Conclusions: We isolated a subpopulation of more invasive glioblastoma cells selected in merosin substrate. Our findings suggest that merosin substrate is related to the brain invasion, and that increased expression of α_1 , α_7 and β_1 integrin subunits, MMP2 activation, and fascin-actin interaction lead to increased motility and invasiveness in U87MG cell line.

63. THE SIGNIFICANCES OF NUCLEAR AND CYTOPLASMIC OVEREXPRESSION OF METASTATIC TUMOR 1 IN HEPATOCELLULAR CARCINOMA

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Background: Metastatic tumor antigen 1 (MTA1) protein is usually localized in the nuclei and its overexpression is suggested to be associated with vascular invasion, frequent post-operative recurrence, and poor survival in patients with hepatocellular carcinoma (HCC). Recently cytoplasmic MTA1 localization is recognized, however, its potential relationship with clinicopathological characteristics has not been examined.

Aims: We investigated nuclear and cytoplasmic expressions of MTA1 to evaluate their relationship with clinicopathological characteristics in patients with HCC by immunohistochemistry.

Methods: A total 263 patients with HCC who underwent resection from January 2013 to February 2015 were subjected. The patients previously treated by transarterial chemo-embolization, radiofrequency ablation, and resection for recurrent HCC were excluded. Nuclear and cytoplasmic overexpressions of MTA1 were defined as positive in nucleus and cytoplasm more than 5% of tumor cells, respectively by immunohistochemistry.

Results: Nuclear overexpression was found in 154 patients. It was significantly associated with female gender ($p=0.039$), viral etiology ($p=0.02$), high Edmondson-Steiner grade ($p=0.022$ in worst grade and $p=0.008$ in most grade), portal vein invasion ($p=0.017$), Glisson capsule invasion ($p=0.026$), high T stage ($p=0.016$), and recurrence ($p=0.017$). Interestingly, cytoplasmic overexpression was associated with beneficial factors for clinicopathological characteristics. Cytoplasmic overexpression was found in 183 patients. Negative for cytoplasmic overexpression was significantly associated with high histologic grade ($p=0.003$ in most grade), portal vein invasion ($p=0.009$), Glisson capsule invasion ($p=0.028$), presence of satellite nodule ($p<0.001$), high T stage ($p=0.003$), recurrence ($p=0.02$), and distant metastasis ($p=0.005$). A total 109 cases with negative for nuclear overexpression, negative for cytoplasmic overexpression was significantly associated with high histologic grade ($p=0.01$ in most grade), Glisson capsule invasion ($p=0.033$), presence of satellite nodule ($p=0.012$), high T stage ($p=0.033$), and distant metastasis ($p=0.003$).

Conclusion: Nuclear overexpression of MTA1 is associated with adverse clinicopathological factors, while cytoplasmic overexpression of MTA1 is associated with beneficial clinicopathological factors in HCC.

64. CARBONIC ANHYDRASE 9 EXPRESSION IN PANCREATIC NEUROENDOCRINE TUMORS IS ASSOCIATED WITH AGGRESSIVE BEHAVIOR

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Background: Pancreatic neuroendocrine tumors (PanNETs) are rare malignant endocrine tumors with diverse clinical behaviors. Therefore, identifying biomarkers is important for stratifying the clinical course and prognosis of PanNET patients. Carbonic anhydrase 9 (CA9) and vimentin are hypoxia and epithelial-mesenchymal transition related protein, respectively. CA9 or vimentin expression was reported to have poor prognosis in many carcinomas. However, their expression has not been extensively evaluated with PanNET cases.

Aim: We aimed to investigate clinicopathologic correlations between CA9 and vimentin expression in PanNETs.

Methods: Immunohistochemical staining of CA9 and vimentin were assessed in 169 surgically resected PanNETs and compared with clinicopathologic factors, including patient survival.

Results: CA9 and vimentin expression was observed in 39 (23.1%) and 37 (21.9%) PanNET cases, respectively. PanNET patients with CA9 expression was associated with higher grade ($p<0.001$), larger size ($p=0.002$), higher T stage ($p<0.001$), lymph node ($p=0.005$) and distant ($p=0.026$) metastasis, higher stage grouping ($p<0.001$), lymphovascular ($p<0.001$) and perineural ($p=0.004$) invasions. Marginally significant survival difference was noted between CA9 positive and negative groups ($p=0.068$). On the other hand, vimentin expression was significantly associated with CA9 expression ($p<0.001$) although it does not associated with other clinicopathologic characteristics.

Conclusion: CA9 expression is observed in subset of PanNETs, associated with advanced clinical stage, and has marginally worse survival time in PanNET patients.

65. INDOLENT CD8-POSITIVE T-CELL LYMPHOMA OF THE GASTROINTESTINAL TRACT: A NOVEL ENTITY ANALOGOUS TO THE CUTANEOUS CD4-POSITIVE SMALL/MEDIUM T-CELL LYMPHOMA?

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Background/Aim: Primary T- or NK (T/NK)-cell lymphomas of the gastrointestinal (GI) tract are uncommon diseases, comprising mainly some aggressive subtypes such as enteropathy-associated T-cell lymphoma and extranodal NK/T-cell lymphoma, nasal type. Rare cases of some T/NK-cell lymphoproliferative disorders with an indolent clinical course, however,