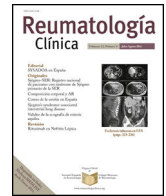




Sociedad Española
de Reumatología -
Colegio Mexicano
de Reumatología

Reumatología Clínica

www.reumatologiaclinica.org



Letter to the Editor

Long COVID-19 and Myalgic Encephalomyelitis/Chronic Fatigue Syndrome: Correspondence



COVID-19 largo y encefalomiélitis miálgica/síndrome de fatiga crónica: correspondencia

Dear Editor:

We would like to share ideas on the publication “Long COVID-19 and Myalgic Encephalomyelitis/Chronic Fatigue Syndrome (ME/CFS): similarities and differences of two peas in a pod.¹” Long COVID-19 should be treated as a public health emergency, according to Qanneta. Real prevalence, phenotypes, risk factors, viable therapies, and potential differences with ME/CFS and other overlapping clinical entities must all be determined by well-conducted research.¹ We concur that post-COVID issues could occur and that long-term COVID is currently a significant worldwide health issue. From asymptomatic to life-threatening clinical situations, COVID-19 exhibits a broad spectrum of clinical symptoms.² The main COVID-19 symptom may also be connected to the existence of long-COVID-19. Additionally, not all clinical problems are brought on by COVID-19 recovery. The primary COVID-19 symptom may also be associated to long-COVID-19. Additionally, COVID-19 recovery does not cause all clinical problems. The clinical problems brought on by other medical conditions must be eliminated, even though the current study may give a true impression of prevalence. For instance, even after COVID-19, there remains a risk of developing another severe common disease, such influenza, necessitating the use of preventative measures.³ Therefore, additional medical issues may impede the clinical manifestation. In circumstances where it is practical, a more detailed

investigation of the relationships between pre-COVID-19 health data and post-COVID-19 concerns may be possible.

Funding

None.

Conflict of interest

None.

References

1. Qanneta R. Long COVID-19 and myalgic encephalomyelitis/chronic fatigue syndrome: similarities and differences of two peas in a pod. *Reumatol Clin.* 2022. <http://dx.doi.org/10.1016/j.reuma.2022.05.003>. Online [in press].
2. Joob B, Wiwanitkit V. Letter to the Editor: coronavirus disease 2019 (COVID-19). Infectivity, and the incubation period. *J Prev Med Public Health.* 2020;53:70.
3. Froese H, A Prempeh AG. Mask use to curtail influenza in a post-COVID-19 world: modeling study. *JMIRx Med.* 2022;3:e31955.

Rujittika Mungmunpantipantip^{a,*}, Viroj Wiwanitkit^b

^a Private Academic Consultant, Bangkok, Thailand

^b Dr DY Patil University, Pune, India

* Corresponding author.

E-mail address: rujittika@gmail.com (R. Mungmunpantipantip).

<https://doi.org/10.1016/j.reuma.2022.07.001>
1699-258X/

© 2022 Elsevier España, S.L.U. and Sociedad Española de Reumatología y Colegio Mexicano de Reumatología. All rights reserved.

Comment to: Teleconsultation of infant rheumatology in COVID-19 time



Comentario a: Teleconsulta de reumatología infantil en tiempo de COVID-19

Dear Editor,

I read very carefully the publication by Nieto-González et al.¹ in *Reumatología Clínica*, where they present their experience of teleconsultation in paediatric rheumatology during COVID-19. I would like to express my opinion from an ethical perspective.

The COVID-19 pandemic caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) has caused a major health, social, and economic crisis worldwide.² In a complex situation involving an extreme need for rationality and common sense, the concept of ethical distress regarding the values of healthcare professionals, a group clearly under great strain and at high risk of

exposure and contagion, has re-emerged. Ethical distress is defined as the feeling of professional anguish at not being able to carry out their work with the minimum standards of quality care, caused by a lack of sufficient resources, among other factors. It has resulted in emotional exhaustion, moral suffering, accumulated fatigue, and burnout, but also in good practices of change, resilience, and transformation. This last point is of positive note and is where the teleconsultation initiative experienced by the authors in the context of ethical distress comes into play.

It is also just as important to emphasise that the ethics of corporate values of organisations and the system have been affected by public health (a higher good) in terms of: universality, justice, autonomy, intimacy, privacy, confidentiality, humanisation, communication, etc.³ In this sense, the pandemic has revealed some shortcomings, prompting new projects to respond to arising needs: adaptation of the organisation, adaptation of care and non-care processes and spaces, and good practices in the relationship with patients and relatives, along with coordination with other levels of

care. This solution presented by the authors during the COVID-19 pandemic has also been reinvented from a corporate and organisational perspective.

Finally, I would suggest that we must rethink the future and recover lost gratitude and self-esteem (as a society and as health professionals), after a pandemic that has been a call for attention and action, to put everything back on track. It is an occasion for examination, learning, and improvement where we can relate to Japanese culture in the concepts of repair (*kintsugi*), reordering (*nankurunaisa*), and harmony (*feng shui*), and take up new challenges in person-centred care.

References

- Nieto-González JC, Monteagudo I. Teleconsultation of infant rheumatology in Covid-19 time. *Reumatol Clin (Engl Ed)*. 2020; <http://dx.doi.org/10.1016/j.reuma.2020.09.007>, 8 Oct:51699–258X(20)30233-3. in press.
- Subdirecció General de Vigilància i Resposta a Emergències de Salut Pública. Canalsalut.gencat.cat. Available from: https://canalsalut.gencat.cat/web/.content/_A-Z/C/coronavirus-2019-ncov/material-divulgatiu/procediment-actuacio-coronavirus.pdf. [Accessed 30 March 2022].
- Castells A. COVID-19: a pandemic of values. *Gastroenterol Hepatol*. 2020;43:329–30. <http://dx.doi.org/10.1016/j.gastrohep.2020.04.002>.

Rami Qanneta

Medicina Interna, Hospital Sociosanitari Francoí, Gestió i Prestació de Serveis de Salut (GIPSS), Tarragona, Spain

E-mail address: rqanneta.gipss@gencat.cat

Anakinra as a potential alternative in the treatment of severe acute respiratory infection associated with SARS-CoV-2 refractory to tocilizumab: comment[☆]



Anakinra, una alternativa potencial en el tratamiento de la infección respiratoria grave por SARS-CoV-2 refractaria a tocilizumab: comentario

Dear Editor,

We have read with interest the article by Figuero-Pérez et al. published in the last issue of your journal suggesting the usefulness of anakinra in severe respiratory SARS-CoV-2 infection refractory to tocilizumab¹ and would like to make some observations.

The clinical course of SARS-CoV-2 infection has three distinct clinical phases². In the initial phase there is viral replication with flu-like symptoms and then some patients progress, between day 6 and 13 of symptom onset, to a hyperinflammatory phase with the development of pneumonia that may progress to respiratory distress syndrome.

The pathogenesis of severe SARS-CoV-2 infection involves dysregulation of the immune response with lymphopenia, increased pro-inflammatory cytokines (IL-1, IL-2, IL-6, IL-7 or TNF alpha) and a decrease in gamma-interferon. This leads to a systemic inflammatory syndrome with elevated acute phase reactants such as C-reactive protein and ferritin³.

Treatment of this inflammatory phase with drugs such as dexamethasone or tocilizumab has been shown to reduce mortality^{4,5}.

Anakinra, an IL-1 receptor antagonist, has recently obtained EMA approval for treatment in adult patients with COVID-19 pneumonia and risk of progression to severe respiratory failure based on the SAVE MORE clinical trial which demonstrated a reduction in 28-day mortality and hospital stay in those treated early with anakinra⁶.

There is little evidence regarding rescue therapy in patients with poor clinical outcome despite corticosteroids and/or immunomodulators. In an article published by our group⁷, we analysed 143 patients with moderate/severe SARS-CoV-2 pneumonia and hyperinflammation treated with various regimens based on the protocols of that date. We observed that in those who had not responded

to corticosteroids with or without tocilizumab, treatment with anakinra could be a useful alternative. Our patients received 100 mg/12 h on day 1 if they weighed between 50 and 60 kg, 100 mg/8 h between 60 and 75 kg or 100 mg/6 h if they weighed >75 kg. Subsequently all received 100 mg/12 h from day 2 to day 6. After adjustment for age and clinical severity indices, anakinra administration was associated with a reduced risk of mortality (HR; .518, 95% CI .265–.910, $p = .0437$).

In the case published by Figuero-Pérez et al.¹ we consider that it cannot be suggested that the patient's clinical improvement was due to anakinra when a single dose of 100 mg was administered. Given that the half-life of anakinra is 4–6 h and that of tocilizumab around 6 days, it is likely that the patient's improvement was due to the effect of tocilizumab. There is currently no consensus on the optimal doses of anakinra in this clinical setting, but higher and longer doses have been used in the literature^{8,9}.

References

- Figuero-Pérez L, Olivares-Hernández A, Escala-Cornejo RA, Terán-Brage E, López-Gutiérrez Á, Cruz-Hernández JJ. Anakinra as a potential alternative in the treatment of severe acute respiratory infection associated with SARS-CoV-2 refractory to tocilizumab. *Reumatol Clin (Engl Ed)*. 2021;17:559–61. <http://dx.doi.org/10.1016/j.reuma.2020.06.008>.
- Atri D, Siddiqi HK, Lang JP, Nauffal V, Morrow DA, Bohula EA. COVID-19 for the cardiologist: basic virology, epidemiology, cardiac manifestations, and potential therapeutic strategies. *JACC Basic Transl Sci*. 2020;5:518–36. <http://dx.doi.org/10.1016/j.jacbs.2020.04.002>.
- Cavalli G, Farina N, Campochiaro C, De Luca G, Della-Torre E, et al. Repurposing of biologic and targeted synthetic anti-rheumatic drugs in COVID-19 and hyper-inflammation: a comprehensive review of available and emerging evidence at the peak of the pandemic. *Front Pharmacol*. 2020;11:598308. <http://dx.doi.org/10.3389/fphar.2020.598308>.
- Villar J, Ferrando C, Martínez D, Ambrós A, Muñoz T, et al. Dexamethasone in ARDS network. Dexamethasone treatment for the acute respiratory distress syndrome: a multicentre, randomised controlled trial. *Lancet Respir Med*. 2020;8:267–76. [http://dx.doi.org/10.1016/S2213-2600\(19\)30417-5](http://dx.doi.org/10.1016/S2213-2600(19)30417-5).
- RECOVERY Collaborative Group. Tocilizumab in patients admitted to hospital with COVID-19 (RECOVERY): a randomised, controlled, open-label, platform trial. *Lancet*. 2021;397:1637–45. [http://dx.doi.org/10.1016/S0140-6736\(21\)00676-0](http://dx.doi.org/10.1016/S0140-6736(21)00676-0).
- Kyriazopoulou E, Poulakou G, Milionis H, Metallidis S, Adamis G, et al. Early treatment of COVID-19 with anakinra guided by soluble urokinase plasminogen receptor plasma levels: a double-blind, randomized controlled phase 3 trial. *Nat Med*. 2021;27:1752–60. <http://dx.doi.org/10.1038/s41591-021-01499-z>.
- Aomar-Millán IF, Salvatierra J, Torres-Parejo Ú, Faro-Miguez N, Callejas-Rubio JL, et al. Anakinra after treatment with corticosteroids alone or with tocilizumab in patients with severe COVID-19 pneumonia and moderate hyperinflammation. A retrospective cohort study. *Intern Emerg Med*. 2021;16:843–52. <http://dx.doi.org/10.1007/s11739-020-02600-z>.
- Pontali E, Volpi S, Antonucci G, Castellana M, Buzzi D, et al. Safety and efficacy of early high-dose IV anakinra in severe COVID-19 lung disease. *J Allergy Clin Immunol*. 2020;146:213–5. <http://dx.doi.org/10.1016/j.jaci.2020.05.002>.
- Cavalli G, De Luca G, Campochiaro C, Della-Torre E, Ripa M, et al. Interleukin-1 blockade with high-dose anakinra in patients with COVID-19, acute respiratory distress syndrome, and hyperinflammation: a retrospective

[☆] Please cite this article as: Aomar-Millán IF, Salvatierra J, Callejas-Rubio JL, Raya-Álvarez E. Anakinra, una alternativa potencial en el tratamiento de la infección respiratoria grave por SARS-CoV-2 refractaria a tocilizumab: comentario. *Reumatol Clin*. 2023;19:121.