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Toxicity of the spike protein of COVID-19 is a redox shift phenomenon: A novel therapeutic approach

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Abstract

We previously demonstrated that most diseases display a form of anabolism due to mitochondrial impairment: in cancer, a daughter cell is formed; in Alzheimer's disease, amyloid plaques; in inflammation cytokines and lymphokines. The infection by Covid-19 follows a similar pattern. Long-term effects include redox shift and cellular anabolism as a result of the Warburg effect and mitochondrial dysfunction. This unrelenting anabolism leads to the cytokine storm, chronic fatigue, chronic inflammation or neurodegenerative diseases. Drugs such as Lipoic acid and Methylene Blue have been shown to enhance the mitochondrial activity, relieve the Warburg effect and increase catabolism. Similarly, coMeBining Methylene Blue, Chlorine dioxide and Lipoic acid may help reduce long-term Covid-19 effects by stimulating the catabolism.

Keywords: Chlorine dioxide; Long-term Covid-19; Methylene blue; Redox potential; Spike protein.

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