Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

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Proposed use of thalidomide for the cytokine storm of COVID-19

A cytokine storm is charged with being the mechanism explaining much of the morbidity and mortality of current cases of COVID-19.

Several medications that have no direct antiviral action have been used to treat this cytokine storm, among these, chloroquine or derivatives therefrom.

I wondered whether oral thalidomide might not be of good use in this respect. This drug was used initially for a similar purpose with great success, by Convit et al to allay reactional phenomena in reactional lepromatous leprosy.[1] We (Goihman-Yahr, Requena, Vallecalle-Suegart, and Convit) used thalidomide in experimental autoimmune diseases of the rat.[2] We found that the drug administered intragastrically in rats was effective in preventing and treating "distant lesions" of adjuvant disease, namely, arthritis, vasculitis of the skin and iridocyclitis, as well as loss of weight and wasting. It was *not* effective in treating or preventing experimental allergic encephalomyelitis or experimental allergic neuritis. We (Goihman-Yahr, Rodriguez-Ochoa, Aranzazu, and Convit) also found that peripheral blood neutrophils were activated in reactional lepromatous leprosy but not in other forms of leprosy. This was not due to anergy of neutrophils in nonreactional leprosy.[3]

I have no direct experience or a feasible way to personally test thalidomide in the serious late phase of COVID-19, but I suggest that its use should be considered in patients who are not women of child-bearing age to prevent or treat this condition. The possible side effects of thalidomide are covered in detail in *Martindale: The Complete Drug Reference*,[4] but most of them occur in patients with complex pathologies, including malignant neoplasia. In my long-term clinical experience with the drug, the only frequent side effect besides sleepiness is alteration in peripheral nerve conduction with prolonged administration.

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