

Do Certain Genotypes of the COVID-19 Specifically Target and More Frequently Attack the Brain and Neurological Tissue

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Received: October 19, 2020; **Published:** October 28, 2020

Quotation: "Do specific genotypes of Coronavirus COVID-19 have a greater proclivity to directly target and attack the brain and neurological tissues more frequently than do other COVID-19 genotypes".

Coronavirus COVID-19 is an infectious disease that is most frequently associated with acute respiratory associated with fever, dry cough, fatigue and shortness of breath [1-3].

The symptoms usually are seen from 2 to 14 days from the time that the victim had initially been exposed to the source of infection [1-3].

COVID-19 infections are now being more frequently seen to cause neurological problems [1]. Recently it has been reported by investigators that approximately one half of the hospitalized patients that they had examined displayed a vast array of neurological manifestations [1-3].

Reinberg has recently cited the fact that many of these neurological manifestations appear prior to the appearance of the more commonly observed respiratory symptoms [3]. It has been further reported that in many of the cases of COVID-19 involving children, there was also an absence of the classical respiratory symptoms [2].

Reinberg further mentions the fact that headaches, dizziness strokes and other neurological manifestations such as loss of smell, taste, seizures, muscle pain and difficulties as relates to the ability to concentrate are additional non-respiratory symptoms [3].

Allison has reported that investigators at Yale University School of Medicine analyzed COVID-19 infections with mouse models, *in vitro*, and in specimens derived from deceased patients who were positive for COVID-19. These investigators found that Coronavirus COVID-19 could directly enter brain cells and thereupon replicate themselves [4]. This new finding has serious and deadly consequences [4].

Ellui, *et al.* have stated that with the ever expanding number of cases of COVID-19 occurring all over the globe, there will be also an expanding number of patients with neurological manifestations. Thus, health-care planners and makers must now also provide research funding for investigations involving neurological ramifications of COVID-19 Research funding will improve our understanding of this new realm of COVID-19 pathology [5].

Recently, Chellapandi, *et al.* have presented a detailed report on the genomics of COVID-19 in which they had focused upon Coronavirus COVID-19 vis a vis the structure of the virus's genome, its evolution and the potential therapeutic target applications which could be utilized in designing new drugs against this deadly viral pathogen [6].

Chellapandi, *et al.* stated that investigations associated with COVID-19 genomics could bring about a means for research scientists to develop or "repurpose" antiviral drugs in order to control the spread of COVID-19 infections [6].

There is a fundamental question that involves the genome and genotyping of COVID-19 as concerns its ability to invade the brain directly which must "now" be addressed [2-4]. This question clearly stated is. Do specific genotypes of Coronavirus COVID-19 have a greater proclivity to directly target and attack the brain and neurological tissues more frequently than do other COVID-19 genotypes!!

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Volume 12 Issue 11 November 2020

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