25th IADR SEA Division Annual Scientific Meeting
22nd SEADE Annual Meeting

28 - 30 October 2011 | Grand Copthorne Waterfront, Singapore

Abstracts & Proceedings

Advances in Biomedical Technology and Devices
- Their impact on Oro-Dental Research

Organised by:
COLLEGE OF DENTAL SURGEONS, SINGAPORE
Conclusion: The study shows that hESC derived progenies are effective for assessing the cytotoxicity and osteogenesis of implants. We hope that with the success of this model, we will be able to conduct research and development for an optimal interface between bone and implants in a more cost-effective, humane and importantly, using unlimited, healthy and standardized cell lines of the actual host for safety and function testing of the implants.

PREVALENT OF ORAL MUCOSITIS IN CHILDREN AND ADOLESCENT UNDERGOING CHEMOTHERAPY


3Faculty of Dentistry, University of Hong Kong, Hong Kong SAR, China
2Pediatric Dentistry, Faculty of Dentistry, University of Hong Kong, Hong Kong SAR, China
1Department of Paediatrics and Adolescent Medicine, LKS Faculty of Medicine, University of Hong Kong, Hong Kong SAR, China

Objectives: To study the prevalence of oral mucositis among paediatric and adolescent cancer patients receiving combination chemotherapy.

Methods: All cancer patients, aged 18 or under, receiving chemotherapy at the Children’s Centre for Cancer and Blood Diseases, Queen Mary Hospital during the period from February through May 2011 were invited to participate in this study. Ethics approval (IRB UW-10-294) and parental consent were sought. Medical history was recorded and clinical examination was conducted to study oral mucositis with WHO criteria.

Results: Forty-one patients with mean age (±SD) of 8.7±4.9 participated in the study. Among them, 24 (59%) had acute leukaemia, 12 (29%) had solid tumours and 5 (12%) with other haematological malignancies. Chemotherapeutic agents including antineoplastics, cytotoxic antibiotics, alkylating agents, and plant alkaloids were administered in 55%, 33%, 25%, and 23% of the patients, respectively. Ten patients (24%) exhibited features of oral mucositis; among them, 40%, 60%, 10%, 15% presented with WHO grade 1, 2, 3, and 4 oral mucositis, respectively. Oral mucositis was found to be more common in patients with low white blood cell count (<3.5x10^9/L) (p=0.007), being treated with cytotoxic antibiotics (p=0.006) and with alkylating agents (p=0.045).

Conclusion: In contrary to adult experience, paediatric cancer patients had much lower prevalence of oral mucositis while they underwent chemotherapy. That may be due to the differences in the cancer types and treatment regimens used. We found that the manifestations of oral mucositis were associated with leucopenia, administration of cytotoxic antibiotics and alkylating agents.

Acknowledgement: Supported by HKU Research Grant 201007176275

RELATIONSHIP BETWEEN DENTAL CARIES AND CHILDHOOD OBESITY IN MALAYSIA

B. ESA, J. MARHAILDIA, Z.Y. YUSOF, H. AWANG, and M.N. MARIANI

3Department of Community Dentistry, University of Malaya, Kuala Lumpur, Malaysia
2Dental research and Training Unit, University of Malaya, Kuala Lumpur, Malaysia
3Department of Children’s Dentistry and Orthodontics, University of Malaya, Kuala Lumpur, Malaysia
4Department of Educational Psychology and Counselling, University of Malaya, Kuala Lumpur, Malaysia

Objectives: To assess the relationship between dental caries and childhood obesity and related factors among 5-6 year-old preschool children.

Methods: A cross-sectional study was conducted on 898, 5-6 year-old children attending 25
Kindergartens (government and private) in 2 large districts in Selangor. A multi-staged and cluster random sampling was employed. Children’s primary dentition was examined using the dmft index and their weight and height measured. The Body Mass Index (BMI in kg/m²) was calculated. The WHO 2007 cut off points for BMI-for-age was used in boys and girls. Prior to the study their mothers were given a questionnaire comprising their age, education level and family income. Only mothers who responded and consented to participate together with their children were included in the study.

Results: The caries prevalence was 67.9%; the mean dm and dmft were 3.97 [95% CI (3.67, 4.25)] and 4.18 [95% CI (3.88, 4.49)] respectively. The prevalence of ‘overweight’, ‘obese’ and ‘normal’ children were 9.9%, 15.1% and 75.0% respectively for boys and 8.4%, 9.6% and 83.0% for girls. No significant association was found between ‘overweight’ or ‘obese’ with caries experience, mother’s education level and family income (p>0.05). Boys had significantly higher prevalence of ‘overweight’ and ‘obese’ than girls (p<0.05).

Conclusion: This study indicated that there was no relationship between caries and obesity in this paediatric population. Further studies need to be conducted to confirm the finding.

AN INVESTIGATION OF ORTHODONTIC TREATMENT OUTCOMES
S. MOM, SR.
Orthodontics, Faculty of Odontology and Dentistry, University of Health Sciences, Phnom Penh, Cambodia

Objectives: This study was undertaken to establish the standard of treatment outcome for orthodontic patients with a class II div I malocclusion who had been treated by Postgraduate Students at the University of Health Sciences.

Methods: This retrospective study utilised the Peer Assessment Rating Index (PAR) to quantify the severity before and following treatment. The Index scores features of irregularity of a patient’s occlusion from study models. The selection criteria must have a class II div I malocclusion, have been treated by one of the four postgraduate students who had started their training in 2004 and have pre and post treatment study models. The exclusion criteria were incomplete records or damaged models. The PAR scoring was undertaken by an individual who had undergone calibration training. A reproducibility study was also undertaken. The records of 42 were identified 13 males and 29 females. The average age being 16.2 yrs, S.D.± 4.5 range 11-27. The OJ was 8mm, S.D. ±2.02 range 4.5-12. The majority of patients had undergone treatment with upper and lower fixed appliances 39 of 42 with 10 additionally having worn a functional appliance.

Results: The average PAR score reduction was 25.2, S.D.: 8.9 range 10-44. The Percentage Score reduction was 65%, S.D.: 14.4 range 43-98%. Of the 42 cases 28 were categorised as ‘greatly improved’, 13 as ‘improved’ and only 1 as ‘worse no different’.

Conclusion: These findings support the view that the standard of treatment was high and compares favourably with that of other providers of orthodontic treatment internationally.

RISK OF POST-OPERATIVE BLEEDING AFTER DENTAL PROCEDURES IN WARFARINIZED PATIENTS
C.H.L. HONG,1, J. NAPENAS1, M.T. BRENNA2, and P. LOCKRAK2
1Faculty of Dentistry, Department of Preventive Dentistry, National University of Singapore, Singapore, Singapore
2Department of Oral Medicine, Carolinas Medical Center, Charlotte, NC, 3Dept. of Oral Medicine, Carolinas Medical Center, Charlotte, NC

Objectives: The purpose of this retrospective study was to investigate the frequency of bleeding complications after dental procedures in patients on warfarin and the possible contributing risk factors.

0128
Id: 153138