

## Role of emergency department to combat Covid-19

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**Dr Sandeep Gore, Director, Emergency Medicine, Fortis Hospital, Mulund explains the pivotal role that doctors in the emergency set-up play, and how their role has become even more crucial during the pandemic.**



Emergency Department is the core of every hospital, it now has an even more crucial role to play, especially while battling a pandemic! The Emergency Department plays multifarious roles, like setting up proper Triaging (separating COVID, non-COVID patients to decide the order of treatment based on criticality), offering emergency care to patients that are suspected to have COVID-19, and to tackle non-COVID emergencies. However, the most crucial role it is playing currently is to recognise the deceptive presentations of COVID-19!

It has been observed that the warning signs of COVID-19 can easily be confused with a host of less serious conditions. In fact, many people have been reported to have been COVID-19 positive without experiencing commonly cited symptoms! According to MoHFW, common symptoms of COVID-19 include fever, tiredness, dry cough, aches & pains, nasal congestion, runny nose, sore throat or Diarrhoea. However, some patients who are detected to have COVID-19 sometimes present to the ER with the following symptoms;

- CARDIAC ISSUES - seen as Heart Attack
- NEUROLOGICAL ISSUES seen Brain Attack, Fits
- GASTROINTESTINAL ISSUES (Abdomen-related emergencies)
  - Pancreatitis, Bowel Ischemia
- LOSS OF APPETITE, TASTE & SMELL
- RENAL EMERGENCY – Kidney damage

Let's look at some cases to understand this phenomenon better;

Case 1: 32yr old female presented to the ER with chest pain. ECG showed Heart Attack, but X-rays showed signs of COVID-19. Patient's swabs were sent for testing – she tested positive

Case 2: 54yr old male presented to the ER with weakness on one side of the body. MRI was conducted, it showed acute Stroke, but the chest X-ray showed COVID19-like findings. Patient's swabs were sent for testing – he tested positive

Case 3: 34yr old male presented to the ER with generalized weakness, fatigability after minimal exertion, loss of appetite, loss of taste and loss of smell. X-ray showed COVID-19 like features. Patient's swabs were sent for testing – he tested positive

Dr Sandeep Gore, Director, Emergency Medicine, Fortis Hospital, Mulund, says, "COVID-19 makes blood more prone to clotting, hence, in young patients without comorbidity, one can see COVID-19 present as a Heart Attack. It can even present as a Stroke for the same reason. The phenomenon of 'Cytokine Storm' – which is overactive & exuberant inflammatory response, makes one more prone to blood clotted. These small clots trigger Heart Attack, Brain Attack, Acute Limb Ischaemia, Kidney failure, and abdominal emergencies. For a proportion of patients who presented to our ER with Stroke or Heart Attack, it was found to be triggered by COVID! Hence, the ER team has to be vigilant in evaluating all cases to spot newer indicators of Coronavirus over and above the classic symptoms of fever, sore throat & dry cough".

The Emergency department plays two pivotal roles in such case – (1) prevents cross infection & (2) prevents misdiagnosis that could result in the patient being treated only for the symptoms he/ she is showing, not for the underlying COVID. Focused history-taking, astute evaluation, and rational imaging helps pick up the COVID-19 cases early and they can be treated in Emergency Isolation areas. This approach helps segregate patients into COVID-19 positive and non-COVID areas of the hospital; thereby preventing patients with COVID-19 from going into non-COVID allocated areas, which could pose a huge risk to the other patients as well as their caregivers. Therefore, accurate diagnosis, prompt emergency care and transfer of patients to proper patient care areas from the Emergency Dept. becomes crucial, and the emergency caregivers play a crucial role in enabling this.

Dr Sandeep Gore, further adds, "I have studied over 180 COVID-19 cases in the past two months; it was observed that about 1 in every 5 cases showed deceptive symptoms. Importantly, the primary symptoms had no co-relation with the underlying condition of the patient! As a frontliner, to be prepared to handle such patients is imperative; we trained our doctors to intubate patients using appropriate techniques which are specifically developed to keep them safe while performing emergency procedure on patients with COVID-19". He further added, "I am extremely proud of our medical and non-medical teams who have helped keep the hospital infection free, and safe for non-COVID patients. Emergency team is indeed the shield of the hospital".