at least two points. This could an effective reduction of vessels in diameter and length and in its velocity of transmission. This could not reveal the hyper coagulation but could improve the production of coagulation factors

**Case report.** The systemic effects of this individual are analyzed bounded with his daily-life. The antigens whose generate respiratory disturbances as cough and dizziness are originated by chemical virions. The direct employed with fat decreasing score is depicted in a window of searching. A decrease in diameter and/or length of vessels could influence the virions to reach targets tissues as adipose or respiratory departments.

Conclusions. The shortening of vessels can define and limit the reaction with adipose tissues and epithelial cells. This situation could explain the eventual unbounded of inflammated and modified tissues with the virus. This written has been done to give rise the relations between a Car-T and a RNA virus of both animals and human origin. The case/the probes of cells whose receives and artificial mutations are of most interest because of the producing of modified proteins, decreasing protein ad many other conditions. Then studies of hysto chemistry are opportunistic in decide which type of mono nuclear antibodies or therapy would be curative. When an artificial clone is wide, many protocols can be choose and even if the final clone is unique, then could be the case in which a variance could derive by the human mistake in a protocol activation. This variance in front of a certain type of clone could insert in doubt some practitioners and could generate changing in a protocol, as that of a Car-T construction. Deciding to relate the Car-T with this pandemic virus has not been easy. The decision derives by the need of some countries as that of Europe to determine a statistic window of people whose were affected and cure them by a new type of treatment mediated by the Car-T therapy. These therapy always considered as new, would be the starting for connect an entire clone (lymphocyte plus chimeric receptor) with a virus.

Key words: adipose tissue, 37.5°C, RT-PCR, respiratory and circulatory system

### DEPARTMENT OF NEUROLOGY

## 28. CLINICAL MANIFESTATIONS OF CHOLINERGIC DEFICIENCY IN PATIENTS WITH PARKINSON'S DISEASE

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**Background.** According to the new concept of Parkinson's disease, the brain suffers from a generalized deficit of neuromediators inclusively serotonergic, adrenergic, dopaminergic, cholinergic and monoaminergic. An important role in the pathophysiology and biocellular mechanisms of Parkinson's disease is played by the cholinergic deficit that becomes evident later than the dopaminergic deficit

**Case report**. An important role in the pathophysiology and biocellular mechanisms of Parkinson's disease is played by the cholinergic deficit that becomes evident later than the dopaminergic deficit. Cholinergic neurons that are diffusely distributed in the cerebral parenchyma play an important role by its involvement in numerous brain processes, the most important being the accomplishment of the superior brain functions. Thus, with the progress of

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