

# POSTER PRESENTATIONS ABSTRACT

## P-AP-01

### THE ROLE OF CD10 IMMUNOHISTOCHEMISTRY IN THE GRADING OF PHYLLODES TUMOUR OF THE BREAST

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**Introduction:** It is important to properly diagnose phyllodes tumours of the breast since all grades may recur and the borderline and malignant ones may also metastasize. In general, no single histological criterion can be used in the grading and instead, it is based on several histological parameters. CD10 has recently been reported to be expressed in spindle cell neoplasia and has been used to differentiate endometrial stromal sarcoma from leiomyoma and leiomyosarcoma. **Objective:** To determine the relationship between the degree of CD10 expression in the stromal cells of phyllodes tumour and tumour grading. **Methods:** A total of 61 cases of mammary phyllodes tumours over the past 11 years were searched from histopathology files, University Malaya Medical Centre. The paraffin blocks were retrieved and 4mm thick slides were prepared and stained using an antibody against CD10 with the envision method. Fibroadenoma case was used as a control slide and breast myoepithelium as the internal control. Each stained slides was independently and semiquantitatively analysed for the intensity and percentage of the stromal cells stained. The staining intensity was graded as negative (no staining), mild, moderate and strong if the staining was much weaker, slightly weaker and same intensity as that of the myoepithelium, respectively. The tumour was considered positive for CD10 if the staining intensity is moderate to strong in 20% or more of the stromal cells. **Results:** 21 (44.7%) of 47 benign phyllodes tumour, 5 (83.3%) of 6 borderline phyllodes tumour and all 8 cases (100%) of malignant phyllodes tumour showed positive expression for CD10 immunostain. **Conclusion:** There was a significant increase in CD10 expression in the stromal cells as the lesions progressed from benign to borderline and malignant phyllodes tumour.

## P-AP-02

### CLINICOPATHOLOGICAL CHARACTERISTICS OF OVARIAN CYSTS RECEIVED IN CENTRE FOR PATHOLOGY DIAGNOSTIC AND RESEARCH LABORATORY, FACULTY OF MEDICINE, UNIVERSITI TEKNOLOGI MARA: A SIXTH MONTHS STUDY.

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**Introduction:** Ovarian cysts are common condition affecting women of all ages, while ovarian cancer comprised 5% of all cancers in Malaysia. The prevalence of ovarian cancer among ovarian cysts received in histopathology laboratory is unknown. This data is important in order to create awareness on the types of lesion and also in terms of training of histopathologists and students. **Aim:** To investigate the types of ovarian cancer prevalent in ovarian cysts specimens received by the Histopathology Laboratory, Centre for Pathology Diagnostic & Research Laboratory (CPDRL) UITM and correlate them with clinical and pathological characteristics. **Method:** All ovarian cysts received in CPDRL from August 2011 to January 2012 were studied. The cases were analyzed for patient demography, clinical presentation, size of lesion and histopathological diagnosis. The data were analyzed using SPSS 17.0, employing student t- test method, statistically significance was taken as  $p < 0.05$ . **Results:** Within this period, 57 cases were received. The age of the patient was  $34.09 \pm 10$  years (mean  $\pm$ SD). The most prevalent ethnic group was Malay (83.9%) followed by Chinese (5.4%) and Indian (5.4%). Abdominal pain and incidental finding during other abdominal surgeries were the common presentations. The mean  $\pm$ SD of the ovarian cysts diameter were  $64.22 \pm 49.58$ mm. There was no correlation between age of the patients and diameter of the cysts. Histopathological diagnoses includes benign/hemorrhagic simple cyst 38.6%, cystic teratoma 19.3%, serous cystadenoma 12.3%, endometriotic cyst 8.8%, mucinous cystadenoma 3.5% and one case each of yolk sac tumor, endometrial carcinoma and germ cell tumor (1.8%). **Conclusion:** The majority (94.3%) of the ovarian cysts received are benign. Majority of the patient are Malays and of young age. The most common cyst is simple/ hemorrhagic cyst followed by mature cystic teratoma.

## P-AP-03

### GRADING OVARIAN SEROUS CARCINOMA USING A TWO TIER GRADING

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**Introduction:** Ovarian cancers cause most of the gynaecological deaths. Recently, it has been proposed that the 3-tier (well, moderately, and poorly differentiated) grading system for ovarian serous carcinomas be replaced by a 2-tier (low grade and high grade) system which is shown to be useful in predicting outcome. **Objectives:** To evaluate a two tier system for grading of ovarian serous carcinoma as compared to a three tier system & to determine whether a predictive relationship exists between grade and survival. **Methods:** Cases of ovarian serous carcinomas diagnosed between 2005 to 2010 (5 years duration) in the Department of Pathology, Kasturba Medical College, Manipal, were retrieved from the archives and analysed based on the assessment of nuclear atypia with the mitotic rate used as a secondary feature and classified into low grade and high grade, i.e. in a two tier classification. For comparison tumours were also graded using the Shimizu and Silverberg system as grade 1, 2 or 3. Median survival was calculated using the Kaplan- Meier method and the curves were compared using the log rank tests. Multivariate analysis was performed using Cox proportional hazard method. **Results:** A total of 45 cases of ovarian serous adenocarcinomas were assessed as per the 2 tier and the Shimizu/Silverberg grading system. Majority of the low grade category were placed in grade 1 of Shimizu Silverberg system while majority of high grade cases serous carcinomas were placed in grade 2 of Shimizu/Silverberg system. The predictive ability of both, the two tier grading system and Shimizu/Silverberg grading system over survival was found to be insignificant ( $p > 0.5$ ). **Conclusion:** The prognostic utility of the two tier grading system was statistically not supported by the present study though there was good overall correlation between the present system and the Shimizu/Silverberg grading system.

## P-AP-04

### PRELIMINARY ANALYSES ON DETECTION OF SYT-SSX FUSION-TRANSCRIPTS IN SYNOVIAL SARCOMA

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**Introduction:** Synovial Sarcoma is a rare cancer and account for 5-10% of adult soft tissue sarcomas. The tumour exhibits unspecified histogenesis composed primarily of spindle cells with variable epithelial components. Despite establishment of some immunohistochemistry staining, making a definitive diagnosis of synovial sarcoma remains a challenging task. This is due to the histo-morphology and immunophenotypes similarities of this tumour to other types of soft tissue sarcoma. **Objective:** The current study aims to apply a molecular method for detection of SYT-SSX fusion transcript, a common molecular defect (>90% of the cases) in Synovial Sarcoma irrespective of the histologic subtypes. **Method:** Paraffin-embedded fixed-tissue (PEFT) blocks of 3 confirmed and 15 possible cases of Synovial Sarcoma were retrieved from Department of Pathology, Tengku Ampuan-Afzan Hospital, Kuantan and subjected to RNA purification using the standard spin column protocol. A one step direct RT-PCR was performed using SYT-SSX and PBGD primer sets for detection of SYT-SSX fusion gene and the reference gene PBGD respectively. **Results:** Our preliminary molecular analyses showed positive SYT-SSX fusion transcript in all 3 confirmed cases and 5 possible cases of synovial sarcoma. Further analysis is still on going for the remaining samples. **Conclusion:** Molecular detection of SYT-SSX fusion-transcript is useful in establishing the diagnosis of Synovial Sarcoma.