



## **AN INTERESTING CASE OF FLURONA: TWINDEMIC ( H1N1 WITH COVID19 INFECTION)**

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### **Abstract**

COVID-19 is caused by a coronavirus called SARS-CoV-2, while flu(H1N1) is caused by influenza virus . Both H1N1 influenza and COVID-19 can be transmitted in similar ways.Both infections can coexist and both can have similar symptoms like fever , dry cough, sorethroat, breathing difficulty, headache, generalized fatigue.Here in our case , patient had covid 19 and H1 N1 co-infection . Patient has been treated with antiviral and patient has improved from the illness.

**Keywords:** Flurona ,Twindemic ,H1n1 ,Influenza, Covid 19

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### **Case Discussion**

A 75 year old female presented to General Medicine department with complains of breathing difficulty for 2 days according to Modified Medical Research Council (MMRC) Grading 2 which was progressed to grade 4 on the day of admission. She also had complaints of dry cough,intermittent& high grade fever & sore throat for 2 days. She had history of polyuria and polydipsia for 2 months. She is a known case of Systemic Hypertension for 2 years and was on anti-hypertensives regularly . She had no other comorbidities. Patient had attained menopause 20 years back. Patient didn't receive any covid/ influenza vaccinations.

On examination , she was conscious , oriented & febrile .Her blood pressure was 150/90 mm of Hg measured in sitting position in right upper limb, pulse was 110 per minute & regular , Temperature was 102\*f , SpO2 was 60 % at room air , 95% with 10 litres of O2 .Capillary blood glucose was 308 mg/ dl , Respiratory Rate was 27 breaths /min & Abdominothoracic type .On clinical examination , Chest – Bilateral normal vesicular breath sounds and bilateral coarse crepitations were heard.CVS,Per Abdomen & CNS Examination were normal.

### **Investigations**

Her investigations during admission were Hb - 11.1 , PCV -35 , TC- 4100, Neutrophilic lymphocytic ratio – 3:1 , ESR - 70 , Platelet - 1,52,000,FBS - 180 mg/dl , PPBS - 210 mg/dl ,HbA1c -8.5% , D dimer – 452mcg/l , LDH -78 IU /L , Serum ferritin – 220mcg /L, CRP- 8 mg / dl .

**2D Echo** showed No Regional motion wall abnormality , Normal LV systolic and grade 1 diastolic function & EF -60%.

**USG Abdomen** showed right renal cortical cysts .

**Chest xray (figure 1)** showed relatively well defined round nodular opacities in Right Midzone of lung & Bilateral hazziness noted in both lung fields.

**HRCT Chest (figure 2)** showed diffuse ground glass opacities with few of them colaescing to form consolidation involving bilateral lung fields with predominant peripheral involvement . Irregular pleural thickening noted in posterior aspect of bilateral lungs . Features suggestive of CORADS -5.

RT PCR for covid 19 showed negative .RT PCR for H1N1 – POSITIVE .



Figure 1: Chest xray - relatively well defined round nodular opacities in Right Midzone of lung & Bilateral hazziness noted in both lung fields



Figure 2 - diffuse ground glass opacities with few of them coalescing to form consolidation involving bilateral lung fields with predominant peripheral involvement . Irregular pleural thickening noted in posterior aspect of bilateral lungs . Features suggestive of CORADS -5

Patient was treated with Antiviral-Tab.Oseltamivir 75 mg twice daily for 5 days and empirical antibiotics to treat the secondary bacterial infection .Steroids were given along nebulization .Patient was supported with Nasal oxygen. Patient was diagnosed Type 2 Diabetes Mellitus and Insulin were given in view of hyperglycemia. Over a period of 7 days , patient saturation improved and Oxygen support has been tapered &stopped.Patient was symptomatically better and hence discharged.

## 2. Discussion

H1N1 Infection is caused by orthomyxovirus .Covid 19 infection is caused by Corona virus .Both infections can coexist and both can have similar symptoms like fever , dry cough, sore throat, Breathing difficulty, headache, generalized fatigue . According to Centres for Disease control and Prevention , Covid 19 is more likely to cause severe illness than flu .Co – infections are real , and to those in medical community , it's not a surprising least bit surprising. A person can be infected by multiple virus at the same time. Flurona is the term used for coinfection of Influenza and Covid 19 .The term was coined by Israeli outbreak management team to describe the potential for contracting H1N1 and Covid 19 infection. According to an article published in Frontiers in Medicine , the frequency of Influenza co- infection among Covid 19 is 0.4% in United States. In our case , We have done HRCT Chest , showed suggestive of Covid 19 and RTPCR for covid 19 was negative . In view of H1N1 Pandemic , We have sent for RTPCR for H1N1 which showed POSITIVE . So Patient was diagnosed to be Flurona.Hence was treated accordingly.

## 3. Conclusion

The H1N1 infection can coexist with Covid 19 infection . Our case report emphasize to rule out of H1N1 infection with Covid 19 in pandemic situation for early detection and rapid treatment are essential for preventing serious complications and accelerating recovery.

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