Journal of Current and Advance Medical Research

January 2021, Vol. 8, No. 1, pp. 75-77

http://www.banglajol.info/index.php/JCAMR

ISSN (Print) 2313-447X ISSN (Online) 2413-323X NLM Catalog ID 101673828

DOI: https://doi.org/10.3329/jcamr.v8i1.52748

CASE REPORT



A Case Presentation and Treatment Review on Novel COVID 19

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[Received on: 1 November 2020; Accepted on: 20 December 2020; Published on: 1 January 2021]

Abstract

SARS-COV 2 Is causative agent of COVID 19, just few month ago was foreign to us and now spreading its routes well in India. Starting with one case As of August 25, 2020 in India 3167323 positive cases have been reported. coronavirus is beta form of SARS-CoV-2 belong to family of Coronaviridae. A 44-year-old man, who lives in Kolakata, West Bengal, Working in a travel agency. He came To OPD with complaint of fever, Throat Infection, Multiple joint and muscle pain, Cough. A SARS-CoV-2 Reverse transcriptase polymerase chain reaction (RTPCR) test was positive. He was being treated & Monitored in Home isolation with high dose oral ascorbic acid, hydroxychloroquine, azithromycin and Zinc acetate. This Article aimed to Case Presentation And Treatment Review of Novel COVID 19. [Journal of Current and Advance Medical Research, January 2021;8(1):75-77]

Keywords: Coronavirus, SARS-CoV-2; Pandemic; Isolation; infection

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Cite this article as: Jha AN, Shah AH, Trivedi UN. A Case Presentation and Treatment Review on Novel COVID 19. J Curr Adv Med Res 2021;8(1):75-77

Conflict of Interest: The author has no conflicts of interest to declare.

Contributions to authors: Ambika Nand Jha Conception and Writing of case presentation. All authors read and approved the final manuscript.

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Introduction

Novel Coronavirus is a type of single strand positive RNA virus¹. CoVs have been identified mostly 6 type to be pathogenic endemic and epidemic^{2,3}. It represent a group of viruses most of them affect human beings by zoonotic transmission. In the past two decades, this is the third attack of the emergency of coronavirus named as COVID 19 after severe acute respiratory syndrome (SARS) in 2003 and

Middle East respiratory syndrome coronavirus (MERS-CoV) in 2012⁴ pneumonia and acute respiratory distress syndrome (ARDS) with high motility rate due to Novel COVID-19⁵. The Government and Ministry of Health and Family Welfare of India has aware to COVID 19 and they release 24/7 days-a-week disease alert helpline (+91-11-23978046 and 1800-180-1104) and some Policy, SOP guidelines for survival clinical managment preventions from COVID 19. The central and state governments are taking various

step to control and prevent the Spread of COVID 19⁶. This aimed to Case Presentation and Treatment Review of Novel COVID 19.

Case Presentation

A Man who 44 years old living in Kolakata, West Bengal of India was working in a travel agency. He came To OPD of Medical Super specialty Hospital Kolkata With complaint of fever, Throat Infection, Multiple joint and muscle pain, Cough, nasal congestion. As per current scenario, Sign & Symptoms patient was suspected for COVID 19 infection. He was immediately shifted in an isolation Ward. And further polymerase chain reaction (PCR) assay was positive of the nasopharyngeal swab sample based on the COVID-19 acid amplifying kids of Novel Coronavirus Real Time RT-PCR Kit. The blood tests (WBC) showed mild changes, including neutrophils, lymphocyte.

Table 1: Laboratory test result

Test	Result
Hb (11.5-16gm%)	12.3
RBC COUNT(4.6-6.0Millions/cmm)	4.93
P.C.V(39-52%)	52
M.C.V(82-98 fl)	75
M.C.H(27-33pg)	23
M.C.H.C(32-36%)	34
R.D.W(11-14%)	13
WBC COUNT(4000-11000/cmm)	3200
Neutrophils(40-75%)	38
Lympocytes(20-45%)	55
Eosinophils(1-6%)	9
Monocytes(2-10%)	7
Basophil(0-1%)	1
Platelet Count(150000-	230000
40000cells/cmm)	
nCOV2019 By PCR	+

The laboratory tests showed mild changes, including neutrophils, lymphocyte Vital signs and examination [Table presented in for 1] management switched to azithromycin 500 mg via oral route OD, hydroxychloroquine 400mg loading dose after that 200 mg twice daily for a 7-day course, ascorbic acid 1000 mg OD, Zinc Acetate 50 mg BD. He completed his course of course of antibiotics and Hcq vitamin C and Zinc are continued. Patient take some home remedy by owns Drink Hot Water Termicrik, Coriander, Cumin, Garlic High Amount In his Food. He Take Herbal Tea Cinnamon, Tulsi, Black Paper, Dry Ginger, Lemon Two Times In a day. Written informed consent had been obtained from the patient.

Discussion

Novel COVID 19 is a serious viral infection that leads to number of cases of severe pneumonia, ARDS, number of deaths across the world⁷. The duration from Entrance to the viruses to the symptoms appearance of SARS-CoV-2 was not well known⁸. Generally, it was consider to be 14 days, but one research of Guangzhou group reported the maximum incubation period of 24 days⁹. One patient's all symptom is improved as compared to earlier and he maintained normal body temperature after treatment with antimicrobial therapy, including oseltamivir, arbidol, Lopinavir/ ritonavir, and moxifloxacin. Or pharyngeal swab tests of SARS-CoV-2 RNA were done repeatedly for surveillance. But the result was positive exceptionally after 8 days of treatment with a viral load of 4.56 102 copies/mL found by real-time PCR. The dynamics HRCT revealed gradually absorption lesion of lungs¹⁰. This patient has been treated with vitamin C and zinc, both of which are responsible for improve the human immune system and aid in shortening the duration of and improving outcomes in respiratory infections including pneumonia^{11,12}. Hydroxychloroquine, is a very well-known anti-malarial Drug and various Study have suggested hydroxychloroquine can interfere with glycosylation of the coronavirus receptors and increase endosomal pH thus inhibiting viral fusion and reduce the viral load¹³. Number of Trials are going on for treatments of COVID-19 emerge and shows effective treatment remdesivir and favipiravir have been point of attention.

Remdesivir is an antiviral adenosine analog that incorporates into viral RNA causing disturbance in termination process of viruses^{14,15}. Favipiravir, an RNA-dependent RNA polymerase inhibitor, already approved in treatment of Covid 19 in china on February 2020^{16,17}. Only some infected people become sick. Although most critically ill COVID-19 patients are either elderly or have underlying chronic medical condition such as cardiovascular disease, hypertension, diabetes mellitus, or cancer, some previously healthy and even relatively young individuals have died from COVID-19. Sequencing of patients' genomes for DNA variations associated with severe illness may help to explain this mystery¹⁸.

Conclusion

Infection of Covid 19 affect globally on human health and economy. Early and rapid Diagnosis is play important role in the control and prevent of Covid 19. The rapid rise in the number of patients and transmission of SARS-CoV-2 has caused deaths, fear, panic, economic disruption, hospitality or tourism, sport. Institutional Study, morbidity and mortality, and significant public health concerns, is ongoing and widespread due to imposed lockdowns by Government. It's hoped this case Presentation can be useful for reference in treatment review on Novel COVID 19 and control and preventions.

References

- 1. Wu F, Zhao S, Yu B, Chen YM, Wang W, Song ZG, et al. A new coronavirus associated with human respiratory disease in China. Nature, 2020
- 2. Wan YS, Shang J, Rachel Graham, Ralph S. Baric, Li F. Receptor recognition by novel coronavirus from Wuhan: An analysis based on decade-long structural studies of SARS. J. Virol. 2019
- 3. Li B, Si HR, Zhu Y, Yang XL, Danielle E. Anderson, Shi ZL, et al. Discovery of Bat Coronaviruses through Surveillance and Probe Capture-Based Next-Generation Sequencing. mSphere.2020;5: e00807-19.
- 4. Chatterjee P, Nagi N, Agarwal A, Das B, Banerjee S, Sarkar S, Gupta N, Gangakhedkar RR. The 2019 novel coronavirus disease (COVID-19) pandemic: A review of the current evidence. Indian J Med Res 2020; 151:147-59.
- 5. Yang X, Yu Y, Xu J, et al. Clinical course and outcomes of critically ill
- patients with SARS-CoV-2 pneumonia in Wuhan, China: a single centered, retrospective, observational study. Lancet Respir Med 2020;8: e26.
- Guidelines on Clinical Management of COVID-19. Available

from: https://www.mohfw.gov.in/pdf/GuidelinesonClinicalMan agementofCOVID1912020.pdf

- 7. Saghazadeh A, Rezaei N. Immune-epidemiological parameters of the novel coronavirus a perspective. Expert Rev Clin Immunol 2020
- 8. Kim JY, Pyoeng GC, Yoonju O, Kyung JO, Jinsil K, So JP, et al. The first case of 2019 novel coronavirus pneumonia imported into Korea from Wuhan, China: implication for infection prevention and control measures. J Korean Med Sci. 2020;35(5):e61
- 9. Guan WJ, Ni ZY, Hu Y, Laing WH, Ou CQ, He JX, et al. Clinical characteristics of 2019 novel coronavirus infection in China. medRxiv. 2020
- 10. Dabiao Chena, Wenxiong Xua, Ziying Leia, Zhanlian Huanga, Jing Liua, Zhiliang Gaoa
- et al. / International Journal of Infectious Diseases 93 (2020) 297–299
- 11. Carr AC, Maggini S. Vitamin C and immune function. Nutrients 2017; 9:1211.
- 12. Wintergerst ES, Maggini S, Hornig DH. Immune-enhancing role of vitamin C and zinc and effect on clinical Conditions. Ann Nutr Metab 2006;50:85–94.
- 13. Gautret P, Lagier JC, Parola P, et al. Hydroxychloroquine and azithromycin as a treatment of COVID-19: results of an open-label non-randomized clinical trial. Int J Antimicrob Agents 2020; 105949
- 14. Gao J, Tian Z, Yang X. Breakthrough: chloroquine phosphate has shown apparent efficacy in treatment of COVID-19 associated pneumonia in clinical studies. Biosci trends 2020;14:72–3.
- 15. Sheppard M, Laskou F, Stapleton PP, et al. Tocilizumab (Actemra). Hum Vaccin Immunother 2017;13:<u>1972–88</u>.
- 16. .Dong L, Hu S, Gao J. Discovering drugs to treat coronavirus disease 2019 (COVID-19). Drug Disc Therap 2020;14:58–60.
- 17. Tripathi KD. "Essentials of Medical Pharmacology"5th Edition, Jaypee Brother Medical Publication (P) Ltd, New Delhi, 2003
- 18. Iranian Ministry of Health and Medical Education COVID-19 Daily Epidemiology Journal, 2020. Available at: http://corona.behdasht.gov.ir/files/site1/files/Factsheet15-0109En.pdf. Accessed March 31, 2020.