

PS-09-024

Establishment and characterisation of primary oral squamous cell carcinoma (SCC) cell lines from Iranian population by enzymatic method and explant culture

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Objective: Oral Squamous Cell Carcinoma (OSCC) is the most frequent oral cavity cancer. It is known as the eight most common cancers in men and the fifth in women. Various prevalence of this cancer has been reported throughout the world, in terms of geographical regions.

Method: Tissue samples were obtained from oral cancer patients and enzymatic, explant culture and MACS methods were used for isolation cells. After confirmation of quality controls, characterization and authentication of OSCC cells were determined by STR, Chromosome analysis, Species identification, monitoring the growth, morphology, expression of CD326 and CD133 markers.

Results: We have successfully established a total number of five Iranian OSCC cell lines.

Conclusion: Regarding the data obtained from the current study, it can be inferred that these cell lines will provide an extremely useful platform for studying carcinogenesis pathways of OSCC in Iranian population and may explain the ethnic differences and anti-cancer drug response in upcoming studies.

PS-09-026

SMARCB1 (INI1)-deficient sinonasal clear cell carcinoma (CCC): A new histological variant

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Objective: SMARCB1-deficient sinonasal carcinoma with clear cell morphology, a new variant.

Method: Case report.

Results: A 43 year old male presented with blurred vision and headaches. CT & MRI revealed a left sphenoid/ethmoid sinus mass. A biopsy showed a high grade tumour composed of sheets of clear cells without evidence of squamous or glandular differentiation. A minority of cells contained eosinophilic cytoplasmic inclusions imparting a rhabdoid morphology. Immunohistochemically, the tumour cells were positive for AE1/AE3 and CK7 with focal staining for CK5, CK20, calretinin, vimentin and SMA. There was diffuse loss of nuclear staining for INI1. The patient underwent neoadjuvant chemotherapy and craniofacial resection, but died 3 months postoperatively.

Conclusion: SMARCB1-deficient sinonasal carcinoma, a recently described aggressive primary sinonasal malignancy, typically has a basaloid appearance. The predominantly clear cell morphology seen in this case has, to our knowledge, not been described and may cause diagnostic confusion with other clear cell carcinomas. Immunohistochemistry for INI1 loss should be considered when dealing with undifferentiated sinonasal carcinoma, including those with clear cell change. This will facilitate appropriate diagnosis and allow for a more comprehensive understanding of this entity.

PS-09-027

Hedgehog pathway proteins SMO and GLI expression in head and neck squamous cell carcinoma (HNSCC) – a potential therapeutic target?

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Objective: The hedgehog pathway is involved in many cancer types and suitable for targeted therapy. Recent studies showed that

the hedgehog pathway might be also a target in head and neck cancer.

Method: We evaluated the hedgehog pathway proteins SMO and GLI as well as p53 expression by immunohistochemistry in 101 patients with squamous cell carcinoma of the head and neck (HNSCC). Correlation with clinico-pathological factors (tumour stage, lymph node status, grading) was performed.

Results: Immunoreactivity for SMO and GLI was found in 36 (35,6 %) and 91 (90 %) of tumours. Positivity of both proteins was found in 35 (34,7 %). Expression of both hedgehog pathway proteins SMO and GLI did not correlate with tumour stage, lymph node status or tumour grade. However, expression of GLI showed statistically significance with positive lymph node status regardless of tumour stage ($p < 0.01$). P53 alteration correlated with higher tumour grade ($p < 0.01$) but not with SMO and GLI expression.

Conclusion: Expression of hedgehog pathway proteins was found in a substantial number of HNSCC. GLI expression significantly correlated with disease progression (lymph node metastases). Targeting the hedgehog pathway in HNSCC might have therapeutic potential and further molecular analyses are needed to elucidate therapeutic options.

PS-09-028

Clear cell carcinoma (CCC): A case report with review of literature

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Objective: Because clear cell carcinoma (CCC) is a low-grade carcinoma, it is very important to recognize it and to distinguish it from other carcinomas « with clear cells », especially the clear cell squamous carcinoma, whose treatment and prognosis are very different.

Method: We present the case of a 43-year-old woman, without any history of cancer, tobacco or alcohol habit, who had for 1 year a retromolar mass, with osseous invasion but without node or hematogeneous metastases. Surgery was performed.

Results: Histologically, this lesion was infiltrative, with solid nests and sheets of large glycogen-rich clear cells and smaller eosinophilic cells, surrounded by a sometimes hyalinized stroma. Atypia were very moderate. Mitoses were rare in the majority of the tumour. Tumour cells were positive for cytokeratine CK5-6 and p63, and negative for myoepithelial markers. The identification of EWSR1 rearrangement by FISH confirmed the diagnosis of CCC.

Conclusion: CCC is a rare tumour of accessory salivary glands characterized by a constant but non specific EWSR1 rearrangement. It occurs in adults, with a slight female predominance, mostly in the oral cavity. Differential diagnoses are discussed with other head and neck tumours « with clear cells », some of them also with EWSR1 rearrangement.

PS-09-030

Prognostic relevance of EGFR expression in laryngeal squamous cell carcinoma (LSCC)

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Objective: The aim of our work is to study the immunohistochemical expression of EGFR in laryngeal squamous cell carcinoma (LSCC) and its correlation with risk factors, tumour location, TNM stage and histological grade.

Method: Our retrospective descriptive study focused on 30 cases of LSCC collected during a period of 6 years from January 2010 to January 2016. A histological examination as well as an immunohistochemical study using the EGFR antibody were performed.