with a change in oral ecosystem and microbial flora. Denture plaque has long been investigated for bacterial and fungal growths.

Objective: The objective of this study was to determine the presence of *H. pylori* in denture plaque of dyspeptic patients wearing complete dentures.

Methods: A total of sixty seven complete denture patients with age ranging between 50-65 years and a mean age of 57.5 (SD= 10.6 years) were included in the study. Among these 46 (68.65%) were males and 21 (31.34%) were females. Specimens of denture plaque and gastric biopsy were collected from all the patients. The denture plaque specimen was processed by Rapid Urease Test (RUT) and gastric biopsy specimens were processed both for RUT and histopathology.

Results: Out of all patients studied (n=67), 59 (88.05%) were *H. pylori* positive by Rapid Urease Test (RUT) from denture plaque specimens while 46 (68.65%) samples were *H. pylori* positive by RUT from gastric biopsy. The histopathology of gastric biopsy specimen showed *H. pylori* in 55 (82.1%) patients while 12 (17.9%) patients showed chronic active gastritis which was not associated with *H. pylori*.

Conclusions: This study reveals that the denture plaque and saliva may serve as a temporary reservoir for *H. pylori* in individuals with gastric disease. It is therefore suggested that meticulouis denture hygiene procedures be performed, along with the antibiotic treatment of *H. pylori*.

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**EFFECT OF BRUCEA JAVANICA AND PIPER BETLE ON CANDIDA HYDROPHOBICITY**

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Introduction: Cell surface hydrophobicity (CSH) is a key attribute of virulence among infectious microorganisms. An understanding of this property would help to explain the high colonization affinity of *Candida* species on oral surfaces and denture materials. *Objective(s):* The aim of the study is to determine the CSH of seven strains of oral *Candida*. The influence of crude aqueous (CA) *Brucea javanica* (Lour.) and *Piper betle* (Linn.) extracts on the CSH were assessed.

Materials and Methods: Seven oral candidal strains were investigated and hexadecane represented the hydrophobic compound in the experiment. Following vigorous agitation of each candidal suspension with hexadecane, the optical absorbance (O.D) of each suspension was read. The percentage of adsorption to hexadecane was calculated. To investigate the effect of the extracts on the CSH, the candidal cells were treated with extract at concentrations of 1, 3 and 6 mg/ml. Positive control was 0.12% chlorhexidine.

Results: *Candida krusei, Candida dubliniensis* and *Candida tropicalis* showed the highest adsorption capacity to hexadecane at 30.23%, 26.19% and 19.79%, respectively, while the others were within the range of 7% to 10%. The CSH of all oral candidal strains were significantly affected following treatment with both plant extracts (p<0.05). The CSH of five out of seven candidal strains tested has shown that the *B. javanica* extract exhibited more than 60% reduction compared to *P. betle*.

Conclusion: Both extracts may be considered as a promising candidate for the development of antifungal agent of natural products, especially in controlling the adhesion of *Candida* species.

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**DIFFERENTIATION OF ORAL CANDIDA SPECIES BASED ON rDNA**

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Introduction: Oral candida are considered to be generally harmless, ubiquitous members of the oral microflora, but can become pathogenic when there are changes in the oral environment, such as under conditions that allow them to increase their relative proportions to other members of the local flora.
Objective: The purpose of this study was to determine the molecular characteristics of oral Candida sp., based on the genetically conserved internally transcribed spacer (ITS) regions of candidal ribosomal coding DNA (rDNA).

Methods: Seven ATCC candidal species, C. albicans, C. tropicalis, C. krusei, C. parapsilosis, C. dubliniensis, C. glabrata and C. lusitaniae, were obtained as controls, and clinical samples were collected from the oral cavity of individuals. Purified colonies were cultured, and candidal genomic DNA was extracted using a glass beads disruption extraction method. Polymerase-chain reaction (PCR) was used to amplify different sections of the ITS region of candidal rDNA, and the amplified DNA was subjected to gel electrophoresis for visualization. Furthermore, the amplified DNA was subjected to MspI and HinfI restriction enzyme digestes for restriction fragment length polymorphism (RFLP) comparisons.

Results: Comparing the sizes of the PCR products and restriction fragments from isolated clinical samples and those from control samples enabled differentiation of candidal species such as Candida albicans, Candida glabrata and Candida lusitaniae.

Conclusion: The rDNA ITS region may potentially be useful for oral candidal species identification.

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IMPACT OF MALOCCLUSION ON ORAL HEALTH-RELATED QUALITY OF LIFE

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Objectives: To assess the children's orthodontic need by integrating normative and oral health-related quality of life (OHRQoL) measures.

Methods: A cross sectional study was carried out using a multistage cluster sampling technique. The sample comprised of 756 schoolchildren aged 13-14 years attending two secondary government schools in urban and rural areas of Klang District in Peninsular Malaysia. Each subject completed a self-administered questionnaire eliciting demographic information such as gender, ethnicity and parents' monthly income and questions on oral impacts using the Child-Oral Impact on Daily performances (Child-OIDP) index. Clinical data on occlusal status was collected using the Dental Health Component (DHC) of the Index of Orthodontic Treatment Need (IOTN).

Results: The prevalence of malocclusion was 41.4%. About 26% had definite need for treatment. The prevalence of Condition Specific-OIDP (CS-OIDP) attributed to malocclusion was 13.8%. A statistically significant difference was noted in the prevalence of CS-OIDP attributed to malocclusion between gender and the orthodontic treatment need (p<0.05).

Conclusion: The combination of the DHC-IOTN index with OHRQoL measures provided more information about the adolescents' perceived impacts on their quality of life by selecting children who are more likely to benefit from orthodontic treatment.

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"IS HOUSEHOLD SMOKING A RISK FACTOR TO CARIES?"

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Objective: The study tested the hypothesis that household smoking (HHS) is a risk factor to caries in permanent teeth.

Methods: A case control study was conducted, whereby a case was defined as a child aged 13-14 years