32 CD4 Expression Profile in Advanced Chronic Periodontitis, I. REN*, L. LI, W. K. LEUNG (Faculty of Dentistry, University of Hong Kong, Hong Kong)

The pathogenesis of periodontitis is characterized by bacterial LPS activation of host response leading to production of proinflammatory cytokines and production of several different types of host cells, and such process often involves the LPS-CD4 cell adhesion pathway. This study was to investigate the expression profile of CD4 in periodontal pocket tissue (PPT) and inflammatory cytokines from the patients with advanced periodontitis (AP). Eighteen patients were assessed and clinical data were analyzed using chi-square test and ANOVA test. Five millimeter deep probing depths were obtained from 14 patients with advanced chronic periodontitis during periodontal surgery in unresolved periodontitis sites following non-surgical treatment. The samples included 12 PPTs from 12 patients and 12 healthy tissues from 12 patients. The expression of CD4 was detected in all 12 PPTs, whereas varying greatly in the ratio of stained positive cells (PC) in total area (31.3±6.49, 30.5±7.66 cells/µm²) and in the proportion of PC/stained area (0.3±0.10, 0.5±0.10 cells/µm²). CD4 was found in 11/12 PPT samples and all 12 healthy tissue samples. CD4 expression was mainly confined to the interface where pocket epithelium met connective tissue. No significant expression was found in these tissues. The expression of CD4 was found in the whole PC between 0.65% (±14.1%) and 7.5% (±7.5%). It is concluded that CD4 was frequently detected in unresolved chronic periodontitis, with varying expressions in different connective tissue from the patients with periodontal pocket tissue. The difference in the expression of CD4 might be related to the different periodontal pocket tissue. The expression of CD4 was mainly confined at the pocket epithelium connective tissue interface. Supported by the Hong Kong Research Grant Council, Grant HKU 713000M.

33 Students' satisfaction and utilization of dental service in Hong Kong, C. CHAN HC and CHU CHI (Faculty of Dentistry, University of Hong Kong, Hong Kong)

Objectives: The objectives of this study was to investigate university students' utilization of and satisfaction with dental care services provided by their university in Hong Kong. Methods: A questionnaire survey was conducted on 200 students in each of the seven universities in Hong Kong through a face-to-face interview in the university campus. Questions on different aspects of dental services, including the total dental visits in a year, the dental visits in the last 12 months, the dental care satisfaction, etc. were included. A total of 1000 students were surveyed in this study. 951 (95%) students had dental visits during the year. The main reason for the remaining 2% who did not visit any dentist was they were not interested in having any dental procedure. The second reason was they had been out of the country for more than 1 year. The utilization of dental care in Hong Kong is very low with only 7% of the students visiting the dentist at least once a year.

34 Orthodontic treatment need and impact of oral health on the life quality of children, C. McGrath, B.N. PANG and E.M.O. LO (Faculty of Dentistry, University of Hong Kong, Hong Kong SAR, CHINA)

Objectives: To identify associations between orthodontic treatment need and impact of oral health on the life quality of children in Hong Kong. Methods: A sample of 547.12-year-old Hong Kong children participated in a study of the impact of oral health on quality of life and orthodontic treatment need. The impact of oral health on the life quality of the children was assessed using the 54-item Child Oral Health Related Quality of Life questionnaire (CHOHLQOL), covering five domains: symptoms, functional limitations, emotional-well-being (EWB) and social-well-being (SWB). Orthodontic treatment need was assessed based on the aesthetic component of Index of Orthodontic Treatment Need (IOTN) – the SCAN score, and on children's own perceptions of the treatment need. Results: Four hundred and four of assessments were usable (92%, 904/474). Impact of oral health on life quality was uncorrelated with IOTN score reported by or more oral symptoms (89%, 548/484) functional limitations (20%, 112/544) and that their teeth needed to be moved (42%, 224/544). Impact of oral health on life quality was significantly (p < 0.05) related to subjective oral symptoms (p = 0.03, 314/504). Employing the SCAN scale, 84% (242) were graded as having no orthodontic need, 11% (55) of having borderline need and 5% (25) as being in need of orthodontic treatment. However, 27% (138) perceived themselves to be in need of orthodontic treatment.SCAN ratings were associated with children's perceptions of the impact of oral health on life quality, specifically P (p < 0.01) and SWB (p < 0.05). Children's own perceptions of the need for orthodontic treatment were strongly associated with their perceptions of the impact of oral health on life quality. It was associated with symptoms (p < 0.05), functional limitations (p = 0.01), SWB (p < 0.01) and EWB (p < 0.01). Orthodontic treatment need assessment is associated with the impact oral health has on the life quality of children.