SESSION No.	SESSION TITLE	AUTHOR	ABSTRACT TYPE	Co-Author (s)
FOP-22 Abstract No. 003 Date & Time 18.10.2018 13:30-14:10	Neuropathology	Almuhaisen, Ghadeer Jordan University Hospital Amman Jordan	Oral Presentation	Al-Tarawneh, Bushra Al-Hussaini, Maysa

ABSTRACT TITLE:
Central nervous system tumors in adolescents and young adults: Epidemiological study from jordan

ABSTRACT TEXT

Objective: Adolescents and young adults (AYA) age group lacks targeted epidemiologic studies that assess the prevalence and outcome of tumors. We aim to provide deep analyses of the epidemiology of central nervous system (CNS) tumors in AYA in Jordan.
Methods: This is a retrospective study for all CNS tumors diagnosed in the AYA group patients diagnosed and managed at King Hussein Cancer Center (KHCC) in 2007-2016. Patients list was retrieved from the Center's cancer registry and clinicopathologic data was reviewed individually from the patients' records.
Results: A total of 370 cases of primary CNS tumors were retrieved, with a median age of 28.5 years. Males outnumbered females; 57.6% and 42.4%, respectively (p-value=0.91).
Most tumors occurred in the cerebrum (72 %, n=230), the frontal lobe was most commonly affected (29%). Gliomas were the most common histologic category, comprising 58.9% (n=218). High grade gliomas, including glioblastoma multiforme and anaplastic astrocytomas, were the most common. Embryonal tumors comprised the second most common group (16.8%, n=62). Medulloblastoma was the prototype of embryonal tumors (91.9%; n=57) and these were diagnosed in the cerebellum. Gliomas tended to affect older age group than embryonal tumors (p-value=0.002).
On last available follow up, 29.5% were lost to follow up, 40% were alive, and 34.6% were deceased. The median overall survival (OS) was 47.6 months. Embryonal tumors had a better outcome than gliomas (median OS 76.3 vs. 30.3 months, respectively; p-value=0.001).
Conclusion: High grade gliomas affecting the cerebrum were the most common tumors among AYA group, and were associated with a less favorable outcome compared to embryonal tumors. More research is needed to address this special age group.
Policy of full disclosure: /

SESSION No.	SESSION TITLE	AUTHOR	ABSTRACT TYPE	Co-Author (s)
FOP-10-II Abstract No. 003 Date & Time 16.10.2018 13:30-14:40	Molecular pathology II	Chernesky, Max University of Calgary Dept. of Pathology Hamilton Canada	Oral Presentation	Hyrcza, Martin Jang, Dan Smieja, Mark Severini, Alberto Lytwyn, Alice Ecobichon-Morris, Anne Young, J. E. M . Archibald, Stuart Jackson, Bernard Michael, Gupta

ABSRACT TITLE:
HPV testing of fine needle aspirates from neck metastases in patients with oropharyngeal squamous cell carcinoma - comparison of OncoE6, Aptima HPV E6/E7 mRNA, and cobas HPV DNA tests

ABSTRACT TEXT

Objective: To determine if HPV testing of oropharyngeal squamous cell carcinomas (OPSCC) using commercially available tests can be performed in samples other than the primary tumour.
Methods: Three commercial HPV tests: OncoE6 (Arbor Vita Corporation), Aptima HPV E6/E7 mRNA (Gen-Probe), and cobas HPV DNA (Roche), were used in testing cervical lymph node fine needle aspirates (FNA) of metastases from 59 Canadian patients with OPSCC. Testing was also performed on saliva samples and oropharyngeal swabs from the same 59 patients. Results were compared to primary tumor p16 immunohistochemistry (IHC) and HPV status.
Results: P16 IHC was positive in 48 of 59 primary tumours. HPV16 genotype was present in 80% of cases. Tests of neck FNAs with OncoE6 was positive in 39 of 59 samples and showed 81.4% agreement with p16 status (kappa 0.53), with Aptima HPV E6/E7 mRNA test was positive in 48 of 59 cases with 96.6% agreement (k 0.88), and with cobas HPV DNA test was positive in 45 of 56 cases with 91.1% agreement (k 0.73). Testing was also performed on saliva samples and oropharyngeal swabs from the same 59 patients, which yielded lower agreements with p16 IHC status: 25.4% (k 0.03) for OncoE6, 57.6% (k 0.26) for Aptima, and 75.4% (k 0.47) for cobas test.
Conclusion: The positivity for HPV E6 oncoproteins and E6/E7 mRNA suggests that patients with HPV-related OPSCC were experiencing transcriptionally active HPV infections. These results suggest that the three commercial assays can be used to determine HPV status in FNAs from cervical lymph node metastases of OPSCC, which is often the only tumour material available for HPV testing. HPV testing of saliva samples and oropharyngeal swabs is less suitable for clinical use.
Policy of full disclosure: /

SESSION No.	SESSION TITLE	AUTHOR	ABSTRACT TYPE	Co-Author (s)
FOP-10-I Abstract No. 003 Date & Time 15.10.2018 14:00-14:30	Molecular pathology I	De Los Reyes, Francia Victoria UERM Memorial Medical Center Quezon City Philippines	Oral Presentation	

ABSTRACT TITLE:
Predicting the RET oncogene mutation in MEN2A probands - A meta-analysis

ABSTRACT TEXT

Objective: Multiple endocrine neoplasia type 2A (MEN2A) is a rare familial cancer syndrome that is characterized by a germline mutation in the RET proto-oncogene and is classically defined as the clinical triad of medullary thyroid carcinoma, pheochromocytoma, and parathyroid hyperplasia. To address the need for an extrapolation of the RET oncogene mutation, this study aims to present a predictive model that presents the likelihood that patients 30 years old and below presenting with medullary thyroid carcinoma and pheochromocytoma may have a high risk RET mutation, thru the meta-analysis of all reports containing the age of diagnosis and the mutation of their respective probands.
Methods: All the reported cases archived in PUBMED and EBSCO under the search string "multiple endocrine neoplasia type 2a"[All Fields] AND "mutation"[All Fields] were reviewed for the required information and adjusted for duplicated entries.
Results: C634R is the most commonly detected mutation in the 30 year old and younger age group, and was observed in 56% of the probands. There is a significant difference between the occurrence of C634R in the younger age group versus all the other mutations in the said group, in comparison to the C634R occurrence versus the other mutations in the older age group (p value= 0.006), and that the higher percentage of C634R in the younger group did not occur by chance. Furthermore, the odds that someone from the younger group would have a C634R mutation is four times more than that of someone from the older group, with the OR = 3.8 (95% CI 1.44- 10.29).
Conclusion: The result of this predictive modelling will allow a basis for clinicians to provide the information regarding the urgency for molecular testing to verify that the proband indeed has a high risk mutation. Moreover, clinical laboratories that would like to establish targeted genomic screening programs for MEN2A may opt to focus on the more prevalent high-risk mutations such as p.Cys634Arg, alongside p.Cys634Gly/Phe/Ser/Trp/Tyr to optimize mutation testing versus constraints that are constantly experiences in a resource limited setting.
Policy of full disclosure: /

SESSION No.	SESSION TITLE	AUTHOR	ABSTRACT TYPE	Co-Author (s)
FOP-03-I Abstract No. 003 Date & Time 15.10.2018 14:00-14:40	Breast pathology I	Jasar, Dzengis CH ACIBADEM SISTINA Skopje Macedonia	Oral Presentation	Kubelka-Sabit, Katerina Petrova, Deva Filipovski, Vanja

ABSTRACT TITLE:
The breast cancer immunophenotypes in correlation with classical morphological parameters as a predictive model for recurrence risk

Objective: Breast cancer is the most commonly diagnosed cancer in women worldwide characterized by molecular and clinical heterogeneity that results with multiple intrinsic tumor subtypes. The aim of this study was to evaluate the occurrence of relapses in the different immunophenotypes of breast cancer (BC) associated with different histomorphological parameters.
Methods: The retrospective population study included 173 breast cancer patients diagnosed between 2007 and 2010 in our hospital. Molecular subtype classification was performed on immunohistochemical surrogates for estrogen (ER) and progesterone receptor (PR), as well as for proliferation index determined with Ki-67 antibody and Human Epidermal Growth Factor receptor 2 (HER-2), according to St. Gallen International Expert Consensus recommendations from 2013. During the follow-up period (min.12,2, max. 75,3, mean 46,6+16,6 months), recurrences were observed in 35 (20,2%). BC immunophenotypes and classic histomorphological and clinical parameters were analyzed in terms of disease free survival (DFS) in a multivariate fashion using a Cox regression model.
Results: Our results showed that proportions of breast cancer immunophenotypes were: Luminal A-26,56%; Luminal B-41.67%; HER2+ 18,75% and Triple-negative-13,02%. In the Univariate analyses there was a significant difference in the distribution of age, tumor diameter, mitotic index, lympho-nodal ratio, Nottingham Prognostic Index (NPI), stage of the disease, Ki67 PI and the bcl-2 overexpression at the diagnosis among the four BC immunophenotypes. In the the multivariate analyses, the age of the patients, the tumor diameter and the stage of the disease were represented as independent prognostic factors of recurrent disease in different BC immunophenotypes.
Conclusion: The prognostic value of breast cancer immunophenotypes persists when adjusting the age, the tumor diameter and the stage of the disease, as clinical parameters. This "morphologic-molecular" model was robust in relapse prediction and recurrence risk stratified by traditional prognostic parameters.