

POST COVID REHABILITATION



ALL INDIA INSTITUTE OF PHYSICAL MEDICINE & REHABILITATION

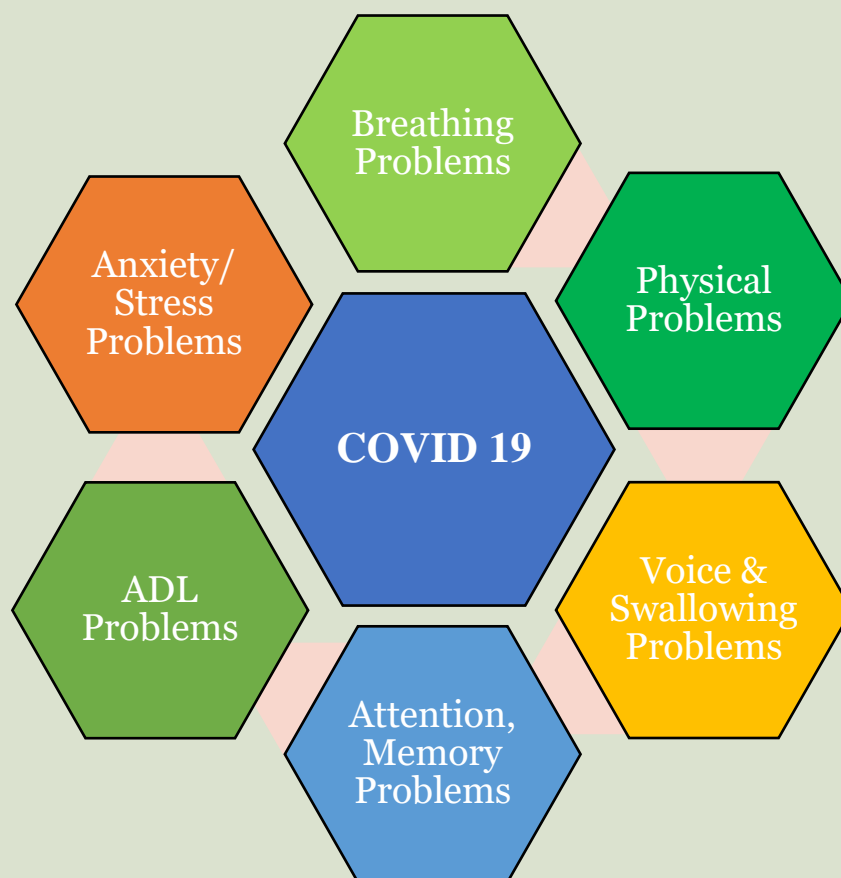
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As COVID19 impacts body as well as mind, rehabilitation efforts should be directed to restore the whole person, helping the person to return to his/her previous quality of life.

Early interventions through exercises and activities focusing on the affected areas play a pivotal role in the recovery process and can be started at home during self-isolation.

It is imperative to continue medical management of any preexisting co-morbidities and contact the treating physician in case of any adverse events.



Breathing Positions and Exercises

Breathlessness is common in post COVID19 patients

Anxiety increases breathlessness.

Stay calm.

Positions to Ease Breathlessness

1. High Side Lying



2. Forward Lean Sitting



3. Forward Lean Sitting



4. Forward Lean Standing



5. Standing with Back Support



Breathing Techniques

1. Controlled Breathing

Keep one hand on chest, other on abdomen

Breathe through nose slowly so that the hand on abdomen rises up and then breathe out through mouth

Breathe slow, relaxed and smooth



2. Paced Breathing

Breathe in before the activity (like climbing stairs) through nose

Breathe out during the effort through mouth

Pursed Lip Breathing

Inhale slowly through your nose for 2 counts, pucker your lips and exhale through mouth for 4 counts



Segmental Breathing

Place hands on upper chest, breathe in deep through nose and breathe out through the mouth (Ex.1)

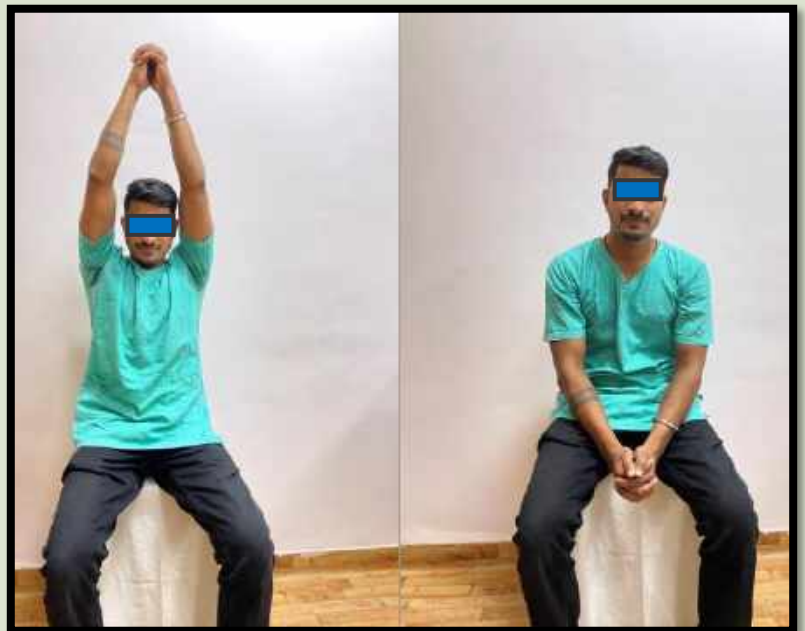


Place hands on the sides of your chest, breathe in deep through nose and breathe out through the mouth (Ex.2)



Thoracic Expansion Exercise

1. Breathe in through nose as you raise hands, breath out through mouth as you bring hands down



2. Clasping hands behind your head, breathe in through nose as you move elbows away and breathe out through mouth as you bring elbows together



3. Breathe in through nose as you raise your arms above your head and breathe out through mouth as you bring arms down



INCENTIVE SPIROMETRY

Incentive spirometer is a device that helps to maintain/increase the lung capacity.

Repeat it 15 times, every 2-3 hourly.



Cautions : Spirometer not to be shared with others

Physical Exercises

Benefits:

- ✓ **Improve fitness**
- ✓ **Reduce stress and improve mood**
- ✓ **Improve balance and coordination**
- ✓ **Reduce breathlessness**
- ✓ **Increase muscle strength**

Exercise Rules:

- 1) **Always warm-up**
- 2) **Comfortable clothes and supportive shoes**
- 3) **An hour after a meal**
- 4) **Remain well hydrated**
- 5) **Exercise in cool environment, indoors**

Precautions:

Stop exercising immediately, and contact doctor if you feel

- 1) **Sick or feel like vomiting**
- 2) **Breathless**
- 3) **Dizzy**
- 4) **Wet or sweaty**
- 5) **Chest tightness**
- 6) **Increased pain**

Exercise Rules

Levels while exercising

- 1) **Can speak the whole sentence without stopping → can exercise harder**
- 2) **Cannot speak at all → too hard, reduce exercise intensity**
- 3) **Can speak with one or two pauses in a sentence → right level**

Can go back to breathing positions to relieve your breathlessness

Warm Up Exercises:

Duration = 5 minutes Repetition = 2-4 times

1. Shoulder Shrugs



2. Shoulder Circles



3. Side Bends



4. Knee Lifts



5. Ankle Taps



6. Ankle Circles



FITNESS EXERCISE:

1) Marching on the spot

Like a soldier

**If needed can hold onto a chair
10 repetitions each leg**



2) Step ups:

**Use bottom step
Can hold on to railing for
support
10 repetitions each leg**



Walking

- **Use your walker, crutch, or walking stick if needed.**
- **Start on flat surface.**
- **Gradually Increase walking speed or as tolerated (feeling just slight out of breath)**

Jogging or Cycling

- **Only do jogging or cycling if permitted by your doctor**

STRENGTHENING EXERCISE:

3 sessions/week

3 sets

10 repetition of each exercise

Rest 1-2 min between each set

Reduce number of repetitions if breathless

Increase weights if you get better with the exercise

Breathe in as you prepare to do hardest part of exercise and breath out during the effort.

Use water bottles if you do not have weights 1 or 1.5 liters.

1) Biceps Curls



2) Wall push off



3) Arm raises to the side slow motion up and down



4) Knee Straightening



5) Sit to stand



6) Wall squats



7) Heel Raises



Cool Down Exercises:

Duration: 5 mins

Slow pace walking/gentle marching on the spot: 2mins

Repeat warm up exercise (sitting/standing)

Muscle Stretches: Gentle/ hold each stretch for 15-20 seconds

1) Side Stretch



2) Shoulder stretch



3) Hamstrings stretches



4) Calf stretches



5) Quads stretches



Voice Problems

- a) **Keep talking**
- b) **Take breaks if tired**
- c) **Don't whisper/shout**
- d) **Stop if breathless and use breathing positions to cope up**
- e) **Try humming**
- f) **Use alternate communication techniques like writing or texting**
- g) **Sip water frequently**

Swallowing Problems:

- 1) **Eat or drink in upright position**
- 2) **Remain upright for 30 mins after meal**
- 3) **Try different consistencies of food(thick/thin)**
- 4) **Soft, smooth, moist food initially followed by chopped(small) ones**
- 5) **Take time and concentrate while eating**
- 6) **Take small bites of food, chew well**
- 7) **Eat smaller meals, clear mouth before next bite, sip water in between**
- 8) **If you cough or choke, take a break to recover**

Diet:

- 1) **Follow a simple, affordable and locally available diet**
- 2) **Include fresh fruits, green leafy vegetables**
- 3) **Consume more proteins over carbs/fats.**
- 4) **Avoid excess salt and oily foods**
- 5) **Drink plenty of water**
- 6) **Avoid consumption of junk food/ street food**
- 7) **Stick to the diet which was advised for medical reasons prior to COVID infection**

Exercises to Improve Swallowing

1) Exercises for Lip Seal



2) Chin tuck and swallow

Whilst holding the food/drink in your mouth, tuck your chin as close to your chest as possible.

Swallow the food/drink keeping your chin tucked to your chest



Attention, Memory Problems

Activities to do :

- 1. Story narration, questions and answers**
- 2. Card pairing**
- 3. Repeat and rehearse**
- 4. Memory games**
- 5. Pneumonic Formation and Practice**
- 6. Reminders, to do lists, Flash cards**
- 7. Naming different things, persons, describing pictures**

Activities of Daily Living:

- 1) Decide on tasks**
- 2) Set realistic goals**
- 3) Sit down for tasks if tired**
- 4) Do light tasks between heavier ones**
- 5) Take Help if needed**
- 6) Ease back into activities**
- 7) Manage gradual return to work**
- 8) Get support for childcare, and return to hobbies slowly**

Work from home Tips

Postures to be preferred while working from home



Tips to follow

1) Toileting:

- **Keep bucket/mug/toilet paper within reach**
- **Wear loose elastic clothing**
- **Bedside commode or urinal may be used**

2) Bathing

- **Keep things required within reach**
- **Use of chair or stool, hand held shower**

3) Dressing:

- **Layout clothes required**
- **Comfortable snugly fitting clothes**
- **Dress lower body first without forward bending**

4) Grooming:

- **Organize items within your reach**
- **Sit in a chair/stool or lean forward supporting yourself on your elbows on the sink or table if possible**

5) Meal preparation

- **Plan simple meals**
- **Use minimum utensils**
- **Assemble ingredients at a place**
- **Slide items instead of lifting**
- **Soak utensils before scrubbing and let them dry in open**

Managing Anxiety/stress

- 1) Get enough quality sleep, regularize timings by using alarms**
- 2) Choose darker and silent environment for sleeping**
- 3) Minimizing nicotine and alcohol.**
- 4) Eat sufficiently and healthy**
- 5) Be physically active**
- 6) Stay socially connected to your friends and relatives.**
- 7) Listen to music, read or do spiritual practices to improve mood**
- 8) Gradually increase your daily activities**
- 9) Practice meditation, deep breathing techniques, positive thinking**
- 10) Engage in brain exercises like puzzles and computer gaming**

“If you can’t fly, then run

If you can’t run, then walk

If you can’t walk, then crawl

But whatever you do, you have to keep moving forward”

Martin Luther King Jr.

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Days and Timing :

Monday to Friday

2:00 pm to 4:00 pm

Except Government Holidays