



COVID-19

- Literature review current through Sept 2020
 - Document created on 25th Sept 2020



What is coronavirus and COVID-19? Are they same?



Coronavirus are enveloped RNA viruses that infect several mammals including humans. While four human coronaviruses caused mild seasonal respiratory infections, SARS and MERS caused outbreaks in China and Middle East.



Recent outbreak which began in Wuhan China is caused by a new coronavirus distantly related to SARS and hence renamed as severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2)



Disease caused by this new virus is called as Corona Virus Disease (COVID) and 19 refers to year 2019 and hence COVID-19



What are the common symptoms?

- Most common symptoms are fever and cough which begin slowly unlike flu.
- Myalgia (pain in muscle), aches and pain, headache are some of the other symptoms encountered.
- 1/3rd to 3/4th of the patients can get shortness of breath after several days.
- 1/3rd report loss of smell and/or taste.
- Less commonly sore throat, running nose or diarrhea may occur

Asymptomatic – Many may not show any symptoms at least initially



Other Clinical Features

- Some may not have fever but only chills and cough to begin with
- Fatigue
- Loss of appetite

Loss of smell
& taste are specific
signs



Who can get affected?

- ✓ Anyone can get affected who comes in contact with an infected individual.
- ✓ Disease is more symptomatic in adults and older individuals.
- ✓ Young people are more likely to carry the virus without symptoms.



How does infection spread?

- Small droplets – Stay away at least 2 meters
- Touching objects infected with such droplets and then touching your eyes, nose or mouth; This generally occurs in the immediate environment around the infected person
- Being together in confined spaces such as aircrafts, cars can increase risk of transmission.





- It is important to note that the detection of RNA in environmental samples based on PCR-based assays is not **indicative of viable virus** that could be transmissible.

How else can it spread?

Urine?

Possible

Stool

Possible
Risk

Pet and
mosquitoes

Unlikely

Stool – No reports yet and only one study showed that virus can be cultured from stool

How else can it spread?

Sweat

No

Tears

**Possible
Risk**

Stool – No reports yet and only one study showed that virus can be cultured from stool

How else can it spread?

Blood


No

Direct mother to
baby
transplacental
transfer?

No

Breast Milk

Unknown and no
specific
guidelines –
continue breast
feeding



What is meant
by incubation
period? Why
is it so
essential?

- Time taken for the virus to manifest is referred to as incubation period
 - In case of Coronavirus, it is 2 - 14 days (typically 5-12 days), very rarely up to 4 weeks
 - This means you may take upto 14 days after coming in contact with an infected individual before you show any symptoms. Hence the need for “quarantine”
-

/


Can it be transmitted even if the infection is mild?

- Yes it can be transmitted even if infection is mild .
-



Can it be transmitted even if patient is asymptomatic?

- There is a theoretical risk, but it has not been found to spread infection.



Does it always
run a serious
course?
Should you be
worried?

- Most infections are mild and hence you should not switch on your worry button
- Some patients who are initially mild may become sick after 5-7 days
- But it is essential to inform your doctor so that appropriate quarantine/isolation can be done; This is important as you with your "milder" disease may affect someone who may not be fortunate enough to run a milder course.




Who are at higher risk of serious disease?

- Underlying lung or kidney disease
- Hypertension
- Ischemic heart disease
- Diabetics
- Old age (> 70 years)



Recovery Time?

- The median time from symptom onset to clinical recovery for mild cases is approximately 2 weeks and 3 to 6 weeks for severe or critical cases.



Are patients with
rheumatic
diseases at
increased risk of
getting COVID-
19?

**No they are not at
increased risk of getting
infection**

Are patients on immunosuppression at increased risk of getting more severe disease?

- Data from patients with underlying rheumatic disease is still lacking. But patients with underlying lung disease, diabetes, stroke or heart disease or age above 60 years are at increased risk of running a more severe case.
- But what is essential is consult your rheumatologist for any doubts.
- Continue your medications and contact your rheumatologists if you develop flu like symptoms or any evidence of any infection.



Of all the rheumatic diseases which is at highest risk of running a severe course?

- First and foremost, if you don't follow standard preventive measures you are at increased risk irrespective of disease activity.
- Secondly data is lacking regarding which autoimmune disease is at so called "higher" risk.
- It is not the disease, but organ affected because of disease and other co-morbidities that decide COVID prognosis.



What about children with rheumatic disease?

- They need to follow the same guidelines as adult patients
 - Physical distancing
 - Face Mask when outdoors; this might be a challenge for small kids and hence parents need to decide the need to take them out. WHO* states children aged **five years and under** should not be required to wear masks. CDC differs and advised children above **two** years should wear mask
 - Hand hygiene
- Vaccination
 - Should be continued as scheduled unless underlying rheumatic disease or drugs are contra-indication(s)

*<https://www.who.int/news-room/q-a-detail/q-a-children-and-masks-related-to-covid-19>



Should I reschedule my next appointment?

- This depends on current trend of infection in your town/city
- If disease is in remission, you can opt for online/telemedicine consultation if facilities are available
- If disease is active or worsening, let your rheumatologists decide
- Remember maintaining physical distance, hand hygiene and mask



How frequently should we do blood tests?

- This depends on your disease activity status
- Most patients with stable disease, irrespective of medications, can do three monthly or even less frequent blood testing.
- Consult your rheumatologist



Can we continue
our medications?

YES

Let your treating Rheumatologist take a call



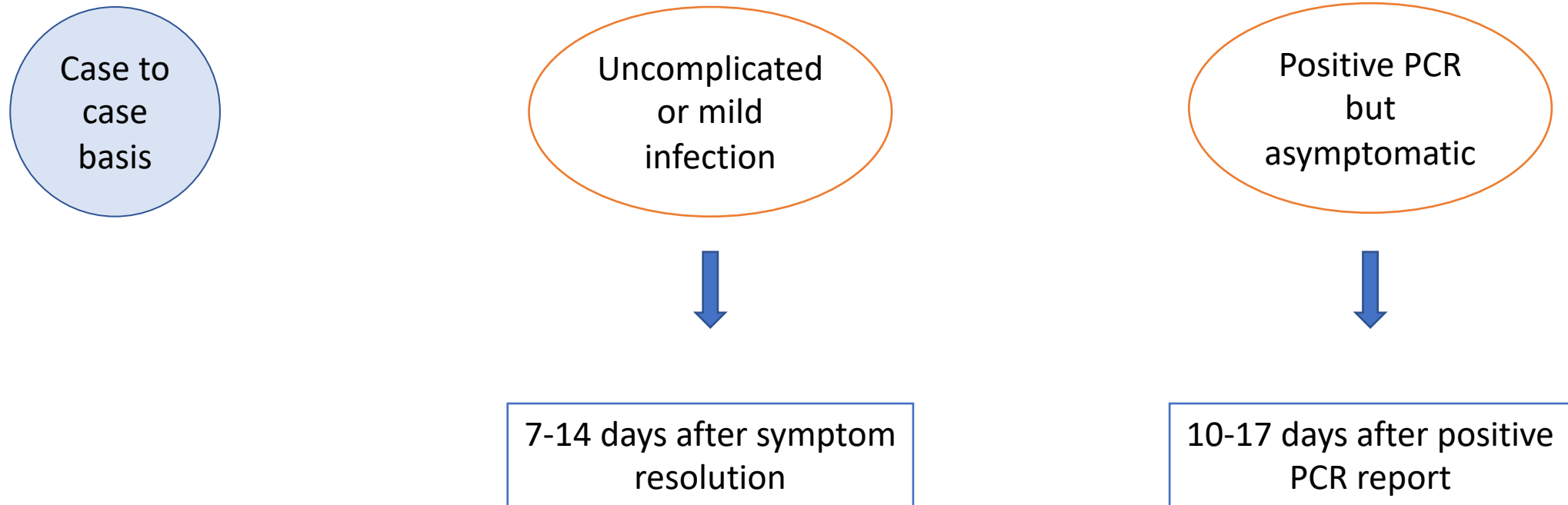
- In case of non-life threatening organ involvement, high dose steroids can be postponed by 1-2 weeks if patient is exposed to SARS-CoV-2 if treating health professional deems it safe



Is it safe to continue medications if there is SARS-CoV-2 infection?

- You can continue medications like HCQ/CQ
- Steroids should not be stopped abruptly
- For other medications, let your rheumatologist decide depending on disease activity. Some of the drugs may need to be stopped for duration of infection or 14 days.

When to restart medications after recovery from COVID?



How can we prevent the transmission?

- Avoid unnecessary travelling especially airplanes and public transport
- Avoid social functions wherever possible
- Sneeze into a tissue preferably to avoid contaminating clothes or hands
- Avoid going to crowded places
- Contact your doctor immediately if you are unwell or if there is any suspicion

How can we prevent the transmission?



- Cover your face with a mask if you have flu like symptoms and consult immediately
- Avoid handshakes, touching eyes, nose or mouth
- Wash your hands diligently with soap and water or Use spirit with 60% or more alcohol. This kills the viruses and other potential infectious micro-organisms.

Who should use the mask?

- Masks if properly used, are useful to reduce transmission. If two individuals are wearing the mask chance of transmission is less than 1-2% if one of two is infected.
- Mask **should be used** by **everyone**
- You can wear cloth masks or three layered surgical masks. Keep a pair of cloth mask and wash them everyday; they can be reused upto 4 weeks. **DO NOT USE MASKS WITH VALVE**
- Hand hygiene should be followed when wearing as well as taking off the mask.



What is the correct method of wearing the mask?

- Wash your hand first as advised previously
- Place mask carefully to cover mouth, nose and chin and tie securely to minimise any gaps between the face and the mask
- Colored side should be facing outwards and border with metal strip should be on the top
- Avoid touching the mask when it worn as well as when taking off the mask
- Remove it by untying the lace and holding the mask with the lace
- Follow hand hygiene and clean your hands after taking off the mask upon removal.
- Refer to [https://www.who.int/publications/i/item/advice-on-the-use-of-masks-in-the-community-during-home-care-and-in-healthcare-settings-in-the-context-of-the-novel-coronavirus-\(2019-ncov\)-outbreak](https://www.who.int/publications/i/item/advice-on-the-use-of-masks-in-the-community-during-home-care-and-in-healthcare-settings-in-the-context-of-the-novel-coronavirus-(2019-ncov)-outbreak) for more details



How many times a surgical mask can be reused? How to dispose off?

- Discard the mask immediately in a closed bin
- Avoid re-use

RE-USE

A blue circle with a diagonal slash through it, positioned over the text 'RE-USE' to indicate that re-use is prohibited.

Hand Hygiene

- Wash your hands with soap for 20 seconds
- If you think your forearm has been exposed, then wash forearm followed by hands
- You can also use alcohol-based sanitizer with alcohol content more than 65%



How long does the virus survive on surfaces?

Surface	Duration
Copper	8 hours
Cardboard	24 hours
Steel	72 hours
Paper	4-5 days
Plastic	7 days

Methods of disinfecting surfaces (derived from SARS-CoV)

Chemical	Strength (%)	Duration of contact
Sodium hypochlorite	0.21 0.01	30 seconds 10 minutes
Hydrogen peroxide	0.5	1 minute
Formaldehyde	1	2 minutes
Povidone iodine	0.23 – 0.47	1 min
Benzalkonium chloride	0.04	1 min




Myths about other sources of transmission or prevention

Surface	Duration
Shoes	Questionable if they spread infection; it would be a good idea to open shoes outside if there are infants and children at home who crawl or play on floors
Flies	Do not transmit the virus
Exposure to Sun or temperatures higher than 25 degree	Not protective
Hot bath	Does not prevent COVID
Rinsing nose with saline or spraying bleaching agent over body parts	Does not prevent COVID



How long does the virus survive on surfaces?

- Dirty clothes should be washed with hot water (60-90 degree Celsius) with detergent. Machine dry on a high temperature or under sun.



What are the definite treatment options?

- There are no virus specific drugs as yet. Certain antiviral medications are being tried but no proven benefit.
 - Management depends on the extent of disease.
 - Antibiotics help if there is secondary bacterial infection
-



What is outcome of the disease?

- Outcome is unpredictable as different countries are reporting different level of severity
- But one thing that is common that is more than 90% recover.
- This does not mean we can be complacent as we are yet to completely understand the virus and the disease. Outcomes are variable



Can it be prevented through some medications or other measures?

- No drugs or magic or kapoor/camphor or garlic or turmeric can prevent this.
- There is no evidence for medications from allied health sciences either as yet.
- Prevention strategies have been already outlined and should be followed.



Can Vitamin D help?

- There are news reports about vitamin D being quoted as cure/prevention but this is not proven
- Take the amount as already advised
- Do not overdose or take more than required



What drugs should be avoided?

- There are no obvious drugs that need to be avoided or are contraindicated. Consult your rheumatologist before taking any decision. Standard guidelines meant for any infection are to be followed.
- Fear of ACE inhibitors or ARB used in hypertension and various other diseases is unfounded and not proven.
- There are reports of ibuprofen and some diabetic drugs, but **nothing is proven as yet**. NSAIDs in general are avoided if you get a viral infection. Consult your rheumatologist.

Is there any vaccine?

- Lot of work is going on to develop a vaccine, but it will take 6-12 months if the various phases of trials go well and are successful.



Can patients with Rheumatic diseases receive vaccine?

- It will be wise to complete your vaccination in consultation with a rheumatologist
- Prioritize influenza but vaccinate for whooping cough and pneumococcus infection as well.



Should I stock medications or grocery?

- There is panic amongst many and we cannot fault them for same. It is essential you learn and read about the disease and follow the prevention strategy.
- There is no need for stocking things.
- Let us be positive and disciplined.

Autoimmune
Disease

Remember

Rheumatic
Diseases

- Continue your medications as prescribed.
- DO NOT STOP medications on your own.
- Consult your rheumatologist if you have any doubts or features suggestive of infection.

Arthritis



Got more questions?

Mail us on indianrheum@gmail.com or

write on our Facebook page <https://www.facebook.com/IndianRheumatology/> or

tweet us [@www.twitter.com/Indianrheum](https://www.twitter.com/Indianrheum)



For more details
and regular
updates, visit

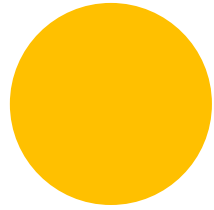
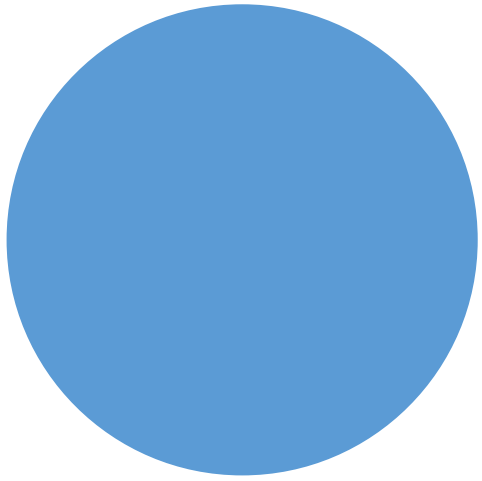
<https://www.who.int/health-topics/coronavirus>

For latest updates
on outbreak, visit

<https://www.worldometers.info/coronavirus/>

India's very own
COVID19
Dashboard

<https://covidout.in/>



Remember the old
saying

**Prevention is
better than
cure**



Prepared By

Dr Avinash Jain, Editing
Committee, IRA e-newsletter

MD DM

Reviewed By

Dr Able Lawrence, EC, IRA

Dr Vineeta Shobha, Editor, IRA e-
newsletter

Dr Alakendu Ghosh, IRA President