the disease a large part of the patients develop cognitive disorders / dementia due to cholinergic deficit. In this paper, the features of cholinergic deficits in patients with Parkinson's disease and their clinical correlations are reviewed. Important neurophysiological processes at the root of several motor and cognitive functions refer to cholinergic neurotransmission at the synaptic level, pathway and circuit. Of interest would be the fact that there is evidence of the connection between cholinergic changes and motor symptoms, gait dysfunction, levodopa-induced dyskinesia, cognitive deterioration, psychosis, sleep abnormalities, autonomic dysfunction and impaired olfactory function. The pathophysiology of these symptoms is related to the alteration of cholinergic tone in striated and degeneration of cholinergic nuclei, the most important being the magnocellular basal nucleus and pedunculopontine nucleus. Finally, several drugs acting on muscarinic receptors have been shown to be effective in the treatment of levodopa-induced dyskinesia and cognitive impairment but also as neuroprotective agents in experiments made on humans. However experimental results on patients are missing.

Conclusions. Parkinson's disease is a neurodegenerative disease with diffuse damage of the cholinergic system. Thus, with the progression of the disease occurs an expressed heterogeneity of clinical manifestations.

Key words: Parkinson's Disease, dementia, cholinergic deficiency

29. RESPIRATORY THERAPY - A POSSIBLE SOLUTION IN THE ALLEVIATION OF CHRONIC PAIN.

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Background. Establishing and arguing the interdependence of chronic pain and breathing. Analysis and confirmation of the efficiency of chronic pain management with the help of various respiratory techniques (such as: Pranayama, Deep Slow Breathing (DSB), Abdominal Breathing, etc.). Minimizing or even excluding the coping / improvement of the chronic pain with opioids, finding alternative in respiratory therapy. Pain is a component of many chronic conditions, chronic pain itself constituting a complex, disturbing nosological entity with a strong negative impact on the individual, family and society as a whole. Chronic pain is a major problem in the 21st century, affecting over 1.5 billion people worldwide (most of them constituting: lumbar pain (27%), migraine (15%), sore throat (15%), pain (4%), chronic pain is the number one cause of long-term disability. Another very important aspect is the economic one: in the United States alone, around 560-635 billion dollars is spent on treatment. of chronic pain, more than that there are registered budget losses of 299-325 dollars from the account of the hours and days of work that were missed. The global study of disease burden in 2016 reaffirmed that the increased prominence of pain and accompanying pain are the main cause of disability and burden of disease globally. Only 23% of chronic pain patients said that opioids are effective in their case.

Case report. The articles from the years 1984-2020 were selected and analyzed, reinforcing a meta-analysis from the works on PubMed, MEDLINE, EMBASE, Elsevier, Pain Magazine (2010-2019), Pain Medicine (2012), Breathe (2017), Respiratory Medicine (2013) etc. The articles that correspond to the contemporary standards of the scientific study were respectively

categorized into 4 types: 1) Experimental studies, 2) Clinical studies studying the effects of pain on respiration, 3) Clinical studies studying the effects of respiratory exercises on self-reported pain and 4) Experimental studies that follow for the purpose of determining the effect of the trained respiratory pattern on the pain induced in laboratory conditions. Most of the clinical studies analyzed (around 75%) report a beneficial pain-relieving effect following at least one of the respiratory techniques. Even if these results are promising other therapeutic active factors such as relaxation, massage, meditation, sea sounds etc. they may be equivalent involved in generating these balance sheets.

Conclusions. Following the analysis of studies regarding the association between respiration and pain, both physiologically and psychologically, an interesting and significant connection is determined. Most clinical studies document the benefit of Slow Deep Respiration (SDB) in relation to pain relief, but experimenp tal studies do not consistently achieve this result, as does the case of a direct correlation between breathing and hypoalgesia (an indirect mechanism being more plausible). In the near future the following questions require an answer: 1) Do such psycho-behavioral mechanisms such as concentration, distraction, anticipation and self-control caused by the instructed breathing reduce pain? 2) What other processes central to Deep Slow Breathing (SDB) can induce respiratory hypoalgesia and what can we conclude from the literature on animals in this regard?

Key words: Pranayama, SDB, Abdominal Breathing.

30. DIFFERENTIAL DIAGNOSIS OF INTRACEREBRAL HAEMORRHAGES. CASES FROM THE INSTITUTE OF NEUROLOGY AND NEUROSURGERY

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Background. Intracerebral hemorrhage (ICH) is the second most common type of stroke, responsible for about 20% of total number of cerebrovascular accidents. There are many pathologies associated with ICH, some related to common vascular risk factors like hypertension, others related to ruptured saccular aneurysm, and vascular malformation, and others to neurodegeneration like amyloid angiopathy.

Case report. We present a series of cases of intracerebral haemorrhages related both to the most common causes and mechanisms of ICH, as well as other, less frequent, pathologies that could manifest as a hemorrhagic stroke. Differential diagnosis is based on hematoma localization, size and shape, age of the patients, and vascular risk factors. We also present data on prognostic factors for hematoma growth and outcome. All cases were collected from the Institute of Neurology and Neurosurgery ”Diomid Gherman”, Chișinau, Republic of Moldova.

Conclusions. Although ICH is the second leading cause of stroke, there is a wide range of pathologies that can result in intracerebral hemorrhage and require an extensive work-up, especially in young patients without vascular risk factors.

Key words: intracerebral hemorrhage, ICH, hypertension, amyloid angiopathy, CAA, hematoma, aneurysm