

The Melasterol as Food Supplement with the Purpose of Supporting the Immune System

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ABSTRACT

The authors take in consideration the beneficial metabolic effect of a nutraceuticals combination (monocolin K, yeasted red rice, polyphenolic extract of annurca apple and berberine) on acquired hypercholesterolemia. They take in consideration the possible use of this compound on supporting the immune system as suggested by the acknowledge of the last epidemic behaviour of the COVID-19 between January 2020 up to date.

Keywords: hypercholesterolemia, nutraceutical, annurca apple, red yest, rice, berberine.

INTRODUCTION

The product notes on Melasterol is a food supplement based on berberine, Annurca apple and fenugreek with monacolins from fermented red rice and policosanols [1]. As reported in the specific leaflet, the Annurca apple promotes regular intestinal transit and contributes to the monitored absorption of nutrients, while fenugreek promotes digestive function by exerting an emollient and soothing action, contributing to the normal metabolism of carbohydrates, triglycerides and cholesterol.

Referring to the studies started 5 years ago at the onset of the COVID-19 epidemic [2], then there was a report referring to lactoferrin which, as we know, is a protein with a molecular weight of 80 kilo daltons already known for its antiviral action by binding to the "glycosaminoglycans" of the plasma membrane with the aim of preventing viral entry as demonstrated with respect to herpes viruses, in particular HSV and CMV as well as the AIDS virus. Lactoferrin has been associated with vitamins C and D3 as well as zinc. As was demonstrated at the time for the effectiveness of what was administered with respect to the pathogens mentioned, in particular at the time of their cellular contact [3]. In the case of what is mentioned in the ability to act on the onset of infection symptoms, we can affirm that a similar effect can concern Melasterol to be compared also to the natural effectiveness of ascorbic acid, vitamin D3 and zinc, at high doses, all recognized actions of support for the immune system.

METHODS

Taking inspiration from this last observation, we believe it is appropriate to transfer these capabilities that favor our immune response also to the respiratory system, especially targeted

by the coronavirus family, no longer just the cause of the common cold, but as expressed by SARS and MERS, agents of even global epidemics.

Until less than 20 years ago, coronaviruses represented a viral family that during the winter period caused 10 to 30% of colds, so it was not worth worrying. In 2002 the situation changed with SARS (Severe Acute Respiratory Syndrome) that in China affected 8 thousand individuals and caused about 10% mortality with a virus that from bats infected dogs and cats and then affected humans. After the scattered episodes of MERS (Middle East Respiratory Syndrome) in 2012 in South Arabia, camel coronavirus, and as an epidemic in 2015 in South Korea, at the end of 2019 with a particular epicenter in the city market of Huanan in the metropolis of Wuhan, Hubei province, a new coronavirus appears, later called COVID-19 (Coronavirus Disease 2019), which after passing into exotic animals such as pangolin, porcupine infects humans and adapts with greater virulence so much so as to subsequently establish interhuman contagion and the spread of a mysterious pneumonia before its isolation and genetic study, variability from 2 to 12% compared to the original bat coronavirus [4-7].

RESULTS

While the history of epidemics repeats itself over the centuries, the basic rules have not changed by isolating the patient and carrying out quarantine, so from typhoid fever in Athens in 430 BC to the plague of Manzoni's memory, 1600 AD to the Spanish flu of 1918, the flu that claimed more victims than the recently concluded First World War. In China, the lesson of SARS allowed the population of Wuhan to be mobilized with a delay of almost a month compared to the first cases and the prompt communication to the WHO (World Health Organization) which in itself took the epidemic lightly by declaring it only a month after the first communication as PHEIC, i.e. Public Health Emergency of International Concern. The photo of President Xi with the protective mask and the declaration of public danger showed a delay that cost human lives, despite that early diagnosis by the ophthalmologist Wen Lee who died from this epidemic disease.

The virus seemed controllable and not aggressive in contagion, providing 10 days after the communication to the WHO, the viral genome to the American CDC (Center for Disease Control and Prevention) which immediately confirmed the fingerprints of the new coronavirus for the preparation of a diagnostic kit to be used globally for all health institutions and to distinguish this infection from the ongoing seasonal flu. Obviously, this viral nucleic acid will allow us to know the proteins produced by the viral RNA for the synthesis of specific antigens and antiviral drugs [8-10].

The autopsy issue, which was very limited in the Wuhan epidemic, was initially very important for the Italian cases. In fact, it demonstrated that mortality did not occur due to interstitial pneumonia, but above all due to a thromboembolic mechanism of the small vessels of various vital organs and therefore the importance, obvious for an emergency room or beds in intensive care units, of using heparin and cortisone.

Still regarding the use of ventilators, this is obviously related to the oxygenation of the lungs and we know from the Chinese experience, which used the Italian suggestion of oxygen ozone therapy, how this is more necessary for antiviral therapy as an antioxidant.

DISCUSSION

The most effective treatment (as demonstrated in an article by our Chinese virologist colleagues and published in the Proceeding National Academy of Science and in another article in the Medical Journal of Virology) is immunotherapy. That is, the use of gamma globulins that are obtained from the blood of patients who have recovered from Sars CoV2. It has been scientifically proven that 200 ml of plasma transfused into patients is enough to see the most serious situations resolved within 48 hours. In Mantua and Parma, where immunotherapy is practiced, good results are already being seen.

It is assumed that contacts with the Chinese virus were greater in the Center-North than in the Center-South. Added to this is the concomitance of environmental and climatological situations, different between the North and South of Italy, even going so far as to hypothesize that over the weeks an autochthonous Po Valley coronavirus has formed, different from the Chinese one. Other possibilities emerge from the situations in Bergamo and Brescia above all, where it is assumed that the circulation of other viruses may have facilitated the action of SARS-Cov-2. The problem, however, was above all upstream: that is, not having enough beds in intensive care, mostly occupied already due to the annual flu. It seems that the flu vaccination favors coronavirus infection, even 36% higher as reported by an American military study [11]. On the other hand since there has been a recent emerging meningitis 34000 people have been vaccinated between Brescia and Bergamo. There has been a publication by Dutch scholars printed by a scientific journal of the University of Cambridge in which both meningococcal and pneumococcal disease have been associated with the activity of influenza and respiratory syncytial viruses [12].

CONCLUSIONS

A 2015 story in The Scientist of a novel coronavirus that emerged from a genetically engineered lab experiment that combined a normal coronavirus with a SARS coronavirus lends credence to the possibility that the current outbreak in the Chinese city of Wuhan (December 2019, January 2020) originated in a lab [13]. If we then hypothesize that the virus was spread by a clumsy spill from the Wuhan virology research center (a technician or researcher who was infected without knowing it), then we can be more concerned about the globalization of the infectious agent for the reasons stated above [14-16].

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