Vasculogenic mimicry and its clinical significance in Kazakh esophageal cancer patients

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The aim of this study is to investigate if there is vasculogenic mimicry (VM), which is the formation of microvascular channels by aggressive, metastatic and genetically deregulated tumor cells in Kazakh esophageal cancer patients and to illustrate its clinical significance. 76 Kazakh esophageal cancer tissues and 20 paraneoplastic normal esophageal mucous membranes were collected, VM was studied by using immune-histochemical CD34 and PAS double staining combining HE and the associated clinical pathological features such as tumor differentiation and pathological classification were analyzed. VM was detected in 42.1% (32/76) of esophageal cancer tissues, which was significantly higher than normal esophageal mucous membranes (P<0.05). VM was not related to gender, age, tumor location, tumor size, however, it was significantly related to tumor differentiation (P<0.05), lymphatic metastasis (P<0.05) and the TNM classification (P<0.05). Furthermore, VM was detected in 28.8% (17/59) of high-moderately differentiated cases, 88.2% (12/15) low-moderately differentiated cases, 26.8% (11/41) of early staged (T1-T2) cases and 60.0% (21/35) of advanced staged (T3-T4) cases. Kaplan-Meier survival curve indicated that survival was shorter in cases of VM positives than VM negatives (Log Rank: χ²=7.803, P<0.05). Cox analysis showed that VM, lymphatic metastasis and TNM classification were the independent risk factors in the prognosis of esophageal cancer. There is vasculogenic mimicry (VM) in Kazakh esophageal cancer patients. VM is related to tumor differentiation, lymphatic metastasis and TNM classification, it may affect the survival of esophageal cancer patients by increasing regional lymphatic metastasis, and this is clinically significant for prognoses of the metastasis and survival of esophageal cancer patients.

Biography
Madinyeti Niyazi completed the Clinical Medicine Research Institute which is First Affiliated Hospital of Xinjiang Medical University in China; His research interests include pathophysiology of cancer and tumor biology.

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