

Study on the localization of Aminopeptidase A in Invasive Carcinoma of Mammary Gland in Human

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Aminopeptidase A (APA) has a broad tissue distribution in both animals and humans. The enzyme is a part of renin-angiotensin system (RAS) and plays a role in blood pressure regulation. It participates also in other physiological functions such as processing of primary urine in kidneys and protein digestion in small intestine. APA expression has been studied in several types of malignant neoplastic lesions to show that it can serve as a biomarker for certain of them, particularly for active neoangiogenesis. In the present paper APA localization is studied in 5 cases of human invasive carcinoma of mammary gland using enzyme histochemistry. The results show elevated APA activity in the area of newly forming blood vessels as well as in tumor cells. A possible role of APA as a marker enzyme in this type of cancer is suggested.

Key words: Aminopeptidase A, blood vessels, mammary gland, invasive carcinoma.