



Detection and Management of Coronavirus

All the methodologies listed here are only for information and educational purposes. This is also to ensure that patients are not left unattended in this healthcare catastrophe. Please check with your doctors for advice on medicines, which might have side effects. The reason for listing drug names instead of just salts is because patients need not waste time on google searching salts.

We have no allied interest/vested intent in promoting any of the pharmaceutical brands. Stay safe, create safety net bubbles around you, mask up, and get vaccinated. Please note that patients who have been vaccinated are seeing extremely mild/moderate symptoms. Vaccines might not protect a person from contracting the disease but will surely help in saving their life.

Our country's healthcare infrastructure is in a mess currently. So, it is only right for people to get educated on COVID-19 so they don't add to the list of severe cases that need hospitalisation. One can stay at home and treat themselves and their families while they know when to knock on the doors of a hospital. It is crucial to ensure that there is no third wave of COVID-19 hitting the country by being cautious, acting swift, and ensuring there is mass vaccination.

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Symptoms

What Happens When One Contracts COVID-19?

Most Common Symptoms:



Fever



Tiredness\body Pain



Dry Cough

Less Common Symptoms:



Diarrhoea



Loss Of Taste/smell



Sore Throat

Isolation

The Best Way To Protect Your Loved Ones

In case of any such symptoms, the first thing one should do is to ISOLATE. Being stern about following the COVID-19 guidelines is the best strategy. Since COVID-19 is a highly contagious disease, it is advised to strictly isolate on noticing the first symptom.



SpO2

Once a symptom is detected, one should buy a Pulse Oximeter immediately and check the SpO2 levels regularly. Here is the correct technique to use SpO2:

One should sit on a bed or chair, place the SpO2 monitor on the left index/middle finger, and wait for 45 seconds. The reading in the 45th second is the SpO2 reading. Any reading < 92 is an indication for Oxygenation. A normal SpO2 is > 95.



Awake Proning (lying face down): The ones whose saturation is below 94 can use this method to improve oxygenation.



1. 30 minutes-2 hours: Lying on belly



4. 30 minutes-2 hours: Lying on the left side



2. 30 minutes-2 hours: Lying on the right side



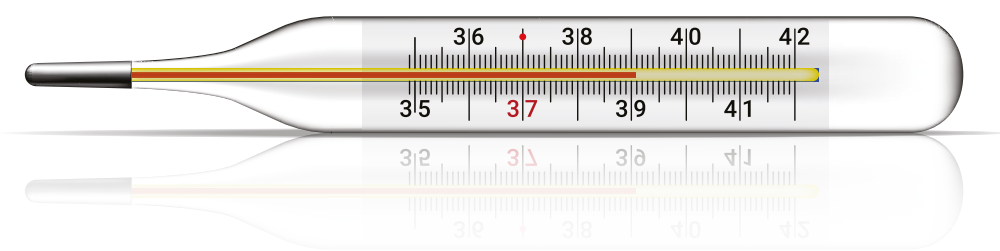
5. Back to Position 1: Lying on belly



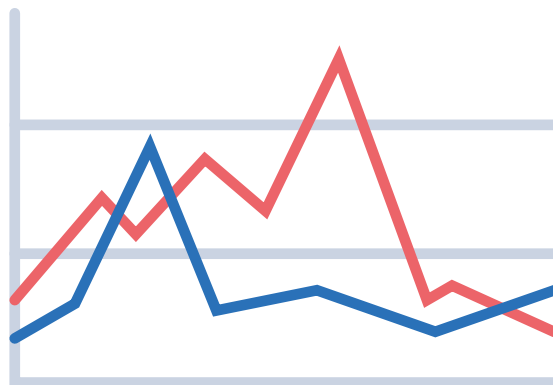
3. 30 minutes-2 hours: Sitting up

Temperature

1. One should monitor temperature using a mercury thermometer. It gives a very accurate reading and is better than the digital one. The normal temperature of a human body is from 97.56 F to 99.6 F. A person is said to have a fever only when the temperature is > 99.6 F. Earlier, the average human body temperature was said to be 98.6 F. But the temperature varies between 97.5 F-99.6 F lately.










2. One should create a temperature chart.



3. Fever medicines, such as Paracetamol, Dolo, Crocin, and Calpol, should only be taken in SOS meaning Signs of Stress (in case of symptoms) and not regularly. But the minimum time interval between 2 doses of any antipyretic should not be less than 4 hours.

Identify You Have Covid-19 Or Not

Problems	Covid-19	FLU	Cold
 Incubation Period	2-14 days	1-4 days	1-3 days
 Symptom Onset	Gradual	Abrupt	Gradual
 Cough	Common	Common	Mild to moderate
 Shortness Of Breath	Common	Sometimes	Mild
 Fever	Common	Common	Rare
 Fatigue	Common	Common	Sometimes
 Runny Nose	Sometimes	Sometimes	Common

4. In case of body pain, one can take Mefenamic Acid. For example, Meftal 500 can be taken but only in Sign of Stress (SOS). Again, it is advised to consult your doctor before taking these medications. The purpose of this document is to ensure that people know what options they have so they can discuss them with their doctors. It is not advised to self administer as different bodies react differently to medicines.

If antipyretics are not able to decrease the fever and if the fever is emerging again within four hours of taking them, please carry out Cold Compression, Tepid Sponging, and consult a doctor instead of taking medication again.



COVID-19 Test

1. Though RT-PCR and other testing modalities are in short supply, it is recommended to arrange for an RT-PCR as soon as possible.



Swab



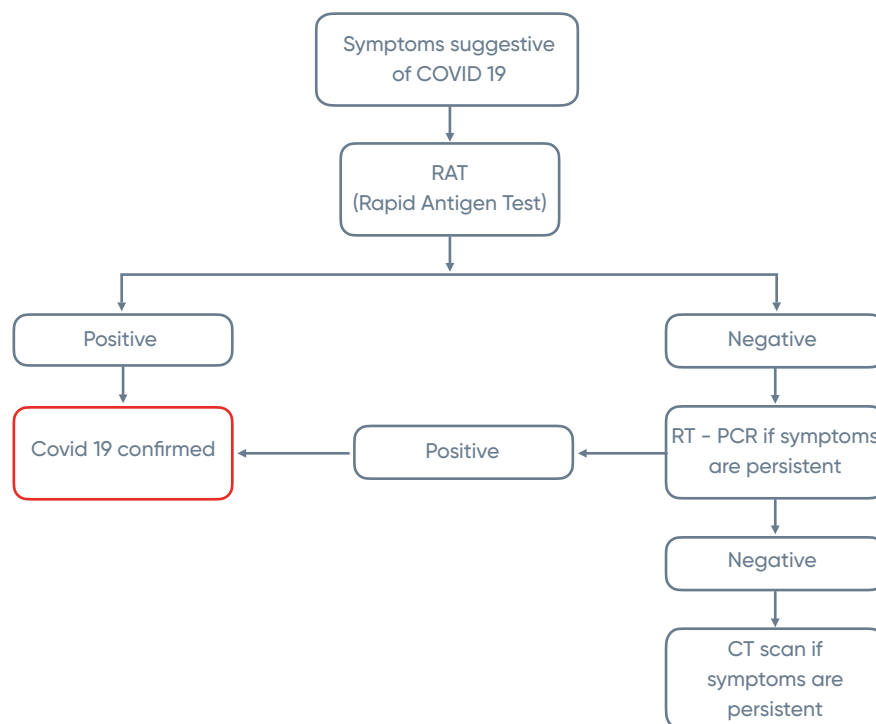
Lysis Buffer



Rt - Pcr Machine

2. If an RTPCR is not accessible please get a RAT(Rapid Antigen Test) done, though the false negativity is high and if the test shows positive for Covid-19, then no further RTPCR and CT needs to be done, but in case of negative test RTPCR/CT needs to be done. If RTPCR comes as negative and still symptoms persist, then please get a CT scan done.

3. CT scan is a fairly conclusive test for COVID-19 testing but should be used as a last resort as it is extremely radiation prone (X-ray) and not accessible for all cases.



Ground Glass opacities is a diagnostic of COVID in these times. CORAD Score helps in diagnosis and CT Severity Score helps in prognosis estimation.

Immediate Treatment

One should not waste time and start the following treatment immediately even if testing is not been done yet.

1. ZINCOVIT 1xBDx10 days (12 hourly) Multi-Vitamin + Multi-Mineral Support.
2. Limcee chewable Vitamin C tablets 1xTDSX10 days (Three Times a Day).
3. Steam with camphor TDS (Three Times a Day).
4. Gargles and Betadine BD (12 hourly).
5. Drink a lot of liquids:
 - Water
 - Lemon Juice
 - Haldi milk
 - Pomegranate Juice
 - Sweet Lime Juice
 - Soup
 - Methi seed soaked water
 - Kaadha
 - Coconut Water
6. One should follow a nutritious diet with fresh vegetables, fruits, ashwagandha, amla, along with high protein items, such as dal, raw paneer, soya, milk, nuts. There is no study to show the significance of the above food and liquid intake. This is purely on the basis of experience and the fact that they don't have any side effects and augment general immunity.
7. Pranayama and breathing exercises.

What To Do When One Tests Positive?

Medication Only After Consulting a Doctor

1. Antibiotic

As COVID-19 is a viral infection, there is no role for an antibiotic technically. But to contain any bacterial superinfection, antibiotics, such as Azithromycin 500 mg OD x 5 days and Doxycycline 100 mg BD x 5 Days should be taken.



2. Anti-Viral

The use of a drug called Favipiravir has been recommended by the NMPAC and has been used in the US. Favipiravir (oral) medicine is given in the following way:

Day 1: Loading dose: 1800 mg x BD

Day 2 – Day 7: 800 mg x BD

The consumption of favipiravir should only be done after consulting a doctor. Favipiravir selectively inhibits the RNA polymerase which is necessary for viral replication.

3. Ivermectin

Ivermectin is an inhibitor of the COVID-19 causative virus (SARS CoV-2). It has been shown to have 5,000 fold reduction in virus in a timeframe of 48 hours in cell structure. Ivermectin is taken 12 mg OD x 3 days. Though ivermectin as a drug is an antiparasitic and has been approved by the FDA for the same classification, it must be consumed only after consulting your doctor.

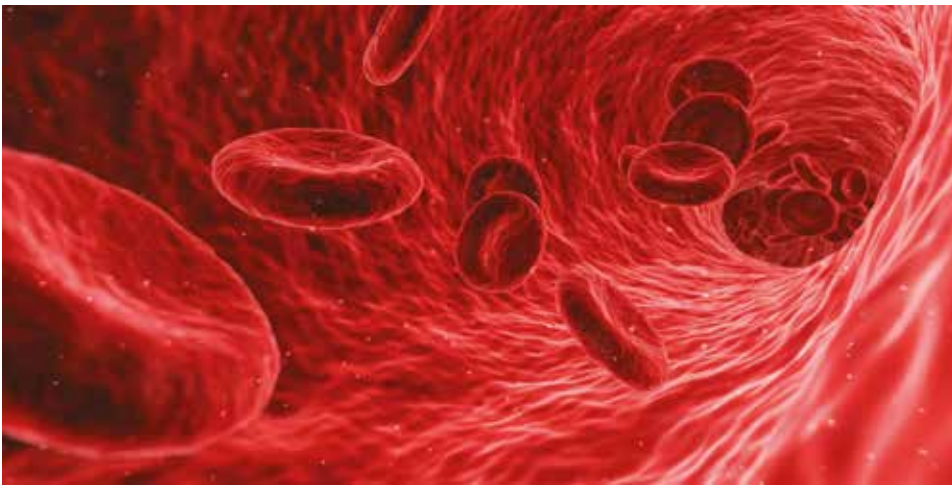
4. Anti-Tussive for Cough

Cough syrups, such as Benedryl-Chlorpheniramine are used for symptomatic cough relief. It should be taken after consultation with one's doctor. Mucinac 600 dispersible tablets is a sugar-free mucolytic medicine. It works by thinning the mucus (phlegm), making it easier to cough out. It clears the air passage and makes breathing easier and also has antioxidant action. This is to be taken after consultation with the doctor, 1 x BD x 7 days.



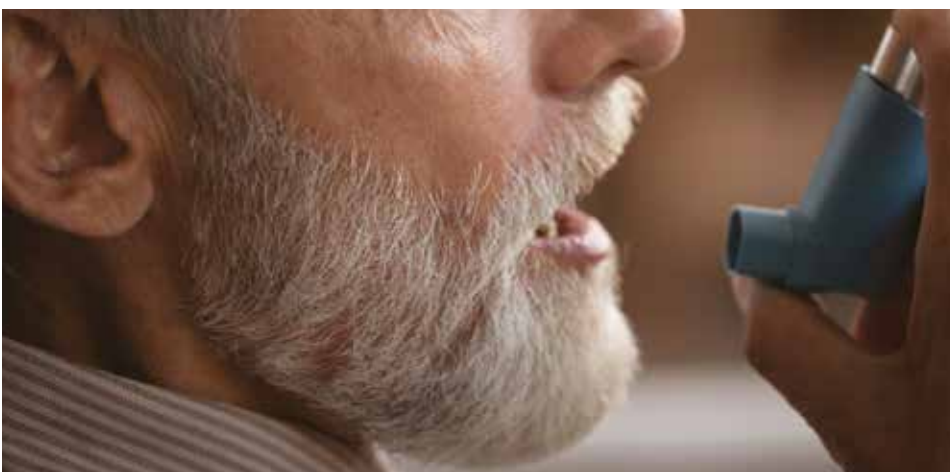
5. Anti-Coagulants

A study on the connection between blood clots and COVID-19 revealed that aspirin, used to prevent stroke and heart attack, could be important for COVID-19 patients*. This is only for heart/stroke patients and to be administered under the proper guidance of a doctor; not to be consumed for mild/moderate cases without comorbidities.



6. Inhaled Budesonide

As per the new study published in The Lancet Respiratory Medicine, a steroid used to treat asthma, if given early to COVID-19 patients with mild symptoms, scales down the need for urgent medical care and reduces recovery time.



Are steroids helpful?

1. Steroids are extremely effective in moderate to serious cases.
2. Steroids are deferred for the first seven days as the virus is in its replication phase and administration of steroids may lead to flaring up of the viral replication.
3. Both Dexamethasone and Methylprednisolone will be used.
For example, Dexona/Dexacort (6mg OD x 5 days) + (3mg x OD x 3 days) + (1.5mg OD x 3 days). In the case of methylprednisolone, Medrol (16 mg BD x 5 days) + (8 mg BD x 3 days) + (4mg BD x 3 days).
4. Steroids are never stopped abruptly and need to be stopped in a weaning depreciation manner.
5. Steroid administration has a lot of uses as well as harms. Thus, caution should be taken and needs to be administered only under the supervision of a doctor.
6. Steroids behave very weirdly in diabetes' blood sugar level and needs to be monitored during the steroid treatment. Diabetic medication may need to be altered while on steroids.
7. In cases where fever does not subside, CRP does not get under control, or hypoxia occurs, steroids can be given but in consultation with a doctor.

Investigations

On day 7, a CT scan should be done and the CT severity score should be checked. On day 4, 7, and 11, the COVID profile should be done, which includes the following tests.

- | | |
|------------------------------|------------------------|
| 1. Complete Blood Count * | 8. Creatinine * |
| 2. Albumin/Globulin/AG Ratio | 9. IL6 (Semi-Specific) |
| 3. LDH * | 10. D-Dimer * |
| 4. S. Ferritin * | 11. CRP * |
| 5. AST | 12. Procalcitonin |
| 6. ALT | 13. PT |
| 7. Urea * | |

Repetitive lab investigations need to be done only in moderate to severe cases as per one's doctor's suggestion. In mild/asymptomatic cases, lab tests are not required unless indicated by the doctor.



Admission Indicators

1. < 93 SpO₂
2. Fever not getting under control by antipyretics/steroids
3. Comorbidities
4. Worsening CT / Lab reports
5. Breathlessness



Severe Covid Cases

1. Remdesivir

Though there are a lot of theories on the efficacy of Remdesivir, but our experience at Radix Healthcare showed that Remdesivir is effective. Though there is no conclusive evidence but in cases where hospital admission is indicated we're recommending Remdesivir within the first 10 days of the first symptom. Role of Remdesivir is questionable post 10 days of the first symptom. Dose 100 mg X 6 vials. Stat dose of 200 mg on Day 1, then 100 mg every 24 hours till day 5.



2. Iv Steroids

Steroids have proven to be life savers in case of high CRP / hypoxia. In cases where oral steroids don't work get admitted & IV steroids should be started.

3. Broad Spectrum Antibiotics

To cover for super infection / secondary bacterial infection, IV antibiotics like monocef can be started in a hospital environment.



4. Tocilizumab

This is a wonder drug in serious cases. Comes in names such as Actemra. This is an IL-6 inhibitor which has proven to save a lot of lives in cases of Cytokine Storm / highly elevated IL-6 levels.

5. Plasma Therapy

Wildly disputed theories are there for Plasma Therapy, but as the disease is so new, for serious patients we should try each & everything. We've seen PT works, & a shot must be given in serious cases.

Source of information:

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