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<th>Title</th>
<th>Biotypes of oral Candida albicans isolates in a Tanzanian child population</th>
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<td>Author(s)</td>
<td>Samaranayake, LP; Matee, MI; Scheutz, F; Simon, E; Lyamuya, EF; Mesengi, AE</td>
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<td>The 11th Annual Scientific Meeting of the International Association for Dental Research (Southeast Asian Division), Jakarta, Indonesia, 4-5 October 1996. In Journal of Dental Research, 1997, v. 76 n. 5, p. 1217, abstract no. 67</td>
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Cytotoxicity of Polyelefyn to Human Cultured Lymphocytes.
W. SISWOMIHARDJO, HARSI N. AND S. SAINIRKITYS (Gadjah Mada University, Yogyakarta, Indonesia).

Acrylic resin has been the only polymeric denture base material. According to Tsai (et al. (1) Prosth Dent J 71: 616-630, 1994), residual monomer (polymethylmethacrylate) elicits irritation of the oral mucosa. Siswomihardjo (2) and preliminary study, 1994) states that polystyrene, a polymeric material for statues, can be manipulated to denture base. This study examined the cytotoxicity of polystyrene to cultured human lymphocytes. Specimen of polystyrene soaked in human saliva for 24 hours during a period of 7 days of close contact of human saliva (polystyrene's soaking solution), and one dish as control. After 24 hours incubation, the number of living lymphocytes was counted by a haemocytometer. Data analyzed by the ANOVA showed no significant influence of soaking period on the cytotoxicity of polystyrene (p > 0.05). It is concluded that in a period of 7 days, polystyrene denture base will not cause toxic effect.

Water Storage Effect on Diametral Tenstile Strength of Glass Ionomers.
D. BRANAWATI (Gadjah Mada University, Yogyakarta, Indonesia).

The objective of this study was to measure the diametral tensile strength (DTS) of resin-modified glass ionomer (RMGI) and conventional glass ionomer (GI) restorative materials added in water at various time. Eight groups of specimens were made of the Ionomat-Fil (RMGI) and AlphaFil (GI). The RMGI was photocured for 40 seconds. The samples were stored in distilled water at 37°C for 1 day, 1 week, 4 weeks, and 12 weeks. The DTS was measured by Universal Testing Machine at crosshead speed of 0.5 mm/min. The means and standard deviation of DTS (kg/cm²) were:

- Water Storage: Ionomat-Fil
  - AlphaFil
  - 1 day: 119.4 ± 7.2 72.8 ± 10.5
  - 1 week: 119.6 ± 6.9 79.4 ± 11.2
  - 4 weeks: 128.2 ± 13.5 105.6 ± 7.7
  - 12 weeks: 138.5 ± 18.0 108.4 ± 8.7

The DTS of RMGI increased from 8 weeks to 12 weeks and GI from 1 week to 4 weeks (p < 0.01). In conclusion, the glass ionomers did not show any loss after stored in distilled water up to 12 weeks.

The Interface between Affected Denines and Resin-Modified Glass-ionomer.
K. TIP (Department of Conservative Dentistry, Faculty of Dentistry, The University of Hong Kong, HK).

Dentine remaining after chemical erosional removal by 8-wt% oxalic-O-DL-2-aminoxyurate acid (NMB) and 16% NMB (NMB-Uae) was considered sound by clinical criteria. Studies using scanning electronic microscope and electron probe microanalysis have showed that the cavity floor, i.e. affected dentine, after complete caries removal to be of similar mineral content as the underlying sound dentine (Caries Res 1995; 19:111-117). The aim of this study is to use the confocal laser scanning microscopy (CLSM) to study the bonding interface between affected dentine and resin-modified glass-ionomer. Carious dentine was exposed from cavities by means of 16% NMB and NMB-Uae teeth. In which carious cavity was removed to be of nearly sound dentine. Normal clinical criteria were removed with resin-modified glass-ionomer (Viviane). Fluorescent dye (Rhoblotine D) was incorporated in the primer and applied onto the cavities according to manufacturer's instruction prior to restoration. A control cavity of the same depth as the carious lesion was prepared using the rotary instrument on the opposite side of the solution-cure tray. All the control cavities were restored with composite (2100). Block sections and thin sections (100-120-um) were prepared from the specimens teeth and examined under scanning electron microscope (SEM) and confocal laser scanning microscope (CLSM). The superficial layer of dentine remaining on cavity floor appears to have a very uneven with many underrun areas. The prism of the resin-modified glass-ionomer generated non-uniformity into dentinal tubules of the affected dentin while the pattern of penetration was much more uniform in control cavity. The results indicated that the bonding interface between resins-modified glass-ionomer and affected dentine was different from that of sound dentine.

L. P. SAMARRANAYAKE*, M.1. MATHE, F. SCHUETZ, E. SHADIR & E. F. LYAMU ("University of Hong Kong and Faculty of Health Sciences, Mahidhiri, Tanzania) and Aarhus, Denmark*.

Although biologies of Candida albicans from adults, especially in the West, have been described, there are no data either from a child population, or from the African continent. Hence a total of 200 oral C. albicans isolates from Tanzanian children aged 6-24 months, were biotyped using two commercially available API microbiot kit systems and a bacitracin disk diffusion susceptibility test. The biotypes comprised which two thirds of the organisms isolated, were: J15 (19.5 %), A15(S6.0 %), J1R (14.5 %), A1R (9.5 %) and P1R (7.5 %). In total 16 new biotypes comprising (22 %) of isolates, which have never described histologically were found in this study. Tanzanian population, and of these, 8 new PR1 biotypes, which 15 (7.5 %) isolates. There was no significant association between predominant biotypes (with clusters > 15 isolates) and the age, gender, breast-feeding, and maternal education. These data together with our recent data in healthy adults from China (30 & Samarannayake, Arch Oral Biol 46: 577-579, 1995), and HIV-infected individuals from Hong Kong, UK, Germany and Austria (Tsang et al. J Oral Pathol Med 24: 32-36, 1995) indicate 1 biotype profile of C. albicans isolates may differ in endemic and adult population, and in global distribution of various sub-types of this common nosocomial pathogen.

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Effect of Mouthwash on Bacteriemia Cases of S. viridans Post Extraction.
G. D'SALLE ("Faculty Dental University of Indonesia, Jakarta, Indonesia).

Bacteriologic causes due to S. viridans bacteriemia post extraction has been reported. The effect of 0.1% Hexitol mouthwash on S. viridans bacteriemia post 3rd molar mastication extraction was examined in this study. Subject's criteria were: 20 - 25 yrs; OHI-S ≤ 2; gingivitis (+); periodontitis (-); not under antibiotic treatment; 3rd molar caries free and vital Twenty six adults whose randomly selected from 130 were the experimental group, and 50 were the control group. The experimental group was informed and consented to participate in the study. The experimental group used two 0.1% Hexitol mouthwash. Two starting broth media, each incubated in aerobic and anaerobic conditions. Blood was drawn 5 minutes before extraction this was followed with blood drawn 5 minutes and 10 minutes post extraction. One of each blood draw was placed in a thrombr and incubated anaerobically. The results showed that S. viridans bacteriemia 3rd molar extraction from control group was 0/13 cases and experimental group was 0/13 cases. This results statistically were significant different (p < 0.05). The conclusion 0.1% Hexitol mouthwash was significant reduce S. viridans bacteriemia in selected population.

Functional Rehabilitation by Metal Reconstruction of Post Operative Mandibles.
H. SUERPRAKAN* (Prosthetic Dental Dept., Airlangga University, Indonesia).

One of the choices in the treatment of mandibular bone Ameloblastoma is mandibular resection. In such a case, rehabilitation/reconstruction is expected to restore the mandible functions, which include kinesiology, masticatory, phonetics and esthetics. One alternative device to be used for mandibular rehabilitation is the conventional metal framework made of Cobalt Chromium casting. The purpose of this research is based on 16 clinical cases consisting of 8 cases of hemimandiblectomy and 4 cases of partial mandibullectomy, all of which were rehabilitated by means of individual metal framework. The investigation included 2 cases for jaw function, 4 cases for esthetic and 2 cases for phonetic evaluation. The best result was observed in 8 cases, where the patient's mandible was reconstructed using the metal framework made metal framework as a control group. After the rehabilitation, we gave a regular training program and conducted clinical testing on the mandibular functions using 14 variables. From the 14 variables, there were one which showed a significant difference. This particular variable is chewable foods. All the other variables proved to be homogeneous. This result was not affected after stored in water over time. Eighty disc (50 mm) samples made of Cobalt Chromium may restore the mandibular functions at least as well as does the metal framework made metal framework in the same type. In fact, both individual metal framework made of Cobalt Chromium casting subjects can chew the foods better.