(PCA) and principal component-linear discriminant analysis (PC-LDA). The results show that Raman spectroscopy coupled with PCA could differentiate the nucleus and cytoplasm of the cell, the PC loadings showing that the cytoplasmic regions are dominated by protein bands while thenuclear regions are dominated by DNA bands. Furthermore, patient samples were discriminated from healthy volunteers based on DNA and lipids bands inthe PC loadings. Sensitivities of 91% and 97% and specificites of 98% and 89% were achieved for the cytoplasm and nucleus respectively, using PC-LDA. Thus, the findings of the study support the potential of Raman microspectroscopy for providing molecular level information from oral exfoliated cells and the future potential for screening of minimally invasive brush biopsy samples for oral pre-cancer and cancer.

HYPERKERATOSIS OF THE ORAL MUCOSA RELATED TO USE OF GORO: A CASE REPORT.

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Background: Hyperkeratosis is a frequent finding in oral mucosa commonly associated with smokeless tobacco, trauma and sometimes idiopathic as in leukoplakia. Goro (kola nut) is a caffeine-containing nut of evergreen trees, available in various genera most commonly Cola acuminata and Cola nitida. It contains caffeine (2-4%), kolanin and theobromine in which all provide euphoric and mental stimulation properties to human subjects. Consumption of Goro is a popular habit in African communities. To the best of our knowledge, we are reporting the first case of hyperkeratosis of the oral mucosa induced by Goro.

Case description: A 22 year-old man attended the dental clinic at King Abdulaziz University – Faculty of Dentistry for dental consultation and treatment. Patient had no medical conditions and denied taking any medication or allergies. In addition, he had no significant family history and never smoked or consumed alcohol. However, he has been chewing Goro five times/day for around 10 years. Extraoral examination, was insignificant. Intraoral examination was significant for a smokeless tobacco keratosis-like lesion, greyish-white, velvety folded plaque on lower vestibule where he chew and pack Goro. Incisional biopsy of the lesion was obtained and showed hyper-parakeratosis with otherwise normal epithelium. The connective tissue was fibrovascular with no inflammation, or hyalinization. The case was managed with patient education with no treatment. The patient was followed up for a year without any changes.

Conclusion: This is the first report of a hyperkeratosis of oral mucosa induced by Goro. Even with clinical presentation matching smokeless tobacco keratosis, there were some histological differences. As Goro is mainly a caffeine-containing fruit, it is reasonable to consider Goro-induced keratosis a reactive lesion with no potential for malignancy. Close follow up and habit cessation is advised pending more data. Further longitudinal studies is needed to better understand this lesion pathogenesis.

LANGERHANS CELLS IN THE EPITHELIUM OF UNICYSTIC AMELOBLASTOMAS.

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Background and Objectives: Langerhans cells (LC's) are specialized dendritic cells known to colonize epithelial lined surfaces. Few studies relating to the distribution of LC's in odontogenic tumors and especially ameloblastomas are available and the influence of inflammation on the presence of these cells in odontogenic tumors is unclear. This study investigate the number of LC's in a series of unicystic ameloblastoma using two immunohistochemical stains, Langerin and S100. The association between the presence of LC's and the degree of inflammation was also investigated.

Methods: Formalin fixed, paraffin imbedded tissue blocks of thirty cases of unicystic ameloblastoma were retrieved from the archives of the department of Oral Pathology. A 4μm tissue sections in each case was stained with S100 and Langerin antibodies respectively. The average number of LC's/1mm of cyst wall were calculated from 10mm of cyst or the entire epithelial lining if less was available. The nature and density of inflammation was scored and compared to the number of LC's present.

Results: LC's were detected in 21 (70%) and 15 (50%) unicystic ameloblastomas stained with Langerin and S100 antibodies respectively. A statistically significant difference was noted in the number of LC's on Langerin (mean = 0.66/mm) compared to S100 (mean = 0.31/mm) (P=0,014). 26/30 cases (86.67%) were associated with inflammation distributed either diffusely (60.00%) or focally (26.67%) in the wall. The degree or type of inflammation did not have any influence on the presence or numbers of LC.

Conclusion: LC's are present in the epithelial lining of the majority of unicystic ameloblastomas irrespective of the type or degree of inflammation present in the wall. Their presence may be due to their epithelial tropism or as part of the normal anti-tumour immuno-surveillance. The exact role of LC's and what attracts them should be investigated on molecular level.

THE ORIGINS OF ODONTOGENIC KERATOCYST BASED ON THE DISTRIBUTION OF MELANOCYTES.

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Objectives: Melanocytes are pigmented-producing cells and derived from the neural crest. Melanin pigmentation is widely distributed in the skin and often in oral mucosa, but normally not existing in bone tissue. However, melanin pigmentation is detected on rare occasions with odontogenic lesions in the jaw bones, especially odontogenic keratocysts (OKC). Moreover, development of the tooth germ is originated from the neural crest, but elimination or expression of neural crest cells with odontogenic lesions is not obvious. The present study aimed to consider the origins of OKC based on the distribution of melanocytes in OKC.

Findings: One hundred and ten OKC were used. Eighty-eight cases showed sporadic type (SPO), and 22 cases involved basal cell nevus syndrome (BCNS). All samples were divided into 54 cases of juvenile group (0-29 years old) and 56 cases of advanced group (30-70 years old). Melanocytes were detected using Melan-A and HMB45 immunohistochemical stainings, and melanin pigmentation was detected using Schmorl's method. The positive rate of Schmorl's reaction, Melan-A and HMB45 staining were significantly higher in juvenile group than

advanced group. These rates were also higher in BCNS than SPO.

Conclusions: Compare to juvenile and advanced groups, Melan-A and HMB45 positive rates were high in juvenile group. It is evident from these findings that the origin of OKC in juvenile group was different from advanced one. It means that the cyst epithelium in juvenile group originated from neural crest cell with melanocytes, and advanced one arose from odontogenic epithelium without melanocyte, for examples epithelial rest of Malassez.

TSH AND TSHR ARE NOT EXPRESSED IN ORAL LICHEN PLANUS LESIONS OF PATIENTS WITH HYPOTHYROIDISM.

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Objectives: An association between hypothyroidism (HT) and oral lichen planus (OLP) has been reported. However, the mechanisms that could explain this association have not been clarified. This study aimed to evaluate the immunohistochemical expression of thyroid-stimulating hormone (TSH) and thyroid-stimulating hormone receptor (TSHR) in healthy oral mucosa and in OLP lesions of individuals with and without HT.

Findings: TSH and TSHR stainings were completely negative in all of the studied specimens.

Conclusions: These results suggest that TSH and TSHR are not involved in the pathogenetic mechanism that could explain the association between OLP and hypothyroidism.

EPITHELIOID HEMANGIOENDOTHELIOMA OCCURRING IN THE PAROTID GLAND: A CASE REPORT AND LITERATURE REVIEW.

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Epithelioid hemangioendothelioma (EH) is an intermediate grade vascular malignancy. EH often exhibits aggressive biologic behavior, frequently metastasizes to regional lymph nodes and rarely, to distant sites. EH most commonly occurs in deep soft tissue, viscera, and bone. Several cases of EH have been reported in the head and neck region; however, development of EH within the parotid gland is extremely rare. To our knowledge, only four cases of EH in the parotid have been reported in the English literature. We present a case of EH of the left parotid gland in a 45-year-old Caucasian woman. The patient had a history of a painless swelling on the left side of her face for several years and imaging studies indicated a neoplasm originated from the left parotid gland. A percutaneous biopsy demonstrated a concern for sarcoma. Therefore, the patient underwent a left parotidectomy with facial nerve preservation and left neck dissection. Histologic examination revealed a well-circumscribed proliferation of epithelioid tumor cells in a hyalinized stroma. Intracytoplasmic vacuoles were noted in some cells. Lymphovascular invasion was present, and a small metastatic tumor focus was identified in one regional lymph node in the ipsilateral neck. Immunohistochemical studies were performed. CD31 and Fli-1 were diffusely positive in tumor cells, while they were negative for AE1/AE3, S-100, SMA and p63. The Ki-67 proliferative index was estimated at 2%. A diagnosis of EH was established based on histological and immunohistochemical findings. No recurrence of the patient's disease has been noted in the 6 months following her surgery.

PLASMABLASTIC LYMPHOMA AS THE PRESENTING SIGN OF HIV INFECTION.

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Plasmablastic lymphoma (PBL) is an aggressive lymphoma that can present both diagnostic and therapeutic challenges. Currently considered a variant of diffuse large B-cell lymphoma by the WHO, it demonstrates overlapping phenotypic features with plasma cell myeloma and other neoplasms exhibiting plasmablastic morphology. The majority of cases arise in immunocompromised patients and a predilection for oral involvement is seen. The underlying etiology is poorly understood, although roles for the MYC oncogene and Epstein-Barr virus are likely. Our patient was a 33-year-old male who presented for evaluation of a left maxillary gingival mass. He reported a one-month history of increasing pain and mobility of the adjacent teeth. Radiographic examination revealed an ill-defined radiolucency located apical to the left lateral incisor and extending to the midline. On questioning, the patient disclosed that he had undergone a routine physical examination one month prior with no abnormal findings. A biopsy was performed which showed sheets of large atypical cells interspersed with tingible body macrophages in a starry sky pattern. The tumor cells were positive for CD10, CD38, CD138, MUM-1, and HLA-DR, and negative for B-cell markers. Kappa and Lambda were negative and Ki-67 expression of >90% was noted. In situ hybridization for EBER was positive and genomic studies confirmed MYC gene rearrangement associated with an additional copy of IgH. A final diagnosis of plasmablastic lymphoma was rendered. Over the course of his oncologic work-up, it was discovered that he was HIV-positive. Despite multiple cycles of chemotherapy, the patient developed pelvic involvement six months later and died one year after his initial diagnosis. PBL is a rare lymphoma that pursues an aggressive clinical course characterized by frequent relapses and high rates of disease progression. No universal treatment protocol exists, although more intensive chemotherapy is currently favored. Bortezomib-based regimens show promise in both frontline and relapsed settings.

A RETROSPECTIVE STUDY OF ORAL LESIONS HISTOPATHOLOGICALLY DIAGNOSED AT FACULTY OF DENTISTRY, SRINAKHARINWIROT UNIVERSITY, THAILAND.

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Incidence of oral and maxillofacial lesions is useful for making differential diagnosis. However, epidemiological studies of oral lesions in Thailand are limited. Most of the studies were from other countries, where nationality, genetic background, environment and life style are different from Thai people.