relationships with different molecular subtypes of breast cancer and main clinical parameters were also analyzed.
Results. Maximal values of both D2-40it and D2-40pt were achieved in case of triple- negative breast carcinomas (19 and 17, respectively). For luminal A, a positive correlation was detected between D2-40it and ER (r=0,611, p=0,012) and a negative correlation between D2-40pt and age (r=-0,533, p=0,033). D2-40pt positively correlated with D2-40it (r=0,676, p=0,011) in HER2+ subtype and in triple-negative breast carcinomas (r=0,631, p=0,028). D2-40pt negatively correlated with age in triple-negative subtype (r=-0,584, p=0,046). Analyzing overall molecular subtypes, we have found a positive correlation between D2-40it and tumor's grade (r=0,289, p=0,008). Intratumoral lymphatic vessels' amount negatively correlated with age (r=-0,242, p=0,026), hormone receptors ER (r=-0,339, p=0,002) and PR (r=-0,245, p=0,024). In G2 and G3 tumors, D2-40pt correlated with D2-40it (r=0,542, p=0,000069 and r=0,558, p=0,000206 respectively). In case of G3 tumors intratumoral lymphatic vessels negatively correlated with ER+ carcinoma cells (r=-0,406, p=0,016) and patients' age (r=-0,432, p=0,009).
Conclusions. There are few data about interrelations between intratumoral and peritumoral lymphatic vessels in breast cancer. Intratumoral lymphatic vessel density is strongly influenced by the expression of hormone receptors. Our findings also suggest that lymphangiogenesis rate is higher in younger patients. The development of intratumoral and peritumoral lymphatic vessels is directly related.
Key words: breast carcinoma, D2-40, LVD, tumor microenvironment, molecular subtypes, ER, PR

266. NEUROHYPOPHYSIS: STRUCTURAL,PHYSIOLOGICAL AND CLINICAL ASPECTS

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Introduction. Much has been written regarding the ultrastructure of the human adenohypophysis, on the other hand, relatively little is available on the the neurohypophysis.
Aim of the study. To apprehend the purpose of this unique tissue; to explore the embryology physiology and pathophysiology of the neurohypophysis, vasopressin and oxytocin; to highlight developments on the neural basis of osmo-sensing mechanism; to describe vasopressin and oxytocin regarding the molecular biology and to underline some of the disease processes in which both the structure and functions of the those two hormones are involved.
Materials and methods. Analysis of literature and synthesis of scientific data from studies (microscopically evidence and clinical tryouts)
Results. The posterior pituitary is derived from the forebrain/prosencefalon during development and is composed predominantly of neural tissue. It lies below the hypothalamus, with which it forms a structural and functional unit: the neurohypophysis. The supraoptic nucleus (SON) is situated along the proximal part of the optic tract. It consists of the cell bodies of discrete vasopressinergic (VP) and oxytotic(OX) magnocellular neurons projecting to the posterior pituitary along the supraoptico-hypophyseal tract. The paraventricular nucleus (PVN)

also contains discrete vasopressinergic and oxytotic magnocellular neurons, also projecting to the posterior pituitary along the supraoptico-hypophyseal tract. The PVN contains additional, smaller parvocellular neurons that project to the median eminence and additional extra-hypothalamic areas including forebrain, brain stem, and spinal cord. Some of these parvocellular neurons are vasopressinergic. The neurohypophysis is the structural foundation of a neuro-humoral system coordinating fluid balance and reproductive function through the action of two peptide hormones: vasopressin and oxytocin. Vasopressin is the main endocrine regulator of renal water excretion, facilitating adaptive physiological responses to maintain plasma volume and plasma osmolality. Oxytocin is important in parturition and lactation. Data support a wider role for both peptides in the neuro-regulation of complex behavior. Clinically, deficits in the production or action of vasopressin manifest as diabetes insipidus. An understanding of the physiology and pathophysiology of vasopressin is also critical in approaching the diagnosis and management of hyponatraemia, the most common electrolyte disturbance in clinical practice.

Conclusions. The neurohypophysis represents a unique tissue having neural and endocrine characteristics and possessing ultrastructural features distinct from those of conventional endocrine organs such as the anterior pituitary, thyroid, pancreatic islets, etc. In contrast to these glands, the neurohypophysis consists from the processes of mature neurons, therefore, it is not capable of synthesizing hormones but only of their storage and release. On the other hand the hormones that it releases in the blood stream seems to have a higher impact on the physiological processes of human homeostasis and complex behavior, than it was originally thought back in the days.

Key words: Neurohypophisis, Oxitocin, Vasopresin

267. ONCOGENESIS – CONTEMPORARY THEORIES AND CONCEPTS

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Introduction. Nowadays, cancer is the second leading cause of death globally and it is estimated that in next years, the number of new cases is going to rise. So, this disease has a great impact on physical, emotional and financial aspects of everyone's life and it would be better to prevent it consequences that to bear them.

Aim of the study. Carcinogenesis may result from the action of different factors such as chemical, physical, biologic and/or genetic injuries that affect human cells. In order to discover new methods of treatment, it is important to know how cancer appears, what factors may accelerate this process and how malignant cells start to spread throughout the body.

Materials and methods. This review represents a synthesis of current information about carcinogenesis from online biomedical literature such as - journals and books, including more than 30 references.

Results. Cancer is a general term that describes a large variety of diseases. The common characteristic of this process is the transformation of a normal cell into a cancerous one. Oncogenesis is divided into three stages: initiation – when one or more stable cells are exposed to the action of a carcinogen factor; promotion – where the initiated cells start to expand by self-proliferation leading to abnormal growth; and progression – where the cells start to detach