Students were also asked to evaluate pain during needle penetration and injection. Results presented here are restricted to anaesthesia performed on nonanxious children (Venham modified score of 0–2). The results were analysed using the chi-square test. Comparisons were considered significant at $P < 0.05$.
Results: No pain was recorded by children (26/101) signicantly more often than by students (13/101) ($P = 0.02$). Pain assessment by the students was identical, very close or close (difference from 0 to 1) to that of the children in 66 cases. It was considered very different (difference >3) in 9 cases. Significantly more differences were noted when DAs were performed to treat anterior teeth ($P = 0.04$).
Conclusion: This study showed that some of the students still have difficulty in evaluating the pain felt by the children during dental anaesthesia.

P06–82

Pilot study in the adaptation of CFSS-DS Latvian version

L. KRONINA[1], M. RASCEVSKA[2] & R. CARE[3]
[1]*Pediatric Department, Institute of Stomatology, Riga Stradins University;* [2]*Faculty of Pedagogy and Psychology, Latvian University;* [3]*Department of Conservative Dentistry, Riga Stradins University, Riga, Latvia*

Introduction: The aim of the study was to adapt one of the most widely used questionnaires for assessing children's dental anxiety and fear – Children's Fear Survey Schedule – Dental Subscale (CFSS-DS) in Latvian version, to evaluate its validity and reliability in Latvian sample.
Patients and methods: Two independent interpreters translated the CFSS-DS questionnaire from English into Latvian. Data of 30 children (mean age 7.2 years, SD = 2.07, range 4–12, male 47%, female 53%), whose parents gave informed consent, were evaluated. Parents answered 15 questions, evaluating their children's fear in five-point Likert scale before the visit in the Department of Pediatric Dentistry, Institute of Stomatology.
Results: The mean CFSS-DS score was 28.75 (SD = 8.14, ranges = 17–50). The internal reliability (Kronbach alpha) of total scale was high ($\alpha = 0.82$). Convergent validity was satisfactory, calculating the Pearsons correlation between individuals' totals and item 1 ((fear of dentists), $r = 0.576$, $P < 0.01$). Scores were higher in boys (M = 30.5, SD = 8.92) than in girls (M = 27.0, SD = 7.35, $P < 0.05$). CFSS-DS didn't show a statistically significant age correlation in this stage of adaptation ($r = -0.029$, $P = 0.88$). All 15 questions formed an appropriate one factor structure according to the original questionnaire (after a provisional factor analysis).
Conclusion: CFSS-DS Latvian version has good psychometric properties, high internal reliability and satisfactory validity. A sample of 150–200 respondents must be analysed to assess the quality of adapted CFSS-DS Latvian version.

P06–83

Do uncooperative children feel more afraid of the dentist than those who cooperate well?

A. CZERLINSKI[1], D. J. KOENEN[1], H. LANG[1] & P. KROPP[2]
[1]*Department of Operative Dentistry and Periodontology;* [2]*Department of Medical Psychology, University of Rostock, Germany*

Introduction: During dental treatment children are usually under psychological pressure. As a result there is a more or less marked clinical manifestation of fear of dental treatment that is often falsely equated with fear of the dentist. Until now there has been no method that measures the qualitative and quantitative impact of the atmosphere at the dental practice and the dentist's behaviour on the young patients' readiness to cooperate. The objective of the present study is the implementation and evaluation of a questionnaire on this subject.
Patients and methods: 88 patients from 4 to 18 years of age participated in this study. The questionnaire consists of different parts: dental chart, parents' professions, Sarnat-score and fear-related questions. With the help of the Sarnat-behaviour-scale the young patients were divided into two groups: the cooperative and the noncooperative children. The chi-square distribution also

revealed these two groups. Statistical analysis was performed using the chi-square test.
Results: As regards the dentist's ability to explain and his wish to help there are statistically significant differences between the groups of the cooperative and the noncooperative patients. Children who do not cooperate are more often afraid of the environment and treatment at the dentist's. Those young patients who are in good oral health (DMF-T/dmf-t- index <10) are significantly more cooperative.
Conclusion: The study shows that the dentist's personality alone has only a minor effect on children's willingness to cooperate. As earlier studies have shown parents with an academic or middle class background spend more time on the oral health education of their children, who consequently have clearly better DMF-T/dmf-t-index figures.

P06–84

The effects of extraction on recovery characteristics in deeply sedated pediatric patients

L. ÖZER[1], Z. B. ÖKTEM[1] & Z. KÜÇÜKYAVUZ[2]
[1]*Department of Pedodontics;* [2]*Department of Oral and Maxillofacial Surgery, Faculty of Dentistry, Ankara University, Ankara, Turkey*

Introduction: Dental extraction is a traumatic procedure for young children. This procedure can be very difficult to manage for these children. Therefore, deep levels of sedation are often required for behaviour management. The aim of this study was to determine recovery characteristics and side effects in children undergoing restorative treatment with or without dental extractions.
Patients and methods: The study was consisted of 68 children, aged 3–7 years. 34 children were assigned to 'the restorative treatment with extraction group' (group E) and 34 to the 'restorative treatment' group (group R). Written informed consent was obtained from parents. Children's behaviours were assessed using (i); modified Frankl Behaviour Rating Scale during pre-operative period, (ii); Houpt Behaviour Rating Scale during venipuncture period, (iii); modified Wilton Behaviour Scale (WBS) at recovery time. All side effects observed during and after sedation were recorded. *T*-test and chi-square test were used for the statistical analysis.
Results: The most common side effects in both groups during the early recovery period were dizziness, sleepiness and agitation. The incidences of WBS scores of 1 and 2 (agitated and restless) were higher in group E than in group R; however, this difference was statistically significant at 15 min only.
Conclusion: This study did not show that dental extraction has any apparent effect on recovery characteristics in deeply sedated pediatric patients. This conclusion can be attributed to the additional doses of sedative agents that all children in Group E received prior to extraction for a deeper sedation level.

P06–85

Measurements of dental fear in 7-year-old children

D. GALAMB[1], A. LENKEY[2], J. MATH[3] & M. ALBERTH[1]
[1]*Faculty of Dentistry, Department of Pediatric Dentistry;* [2]*Department of Clinical Biochemistry and Molecular Pathology, Medical and Health Science Center;* [3]*Institute of Psychology, University of Debrecen, Debrecen, Hungary*

Introduction: Previous studies did not examine the objective parameters of dental fear in small schoolchildren. The aim of the study was to compare the subjective and objective parameters of dental anxiety in 7-year-old children.
Materials and methods: Forty-one 7-year-old children were randomly chosen. Corah's Dental Anxiety Scale (DAS) was applied to evaluate the level of the children's dental anxiety. The parents of the patients filled a social questionnaire. Sweating was recorded, and salivary cortisol concentration was measured before and 20 min after the dental treatment. Caries experience was measured by dmf-t index, unstimulated and stimulated saliva production was detected. The study was approved by Institutional Ethical Committee, and written informed consent was obtained from the guardians of the children. The data were analyzed for statistical significance by Chi-Square and independent sample *t*-test.
Results: Significant correlations between the mothers' qualification, the children's dmf-t and DAS were found. DAS significantly correlated with the salivary cortisol concentration and sweating scores significant correlation between the salivary cortisol concentration, stimulated saliva production and the sweating scores occurred.
Conclusion: The measurement of salivary cortisol concentration, sweating scores, stimulated salivary production and DAS were reliable and valid measurings of dental anxiety in children aged 7 years.

P06–86

Dental anxiety patterns in adolescents born pre-term compared with matched controls

S. BROGÅRDH-ROTH[1], K. STJERNQVIST[2], L. MATSSON[1] & G. KLINGBERG[1]
[1]*Faculty of Odontology, Department of Paediatric Dentistry, Malmö University;* [2]*Department of Psychology, Lund University, Sweden*

Introduction: A high frequency of cognitive and behavioural disturbances has been reported in pre-term children. It is not known if this affects the children's apperceptions or behaviours during dental treatment. The aim was therefore to investigate dental behavioural management problems (BMP) and dental anxiety (DA) in pre-term children from age 3–14, and to compare with matched controls.
Materials and methods: 187 pre-term children (23–32 weeks of gestation), born 1994–96 were followed regarding BMP and DA. Comparisons were made with matched full-term controls. Data on BMP were collected from dental records for the ages 3 and 6 years. During the school years, parents were interviewed twice regarding BMP in their children. Two periods of time were covered; pre-school period, and early school years. Finally, at 12–14 years the children filled out the CFSS-DS scale, measuring DA.
Results: During pre-school years pre-term children showed significantly more BMP at various kinds of dental treatments (32% *vs* 15%; $P < 0.001$). This was confirmed in the first interviews of the parents (20% *vs* 10%; $P = 0.028$). At the second interviews, covering early school years, no differences were found between the groups. This was also verified by the children's scorings on CFSS-DS at age 12–14 where no differences in mean scores were revealed.
Conclusion: Children born pre-term seem to have a high prevalence of BMP during pre-school years. But this difference decreases with increasing age, possibly reflecting a catch-up. At school years and early adolescence no differences were seen between the groups regarding BMP or DA.

P06–87

The German version of the child perceptions questionnaire – association to overall well-being

K. BEKES[1], H. G. SCHALLER[1] & C. HIRSCH[2]
[1]*Department of Paediatric Dentistry, Martin-Luther University Halle-Wittenberg, Halle;* [2]*Department of Paediatric Dentistry, University of Leipzig, Leipzig, Germany*

Introduction: The aim of the present study was to examine the validity of the Child Perceptions Questionnaire (CPQ11-14) by

exploring the association between oral health related quality of life (OHRQoL) with the overall well-being in a random population sample of 11- to 14-year-old children in Germany.
Patients and methods: 1589 children were drawn from a nationwide sample considering the size of the selected communities. The children completed the German version of the CPQ11-14 questionnaire consisting of 50 questions about oral problems with 5 options for responding (the problem can occur: very often, often, sometimes, hardly often, never). Additionally, the children were interviewed for their overall well-being, which was measured using a 5-point scale ranging from 1 (excellent general health) to 5 (very bad general health). Statistical analysis (ANOVA) was performed to test the differences of CPQ11-14 summary score between the different groups using SPSS 16.0.
Results: Following mean CPQ-G scores were evaluated within the different overall well-being groups: score 1 (excellent): 7.1 (±7.5), score 2 (good): 9.0 (±7.7), score 3 (moderate): 11.9 (±10.1), score 4 (bad): 18.5 (±15.6), score 5 (very bad): 20.5 (±20.5). ANOVA revealed significant differences between the groups ($P < 0.001$).
Conclusion: Self-report of impaired well-being is linearly associated with impaired oral health related quality of life in children using the CPQ-G. The results support the validity of the CPQ-G as an instrument to measure the OHRQoL in 11–14-year-old German children. The study was supported by GABA International.

P06–88

Which pre-medication agent is more comfortable for anxious children in dental treatment?

O. BAYGIN[1], H. BODUR[2] & B. ISIK[3]
[1]*Department of Paediatric Dentistry, Karadeniz Technical University Faculty of Dentistry, Trabzon;* [2]*Department of Paediatric Dentistry,*[3]*Department of Oral and Maxillo Facial Surgery, Gazi University Faculty of Dentistry, Ankara, Turkey*

Introduction: In paediatric dentistry sedation procedures are required when there is no possibility to carry out dental treatments. We aimed to evaluate the most comfortable pre-medication protocol used in anxious children scheduled for dental treatment under N_2O/O_2 sedation by assessing parents' and children's apprehension.
Materials and methods: In this randomised controlled clinical trial, the comfort of three pre-medication agents was compared. After ethic committee approval and parental informed consent, 60 healthy children aged between 5–8 years, having no sedation or general anesthesia experience and being incompliant with dental treatment (Frankl Behaviour Scale ≥3) were enrolled to this study. The treatment regimens were as follows: Group A: Oral administration of 1 mg/kg hydroxizine hydrochloride suspension. Group B: Oral administration of 0.7 mg/kg midazolam. Group C: Oral administration of 3 mg/kg ketamine + 0.25 mg/kg midazolam. Control Group: No oral pre-medication. Following pre-medication, 40% N_2O and 60% O_2 were administered to all groups. Sedation protocol was evaluated using RSS (Ramsay Sedation Scale), recovery time of children and the comfort of the treatment was assessed pre-operatively and postoperatively according to the parents and children's likert-answers. Data were statistically analysed with ANOVA, Kruskal Wallis was performed (at $P < 0.05$).
Results: All tested agents were found to be acceptable both for parents and children. Significant differences were observed in 0.7 mg/kg midazolam group compared to the others ($P < 0.05$) regarding the comfort of pre-medication procedure.
Conclusion: 0.7 mg/kg midazolam seems to be a more comfortable agent for parents and children when used as a pre-medication protocol in anxious children.

P06–89

Guidelines for nonpharmacologic behavior management: changes through the last 20 years

K. ARAPOSTATHIS, V. BOKA, E. L. EXARCHOU & N. KOTSANOS
Department of Paediatric Dentistry, School of Dentistry, Aristotle University of Thessaloniki, Greece

Introduction: The aim of this study is to present the changes of the clinical guidelines on nonpharmacologic behaviour management for the paediatric dental patient through time.
Materials and methods: We searched for all the guidelines published in English language through the links of the IAPD, EAPD, AAPD and HSPD web pages.
Results: The first AAPD guidelines were developed in 1989 and were revised several times. The Australesian Academy of Paediatric Dentistry follows the AAPD guidelines. Those from The Royal College of Surgeons of England (no revision since 2002) are followed in Great Britain. In addition, there is a newly prepared draft of guidelines from the EAPD. There are no main changes in the methods: Tell-show-do, Voice control, Nonverbal communication, Positive Reinforcement, Distraction and Negative Reinforcement. Parental consent used to be written or verbal, now has to be written for most the techniques. Parental presence/absence is proposed in 1996 for the first time. Limitations appear increased on physical restraint over time, now called 'protective stabilisation'. 'Hand Over Mouth Exercise' is lately eliminated in AAPD guidelines, does not appear in the EAPD's draft, while it is still present in the UK guidelines. The last five years special attention is given on the dental team behaviour, more so in dentist's behaviour and communicative skills.
Conclusion: There have been quite a few guideline changes over the last 20 years, aiming to decrease dental fear and anxiety, while reflecting societal changes towards less intervening techniques and more documented behaviour by the dental profession.

P06–90

Reliability of the salivary alpha-amylase activity as an index of psychological stress

K. AOYAGI, H. KARIBE, Y. HAGIWARA, T. KAWAKAMI & K. SHIMAZU
Department of Pediatric Dentistry, Nippon Dental University, Tokyo, Japan

Introduction: The salivary alpha-amylase activity (sAMY) had been widely noted as an index of psychological stress in dental patients. Recently, a hand-held *sAMY Monitor* which can easily measure sAMY has appeared. The purpose of this study was to investigate (1) the diurnal fluctuation of individual sAMY levels, (2) its day-by-day fluctuation during the week and (3) the gender difference regarding the sAMY.
Materials and methods: For each purpose, (1) 6 subjects (4 females, 2 males; average age 37.5 years), (2) 11 subjects (6 females, 5 males; average age 33.9 years) and (3) 30 subjects (15 females, 15 males; average age 31.8 years) participated in this study. Using the *sAMY Monitor*, the sAMY level was measured (1) once every hour from 10 a.m. to 4 p.m. (7 times/day), (2) at every 10 a.m. on Monday, Wednesday and Friday (3 times/week) and (3) without any restriction. Repeated-measures ANOVA and the *t*-test were used for the statistical analyses. This study was approved by the Ethics Committee of Nippon Dental University.
Results: During the experimental period, no significant differences were observed in the sAMY levels among the different times of day or different days of the week ($P = 0.311$ and 0.291, respectively).

No significant difference in the sAMY level was found between males and females ($P = 0.962$).
Conclusion: These results suggest that the individual sAMY level remains relatively stable under normal conditions. Even though there are wide-ranging differences in the sAMY levels among individuals, these differences are not influenced by gender. Support: Grant-in-Aid for Young Scientists (No.20890239).

P06–91

Relationship between dental anxiety, oral health status and sociodemographic factors in children

Z. KIRZIOĞLU, A. C. ALTUN, K. G. ULU & Y. ERDOĞAN
Department of Pediatric Dentistry, University of Süleyman Demirel, Isparta, Turkey

Introduction: The objective of this study is to assess the influence of dental and maternal anxiety on the oral health status of children and to determine the sociodemographic factors that related to dental anxiety.
Patients and methods: A questionnaire was used to collect information about age, sex, nutritional status, socioeconomic status, education level and occupations of parents, reasons and frequency of dental visits. The Dental Subscale of Children's Fear Survey Schedule (CFSS-DS) and Corah Dental Anxiety Scale (DAS) was administered to the children and their parents. Children aged 4–14 years and their parents participated in this study. The dental anxiety scores, relationship between the sociodemographic factors and patients' anxiety were determined. Dentition status and treatment needs along with decayed, missing, and filled teeth (DMFT) index were recorded. All data were determined statistically by using SPSS 13.0 software program with chi-square, Mann–Whitney, Pearson correlation and Kruskal–Wallis test.
Results: The mean age was 7.42 ± 2.89 years. The anxiety (CFSS-SF) scores of the patients ranged from 14 to 68 (Mean = 28.72 ± 11.71). A positive correlation was found between the anxiety of children and their mothers ($r = 0.20$; $P < 0.01$). The children aged 6 and smaller are more affected from their mothers than children aged 7 and higher, but the difference is not statistically significant.
Conclusion: The level of dental anxiety in children is affected by their mothers. The results of such studies could be used as an appropriate tool to encourage favourable dental behaviours for children.

P06–92

Sudometry for assessing dental fear in adolescents

M. ALBERTH[1], D. GALAMB[1], A. LENKEY[2], A. OLAH[2] & J. MATH[3]
[1]*Faculty of Dentistry, Department of Pediatric Dentistry;* [2]*Department of Clinical Biochemistry and Molecular Pathology, Medical and Health Science Center;* [3]*Institute of Psychology, University of Debrecen, Debrecen, Hungary*

Introduction: Dental fear is a common health care problem in the child population. The aim of the present study was to find a new reliable, simple, patient friendly and inexpensive method for assessing dental fear.
Materials and methods: The study group consisted of 32, randomly selected 12–14-year-old adolescents. Corah's Dental Anxiety Scale (DAS) was used for evaluation of dental fear. Blood pressure, pulse rate and sweating were recorded, salivary cortisol concentration and alpha-amylase activity were measured before and 20 min after the dental treatment. Permission was obtained from Instutional Ethical Committee, and the parents of the students gave written informed consent. Chi-Square test and independent sample *t*-test were used for statistical analysis.
Results: There was significant correlation between the systolic blood pressure, pulse rate, sweating scores and salivary cortisol concentration. The salivary alpha-amylase activity did not correlate with the parameters of the other objective methods and the DAS. From the objective measurements only the salivary cortisol concentration and the sweating scores showed significant correlation with the results of the DAS.
Conclusion: The measurements of systolic blood pressure, pulse rate, sweating scores and salivary cortisol concentration were accurate and reliable assessment tools for dental stress. However, the salivary alpha-amylase activity did not appear as specific marker of dental fear. The measurement of sweating (sudometry) is reproducible, simple, quick, inexpensive and a nonthreatening method for the evaluation of fear. Our study suggests that measurement of sweating can replace the subjective and other objective methods to assess dental fear in pediatric dentistry.

P06–93

Dental anxiety in 7–11-year-old children and its relationship to dental caries

A. AKBAY OBA[1], C. T. DÜLGERGIL[2] & I. ŞAROĞLU SÖNMEZ[1]
[1]*Department of Pediatric Dentistry;* [2]*Department of Operative Dentistry, School of Dentistry, University of Kırıkkale, Turkey*

Introduction: The aims of this cross-sectional study were to evaluate the level of dental fear among 7–11-year-old schoolchildren and to assess the dental caries relation to dental fear.
Patients and methods: 275 children aged 7 to 11 years were included in the study. This study was approved by the institutional ethical committee and written informed consent for participation of the children in the study was obtained from all parents. Before the dental examination each subject was advised to answer the CFSS-DS questionnaire by himself/herself. The children having 38 and more CFSS-DS values were included to the group 'with dental fear', others to 'without dental fear' group. All dental examinations were performed in school premises according to WHO criteria. Chi-Square, *t*-tests, Pearson Correlation, ANOVA was used in statistical analysis.
Results: Mean CFSS-DS value was 28.17, and the rate of children who have experienced dental fear was 14.54%. It was found that DMFT-dfs increased significantly with increasing CFSS-DS values. Children were most afraid of 'Choking', 'Injections' and 'Having somebody put instruments in their mouth'. No significant differences in fear scores between boys and girls were found in this study.
Conclusions: The results demonstrate that the prevalence of dental fear in Turkish child population is not very high in comparison to reports from other countries. Furthermore, dental fear could be thought as a caries risk factor and by providing extra attention for these children, the development of high dental fear may be prevented.

P06–94

A case report of Trichotillomania and its influence on dental treatment

D. TSIANTOU, D. VELONIS & N. KOTSANOS
Department of Paediatric Dentistry, Aristotle University of Thessaloniki, Thessaloniki, Greece

Introduction: Trichotillomania (TTM) is a relatively common cause of childhood alopecia. It is a repetitive behaviour that causes noticeable hair loss or substantial physical damage. This report presents the dental treatment of a 10-year-old boy with trichotillomania.

Clinical management: The patient was referred to our clinic in October 2007. Upon extraoral examination, a bald area was noted at the frontal scalp. The boy had been removed from his family and was hosted in a SOS village. He was followed by a dermatologist and a psychologist. Intraoral and radiographic exam revealed treatment needs for caries and the patient was scheduled for restorative dental treatment. He was also referred for orthodontic treatment. He was not very cooperative for dental treatment during his visits at either clinic. 'Tell-Show-Do', positive reinforcement and voice control were the methods that were used for the achievement of the cooperation.

Conclusion: TTM in children is a disorder with psychological background, that may interfere with ideal cooperation between the patient and the pediatric dentist. TTM can also be accompanied by oral habits, such as nail biting or digit sucking, or anxiety disorders. Thus, the dentist should be aware of these conditions in order to recognize them, be able to refer the child to a psychologist and efficiently manage the patient in the dental office.