P-AP-21
UNUSUAL CLINICAL PRESENTATION OF LUNG ADENOCARCINOMA
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Introduction: Ocular metastases can precede the diagnosis of the primary malignancy. However, intraocular metastasis from lung carcinoma as an initial presentation is very rare. Here, we present a patient with intraocular metastasis as the first symptom of lung adenocarcinoma and a short review of the relevant literature.
Case Report: A 51-year-old Malay lady presented with loss of vision in her right eye which started with painless progressive blurring of vision. Her initial medical history, apart from having on and off constipation was non-contributory for any lung symptoms. Optical-halmic examination revealed a normal visual acuity and orbital mydriatic imaging (OMI) confirmed retinal detachment with presence of right ocular mass. The patient then underwent a removal of her right eye. Macroscopic examination of the eye ball showed an intraocular greyish mass. Microscopic examination confirmed an intraretinal tumour with papillary growth pattern. Immunohistochemical studies showed the tumour cells are strongly positive with CD4 and TFF1, positive with ≥100 protein (moderate intensity) while negative with HMBS, Melan A and thyroglobulin. On follow up, the patient complained of productive cough and on review of the chest X-ray, showed a left mid zone lung mass. Bronchoscopic examination did not show any endobronchial lesion seen, his biopsy was taken at the scope could not pass through the upper lobe due to internal compression. Conclusion: Loss of vision due to intraocular metastasis as the primary symptom of lung cancer is very uncommon. Tumour cells positivity for CD4 and TFF1 with negative HMBS, Melan A and thyroglobulin support the tumour is of lung origin. Therefore, a great index of suspicion for a secondary metastasis is essential when an intraocular lesion appears.

P-AP-22
IDENTIFICATION AND VALIDATION OF NOVEL ABERRANT GENE PROMOTER HYPERMETHYLATION IN ORAL SQUAMOUS CELL CARCINOMA (OSCC)
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Introduction: Aberrant promoter hypermethylation is one of the hallmarks of carcinogenesis, occurs early in cancer development and is associated with inactivating genes silencing. Therefore, identification of genes with aberrant promoter hypermethylation can provide clues for the elucidation of cancer pathways and provide attractive biomarker candidates for the detection of early neoplastic events. Methods: In our study, whole-genome methylation microarray was applied to identify novel genes with tumour specific DNA methylation of promoter Cpg islands in Oral Squamous Cell Carcinoma (OSCC). Using a combination of an Illumina Infinium HumanMethylation450 bead array and a sensitive, fluorescence-based real-time PCR technique, Methylation-Sensitive High Resolution Melting (MS-HRM), the methylation level was investigated in the non-cancerous and 30 primary OSCC tumour samples. Results: Nine novel genes with tumour-specific hypermethylation profiles were identified by the MethylationSens software (version 2.0.9.0). The identified hypermethylation profiles of 3 selected genes, previously not known to be affected by OSCC, were further validated using MS-HRM. The aberrant genes were confirmed by sequencing frequent promoter CpG island hypermethylation with 59% of CEL5R3, 50% of DDX43, and 40% of PKHR1 in OSCC samples. Conclusions: In this study, the methylation levels are statistically significantly associated with the tumour hypermethylation of CEL5R3 (P<0.03), CEL5R3 (P=0.02), and PKHR1 (P<0.02) in one way ANOVA statistical analysis. Conclusion: These genes reviewed aberrant hypermethylation patterns with a profound transcriptional association, indicating that hypermethylation of these genes may play a direct regulatory role. The hypermethylation changes of these selected genes were significantly detected in OSCC samples, indicating that they may be used as biomarkers for early oral cancer detection. Moreover, the identification of the novel candidate genes genically methylated at CpG islands provide new insights into tumorigenesis.

P-AP-23
DIAGNOSIS OF PLEOMORPHIC TUMOR IN THE ELDERLY: ROLE OF FINE NEEDLE ASPIRATION (A CASE SERIES)
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Introduction: Pleomorphic carcinoma is an uncommon neoplasm in middle-aged and old patients. It is however more common in children. Careful clinical examination, thorough cytological and histological investigations and a high index of suspicion results in an accurate diagnosis. In 1961, Forbes and Metcalfe found the cell of origin to be the outer root sheath cell of the hair follicle and proposed the name, pleomorphic carcinoma, now called plasmocarcinoma. Case Report: We report on 4 patients aged 35, 56, 68 and 70 years, with uncommon clinical and histological presentation including localisation, absence of ghost cells and malignant features of plasmocarcinoma in the Pathology Department of BPJS/UPJ institute of Health sciences, Dharan, Nepal. Fine needle aspiration was performed pre-operatively to confirm the diagnosis. Discussions: The results from these cases show that smear from FNA can help make a conclusive diagnosis of plasmocarcinoma, even with uncommon clinical presentations and potential malignancy transformation. The findings of a smear with clusters of tightly arranged beaked cells surrounded by delicate fibrillar material, squamous necrobiotic, shadowed and giant cells, calcification deposits and numerous naked nuclei with inflammatory cells in the background should lead to a diagnosis of plasmocarcinoma. Conclusion: FNA provided an adequate investigation for the diagnosis of plasmocarcinoma in cases with atypical clinical presentation even in the absence of ghost cells.

P-AP-24
ANALYSIS OF HEAT SHOCK PROTEIN 37 IN CHRONIC ATROPHIC GASITRITIS, HELICOBACTER PYLORI-ASSOCIATED CHRONIC GASTRITIS AND GASTRIC CANCER BY IMMUNOHISTOCHEMISTRY.
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Introduction: Gastric cancer is the 7th most common cancer in Malaysia. It is usually diagnosed at advanced stage thus causing high mortality. Unfortunately, until recently there is no useful biomarker for gastric cancer that has been identified. Therefore, there is a need to find a diagnostic marker especially at its early stage. Recent reports showed that Heat Shock Protein 37 (Hsp37) was over-expressed in gastric cancer and increased in the sera of gastric cancer patients. However, there are very few studies reported on the Hsp37 expression in chronic gastritis, the precursors of gastric cancer. Objectives: In this study, immunohistochemistry was used to determine the expression of Hsp37 in gastric cancer and its precursor lesions. It should suggest whether the alteration in the expression of Hsp37 occurs prior to the development of gastric cancer and can be detected even in chronic atrophic gastritis and Helicobacter pylori-associated chronic gastritis. It will also disclose whether these alterations may correlate and predict early stage of gastric cancer. Methods: Immunohistochemical staining of Hsp37 was performed on 54 chronic atrophic gastritis, 53 Helicobacter pylori-associated chronic gastritis and 40 gastric cancer samples to determine the expression of Hsp37. The immunohistochemical staining was scored semi-quantitatively with a modified Silverton-Rank Test and Mann Whitney U Test were used for statistical analysis. Results: Analysis showed that there were significant differences between the expressions in both types of gastritis with gastric cancer, with higher expression in gastric cancer (P=0.03). There were significant differences in the Hsp37 expressions in chronic atrophic gastritis and gastric cancer with their normal adjacent mucosa (P=0.05). Conclusions: Overexpression of Hsp37 was found in the samples of gastric cancer and both types of gastritis. Further studies need to be carried out to ascertain the association of Hsp37 expression in gastric cancer and its precursor lesions.