Variable presentation of Covid 19 infection

R J Akhter[1], B H N Yasmeen[2]

Introduction

Coronavirus disease (COVID-19) is an infectious disease caused by the SARS-CoV-2 virus. Patients of COVID-19 have variable presentation ranging from asymptomatic to severe acute respiratory distress. Some COVID-19 patients who are asymptomatic and an important source of transmitting the disease.[1] Some COVID-19 patients consist of mild symptoms like seasonal flu while some others develop moderate symptoms.[2-3] A few COVID-19 patients, however, get diagnosed with severe symptoms like respiratory distress and pneumonia.[4-6] Most of the patients who experience mild to moderate respiratory illnesses usually recover without requiring special treatment. However, some become seriously ill and require more medical attention. Older people and those with underlying medical conditions like cardiovascular disease, diabetes, chronic respiratory disease, or cancer are more likely to develop serious illnesses. Anyone can get sick with COVID-19 and become seriously ill or die at any age.[7] Therefore, treatment modalities are also variable according to the patient's clinical condition. Now we will be going to describe 2 COVID-19 cases here with different presentation and with different management plan. This case report would be a still picture of the pandemic Covid 19 management protocol at Dhaka, Bangladesh during that period.

Case I

October 2020

During the early period of Covid pandemic a 49-year-old woman of Dhaka city (Bangladesh) suddenly developed loss of smell on 8 October, 2020. It was so severe that she could not even get the smell of perfume. After 5 days of this symptom, she developed loss of taste sensation. On the 7th day of her illness, RT-PCR test for Covid 19 was done by the advice of a Chest Disease specialist and the result was positive. Then she was kept into isolation in a room, separating herself from her family members (Home isolation). She was a known Diabetic patient for the last 3 years and hypertensive for the last 7 years. She was on regular medication for these problems.

By the next morning, the patient's base line investigations were done i.e. Complete blood count, C reactive protein (CRP), random blood sugar (RBS), D-dimer, High resolution CT scan (HRCT) of the chest according to the advice of the previous doctor. All reports were normal except the HRCT scan of the chest, which revealed few air spaces with ground glass consolidation in the apical segment of the left lower lobe involving 5% of lung parenchyma (suggestive of Covid 19 lesion).

Treatment started at home with Antibiotic, Capsule Moxifloxacin 400 mg once daily for 7 days. Antiviral drug, tablet Favipiravir 200 mg, 8 tablets thrice daily on day 1 then 4 tablets trice daily up to day 7. Anticoagulant, tablet Rivaroxaban10 mg once daily, tablet Famotidine 20 mg twice daily, tablet Zinc 20 mg twice daily, and Multivitamin tablet once daily for 15 days. Capsule Vitamin D 20000 IU also given once weekly for 8 weeks.

With this treatment she regained her taste and smelling sensation gradually within 10 days. On the 12th day of her isolation, RT-PCR test for Covid 19 was repeated and the result was negative. However, she developed severe

[1]Dr. Rowshan Jahan Akhter
Assistant Professor
Dept. of General Peadiatrics
Dhaka Shishu Hospital
Dhaka, Bangladesh

[2]Prof. Dr. B H Nazma Yasmeen
Professor and Head
Dept. of Paediatrics
Northern International Medical College, Dhaka, Bangladesh

Correspondence
Dr. Rowshan Jahan Akhter
Assistant Professor
Dept. of General Peadiatrics
Dhaka Shishu Hospital
Dhaka, Bangladesh
E-mail: rowshanfairuz22@gmail.com

DOI: https://doi.org/10.3329/nimcj.v12i2.68313
Northern International Medical College Journal Vol. 12 No. 2 January 2021, Page 555-557

weakness while recovering and the weakness persisted for almost next 2 weeks. At the end of a month, she finally became fit for her work.

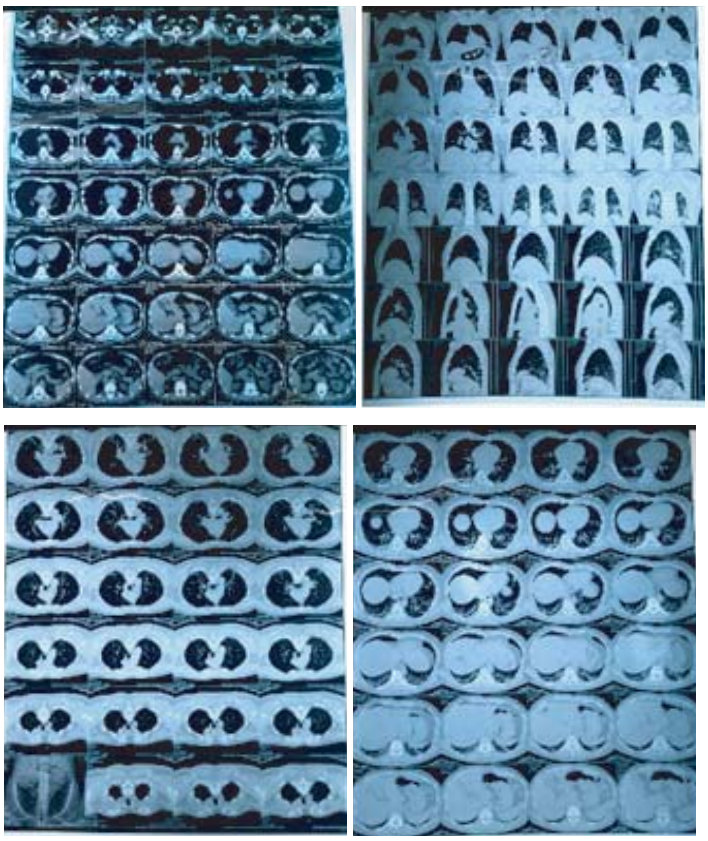
HRCT scan of the chest (Case-I)

Case II

November 2020

A 47-year-old male developed fever for 4 days associated with cough and cold on 11th November,2020. On the 5th day of his illness RT-PCR test for Covid 19 was done by the advice of a Medicine specialist and the result was positive. Home isolation started since that day (10.11.2020). Then the following investigations were done i.e., CBC, CRP, S. Ferritin, D-Dimer, Fibrinogen level, Liver function test (LFT), Renal function test (RFT). All of those were normal except CRP which was mildly raised 9 mg/dl (normal value 5mg/dl). On the next day an HRCT scan of the chest was done which revealed consolidation at the superior segment of the right lower lobe and posterior segment of the left lower lobe with 15% lung involvement, suggestive of Covid 19 infection. He was diabetic since 25 years of age, and he is on insulin for the last 5 years.

HRCT of the chest at the time of diagnosis (Early stage of the disease)



HRCT Report during hospitalization

Home treatment started with the following drugs-

Capsule Doxycycline 100 mg twice daily for 7days, tablet Ivermectin 6 mg 3 tablets single dose, tablet Paracetamol 500 mg 6 hourly or 4 hourly as required, tablet Favipiravir 200 mg, 8 tablets thrice daily on day 1 then 4 tablets thrice daily till day 7, tablet Famotidine 20 mg twice daily, tablet Rivaroxaban10 mg once daily, tablet Zinc 20 mg twice daily, tablet Vitamin C 500 mg once daily, Multivitamin tablet once daily for15 days and Capsule Vitamin D 20000 IU,1 cap weekly for 8 weeks. On the 6th day of illness, he became afebrile but developed severe headache for which he could not even sleep at night. Within a short time along with headache, he developed severe body ache, anorexia, and severe weakness. The pain and weakness were so severe that he could not even talk, and this pain was not subsided even after taking painkillers, tablet Paracetamol 500 mg 4 hourly. After 12 days of illness, the pain became less severe, and he regained his taste sensation. Gradually his general condition was improving.

However, on the next day (13 days of illness) again he developed fever and was hospitalized on 21.11.2020. After hospitalization following investigations were done on the same day. CBC, CRP, D-Dimer, Procalcitonin, S. Electrolyte, S. Ferritin,

LFT, RFT, HbA1C and HRCT scan of chest.

Among those CBC showed neutrophilic leukocytosis, CRP raised further (58.1mg/dl), S. Ferritin increased than normal (9378.5 ng/ml). Other investigations were normal except HRCT scan chest, which revealed Covid 19 infection with 45% lung involvement with crazy paving appearance and fibrosis. Since 12.11.2020 the lung infection gradually worsened. After hospitalization following treatment were given - Injection Remdesivir100 mg/20ml single dose, Injection Ceftriaxone 1 gm twice daily, Injection Enoxaparin 40mg/0.4ml twice daily for 5 days.

On the next day, at the hospital, his fever subsided but he developed respiratory distress and saturation fall down below 92%. IL-6 level was done which was increased 11.3pg/ml (Normal level up to 7 pg/ml). Therefore, oxygen was given 2L/min. After 5 days of hospital admission all symptoms subsided and Covid test became negative. Then he was discharged from the hospital and during discharge following treatment was given to continue to at home.

Antibiotic Capsule Cefixime 400 mg twice daily for 10 days, Capsule Doxycycline 100 mg twice daily for 7 days. Anticoagulant, tablet Rivaroxaban 10 mg once daily for 4 weeks.

For mild to moderate Idiopathic Pulmonary Fibrosis - Capsule Pulfibro (pirfenidone) 267 mg thrice daily for 2months and improvement of lung function Leukotrienes antagonist, tablet Montelukast 10 mg, single dose for 1month and Inhaler Salmeterol plus Fluticasone HFA-25/250 mcg – 2puffs twice daily given for 15 days.

Capsule Vitamin D 20000IU, 1 cap weekly for 6 weeks, tablet Xinc-20 mg twice daily, tablet Omeprazole 20 mg twice daily for 1 month.

For Diabetes Mellitus Type 2

Tablet (Sitagliptin (50 mg) + Metformin (1000 mg) 1 tab twice daily,

Injection Insulin Glargine 40 unit once daily at night,

Injection Insulin Aspart 20 unit at morning, 10 unit at noon and 10 unit at night – should be continued up to next follow up.

During discharge from the hospital doctor advised to continue all these medications and come for follow-up after 15 days. During follow-up all symptoms subsided except weakness, which was persist for more than a month after his discharge.

References

1. Bai Y Yao L, Wei T et al. Presumed asymptomatic carrier transmission of Covid 19. JAMA 2020;323(14):1406-07. DOI:10.1056/NEJMe2001468. 2020.2565.
2. Rothe C,Schunk M, Sothmann P et al. Transmission of 2019-nCov infection from an asymptomatic contact in Germany. N Engl J Mec 2020;382(10):970-71. DOI:10.1001/jama.2020.2565.
3. Holshue ML,Debolt C,Lindquist S et al.First caseof 2019 novel corona virus in the United States. N Engl J Med 2020; 382(10):929-36. DOI:10.1056/NEJMoa2001191.
4. Hoel S Rabenau H ,Berger A et al. Evidence of SARS-CoV-2 infection in returning travellers from Wuhan,China. N Engl J Med 2020;382(13):1278-80. DOI:10.1056/NEJMc2001899.
5. Zou L , Runa F, Huang M et al. SARS-CoV-2 viral load in upper respiratory specimens of infected patients. N Engl J Med 2020;382(12):1177-79. DOI:10.1056/NEJMc2001737.
6. Lai C C,Shih T P, Ko W C et al. Severe acute respiratory syndrome Corona virus 2 (SARS-CoV-2) and Corona virus disease-2019 (Covid 19):the epidemic and the challenges.Int J Antimicrob Agents 2020;55(3)105924. DOI:10.1016/j.ijantimicag.2020.105924.
7. Ref- https://www.who.int/health-topics/coronavirus#tab=tab_1