



Pentoxifylline: A Cheap and Safe Drug for COVID19?

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Pentoxifylline (PTX), a methyl-xantine that inhibits phosphodiesterase IV, has long been used in the treatment of obliterant peripheral arteriopathy and circulatory alterations related with arteriosclerosis, diabetes or inflammation [1,2]. This low cost drug present minimal side effects and low toxicity usually reported in chronic use and it have an interesting immunomodulatory, bronchodilatory, anti-inflammatory and antiviral properties. The principal mechanism of these properties is the reduction of TNF- α , IL-1, IL-6 and IL-8 [3]. These properties are confirmed *in vitro* but efficacy of PTX *in vivo* is controversial; for some authors, the weak anti-inflammatory and immunomodulatory action *in vivo* is due to the low serum concentrations of the drug at usual doses and they propose the use of high dose ou continuous vein perfusion of PTX to increase efficacy *in vivo*.

A recent Meta-Analysis concludes that during COVID19, IL-6 levels are significantly elevated and associated worse outcomes [4].

In the absence of conventional treatment, PTX may have a beneficial effect during this novel disease due to its ability to reduce IL6 level which can modulate the immune response and could lead to a better outcome in this disease.

In 2003, M Ángeles Muñoz-Fernández suggests the use of PTX, alone or as an adjuvant therapy in combination with other drugs, in the treatment of SAR.

Should we propose PTX as a treatment of COVID19?

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