



Revised clinical criteria for COVID-19 clinical syndrome

Mandalam S. Seshadri^a, T. Jacob John^b

^a MD, PhD, FRCP, Former Professor of Medicine & Endocrinology, Department of Endocrinology Diabetes & Metabolism, Christian Medical College & Hospital, Vellore; Consultant Physician & Endocrinologist, Honorary Medical Director, Thirumalai Mission Hospital, Vanapadi Road, Ranipet, India

^b PhD (Virology), FRCP (Paediatrics), Former Professor & Head, Department of Clinical Virology, Christian Medical College & Hospital, Vellore, India

We had recently published clinical criteria for diagnosing COVID 19 syndrome¹ in low- and middle-income countries. Since then, community transmission has become wide-spread in many countries. Therefore, the epidemiologic setting has become less relevant, and it should be assumed that everyone is exposed. Further some additional common ocular and cutaneous features have been described.^{2,3} Elderly subjects and those with co-morbidity may have a different clinical presentation,⁴ requiring modification of criteria. Based on these arguments, we have revised the clinical criteria for diagnosing COVID 19 syndrome as set out below.

Revised Diagnostic criteria

The following criteria are applicable for otherwise healthy young adults and middle-aged subjects. In other categories of adults (elders and those with co-morbidity), these criteria may be present; frequently, they are not present. They may need fewer and different criteria (lower threshold) for diagnosis. Paediatric COVID 19 diagnostic criteria are not included.

Major criteria:

Group A

- 1) Fever \geq 3 days
- 2) Persistent dry cough
- 3) Sudden onset loss of smell with or without loss of taste

Group B

- 4) On chest auscultation, crepitations
- 5) Resting respiratory rate of \geq 25 per minute
- 6) Pulse oximeter showing oxygen saturation \leq 94 % on room air

Group C

- 7) CT scan or chest X Ray showing patchy peripheral infiltrates or bilateral ground glass appearance, without lobar consolidation or cavitory lesion

Minor Criteria:

1. Headache/body aches/myalgia
2. Severe fatigue/lassitude
3. Diarrhea
4. Conjunctival irritation — pink eye with or without secretions
5. Skin lesions — maculopapular erythematous, urticarial or vesicular non-pruritic
6. WBC count: normal or low normal total count; but lymphocytes \leq 20%

Diagnosis using the above criteria:

Either:

Three Major criteria, if they include at least one each from Group A, Group B, and Group C.

Or:

In the absence of, or non-availability of, Chest imaging criterion (Group C), at least two Major

criteria from Group A, at least one Major criterion from Group B, and at least two Minor criteria

Clinical features of COVID-19 may be altered and may be subtle, in:

1. Elderly, age ≥ 70 years
2. Immunosuppressed individuals
3. Poorly controlled diabetics
4. Cardiovascular disease with or without cardiac failure
5. Chronic renal failure on, or not on, dialysis
6. Those on corticosteroids and/or other immune-suppressants

These subjects may have any of the clinical features listed under Major or Minor criteria or may have only subtle features of low-grade fever, delirium, postural instability, and drowsiness.

If any of these subtle features occurs, it is mandatory to do pulse oximetry (Major No. 6) and a Chest CT scan or X Ray (Major No.7) and if either is positive, to assume the diagnosis of COVID-19 and initiate treatment in a hospital.

References

1. Seshadri M, John TJ. The COVID-19 pandemic: defining the clinical syndrome and describing an empirical response. *Christ J Global Health*. 2020 Apr;7(1):37-44. <https://dx.doi.org/10.15566/cjgh.v7i1.365>
2. Wu P, Duan F, Luo C, Liu Q, Qu X, Liang L, et al. Characteristics of ocular findings of patients with coronavirus disease 2019 (COVID-19) in Hubei Province, China. *JAMA Ophthalmol*. 2020 [cited 2020 Aug 6];138(5):575–8. <http://dx.doi.org/10.1001/jamaophthalmol.2020.1291>
3. Recalcati S. Cutaneous manifestations in COVID-19: a first perspective. *J Eur Acad Dermatol Venereol*. 2020 May [cited 2020 Aug 6]; 34(5):e212-3. <http://dx.doi.org/10.1111/JDV.16387> Accessed on 08-06-2020
4. Lithander FE, Neumann S, Tenison E. COVID-19 in older people: a rapid clinical review. *Age Ageing*. 2020 [cited 2020 Aug 6];1–15. <http://dx.doi.org/10.1093/ageing/afaa093>

Submitted 9 June 2020; Accepted 20 July 2020; Published 9 Nov 2020

Competing Interests: None declared.

Acknowledgements: Thirumalai Mission Hospital, Ranipet, India.

Correspondence: Dr. Seshadri, India. mandalam.seshadri@gmail.com

Cite this article as: Seshadri MS, John TJ. Revised clinical criteria for COVID-19 clinical syndrome. *Christ J Glob Health*. October 2020;7(4):61-62. <https://doi.org/10.15566/cjgh.v7i4.401>

© **Authors** This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are properly cited. To view a copy of the license, visit <http://creativecommons.org/licenses/by/4.0/>
