



62% - ≤ 0.238 and in 38% of cases ≥ 0.238 . For MPP-9, the limits of optical density were 0.284-0.3116, the average was 0.297. In 77.5% of the metastatic indices were ≥ 0.297 , 25.5% ≤ 0.297 . In the group without metastases the results were 75% - ≤ 0.297 and 25% ≥ 0.297 .

The relative risk of MRP-2 with a diagnostic value of "1.0" is 4.239, the odds ratio was 15.664. For MPP-9 the value of the relative risk with a diagnostic value is "1.0" - 4.433 and odds ratio is 27.841.

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INVESTIGATION OF PROTEINS' PECULARITIES IN THE TISSUES OF DUCTAL BREAST CANCER FOR TUMOUR METASTASIS PREDICTION

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The importance of studying changes of proteins in tumor processes proves that these data indicate an active process in the tissues. These processes are the growth of tumor, invasion or metastasis. Particular importance is given to the metastasis of tumor.

The objective of the research was to establish the proteins' properties with the "acidic" and "basic" groups as a criterion for the oxidative modification of proteins, as well as quantify of free NH₂- group of proteins as a criterion for limited proteolysis. It became possible due to the usage of histochemical methods of epy research. After receiving these data, a quantitative metastasis prognosis would be established.

The morphological observation of 162 cases with invasive duct breast carcinomas, including those with metastases (97 cases) and without metastases (65 cases) has been used for in the research. Free NH₂- group of proteins was determined by A.Yasuma and T.Ichikava, as well as "acidic" and "basic" proteins were determined by Mikel Calvo with the help of the computer program ImageJ.

It was found out that the relative risk of free NH₂-group of proteins with established diagnostic value "1.0" was 7.85, and the odds ratio - 109.40. The relative risk of R/B that was staining the "acidic" and "basic proteins" at the diagnostic value of 1.34 in tumor cells was 9.30, and the odds ratio was 196.07. The relative risk factor R/B that was staining the "acidic" and "basic" paints was 1.64, in the fibers of the connective tissue it was 8.05, and the odds ratio was 133.50.

The difference in spectral characteristics of colour elements of the stroma and parenchyma of breast cancer is in difference between the amino acids and carboxyl groups of proteins. In the cells of epithelial carcinoma, in comparison with stroma, the structure is mainly blue; that indicates the predominance of "main" proteins, pointing out the prevalence of amino groups in them, and in compound components, the colour is mainly red - it indicates the predominance of "acidic" proteins, namely proteins with the domination of carboxyl groups.

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ANATOMIC PECULIARITIES OF THE FACIAL NERVE IN THE EARLY PERIOD OF HUMAN ONTOGENESIS

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The embryology of the seventh cranial nerve, especially its peripheral development, has received little attention in man in comparison to the important role it plays in postnatal life.

The specimen of 21 embryos and 23 pre-fetus were selected to be the materials of the research. Following investigational methods have been used: macroscopy, microscopy of consecutive histological sections series, conventional and thin preparations.

In a 4.2 mm embryo, the facial nerve arises in common with the eighth cranial or acoustic nerve and is attached to the metencephalon just rostral to the otic vesicle. This facioacoustic primordium (acousticofacial crest) is fibrous in its attachment but soon becomes cellular as it courses ventrally. It passes rostral to the otic vesicle and, at the lower part of the vesicle, the acoustic division arises. The major division of the primordium (facial part) continues ventrally, becomes more cellular and compact, and appears as a column of cells. In 4.8 to 6.5 mm embryos the facial division of the facioacoustic primordium is less cellular than the acoustic division and, as it courses ventrally, it is partially surrounded by the developing acoustic ganglion. The facial division separates into two almost equal parts. The caudal part, which constitutes the main trunk of the facial nerve, shortly disappears into the surrounding mesenchyme. The rostral part enters the mandibular arch by passing ventral to the first pharyngeal pouch and will become the chorda tympani nerve, the first branch of the facial nerve to develop. The proximal part of the facioacoustic primordium begins to separate into two distinct nerves in 8.0 to 10.6 mm embryos. A complete separation appears at 14.0 mm and a discrete nervus intermedius is present at 16.5 mm. In 18.0 mm embryos the nervus intermedius is considerably smaller than the motor root of the facial nerve and is arranged as one or two main bundles that pass from the geniculate ganglion to the brainstem between the motor facial root and the acoustic nerve. In pre-fetuses 20.2 - 41.0 mm the facial nerve becomes proportionally smaller in relation to the total cranial region and its peripheral branches gradually approach the definitive condition. Proximally the facial nerve is round or oval on transverse section although peripherally, in some areas of the face, it is flat.