# Choral singing after a Sars-CoV2 infection



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Coronavirus SARS-CoV-2 was first found in human beings in December 2019 and causes the COVID-19 virus. As symptoms include effects on breathing as well as on general being, singing after recovering of a COVID infection can be a challenge. Here you will find some tips to get your voice back to normal.

#### Complications and sequelae. What to do?

Post-COVID Syndrome: What are the effects of Covid-19 on the human body, and what can we do to continue singing afterwards?

## Respiratory system sequelae

- Olfactory pathologies (anosmia, dysosmia). For this function is important for the control and taste of food. If our food intake is not good in terms of quality and quantity, the nutrients will not be sufficient for our health and a stable immune system.
- 2. Taste problems. Rehabilitation for the olfactory-taste system with different smells such as acidic (orange, tangerine or lemon peel), sweet and salty flavors, for 10 minutes, 3 to 5 times a day.
- 3. Physical cardiovascular exercises improve nasal

- inspiration. Improve nasal humidity with warm water and by applying vaseline to the entrance of nostrils.
- 4. Dryness of the pharynx with a sore throat. Gurgle natrium bicarbonate. Dryness of the pharynx and larynx is detrimental for singing. Use a nebulizer with warm water.
- 5. A dry cough that inflames the vocal folds. Hydration is important to avoid hemorrhages, polyps or cysts. Use a nebulizer with medicine specific for coughs. An examination of the larynx with stroboscopical and endoscopical procedures, mainly with rigid endoscopes through the mouth, may be beneficial.
- 6. Voice pathologies: lack of flexibility (singing from high notes to low tones as in glissando), difficulty changing volume (pianissimo, fortissimo and crescendodiminuendo), dysphonia and bitonality. We may experience voice pathologies and mucous that causes us to clear our throat and produces inflammation on the free edge of the vocal folds. Voice rest, pharmacological treatment and avoiding reflux are necessary.
- 7. If you experience difficulty swallowing solids and liquids, rehabilitation should begin immediately. An examination should be carried out, if possible, with a radiological esophagogram or flexible endoscopic equipment.
- 8. Difficulty breathing (dyspnea at different levels) has to be supported by a tomography of the lungs and if possible spirometry with medical treatment (anti-inflammatory drugs, bronchodilators) and respiratory rehabilitation directed to the vocal support.

## **Digestive System**

- 1. The digestive system may have a damaged microbiota and cause diarrhea. Medical treatment with probiotics.
  - 2. Gastritis and colitis can provoke stomachache, gut

- ache and abdominal distension as well as changes in feces. Medical treatment with antispasmodic drugs and antacids.
- 2. Food hygiene: quantity according to each person's needs, and quality with proteins, carbohydrates and fats in correct proportions. Analysis of personal vitamin and mineral intake. Reflux needs a high position in the head area, 10 cm. Avoid fatty foods mainly in the evening and do not eat less than 3 hours before going to bed

#### Cardiovascular

- 1. Thorax ache
- Heart with abnormalities (palpitations)
- Reduced capacity during sports or other strenuous activities

## **General symptoms**

- 1. Headache
- 2. Muscular pain in the shoulders and back and arthralgias
- 3. Muscular weakness
- 4. Tiredness

### **Nervous system**

- 1. Emotional fragility and anxiety
- 2. Lack of mental concentration
- 3. Irritability
- 4. Depression
- 5. Sleep alterations, insomnia, lethargy

## Systemic and metabolic pathologies

- 1. Hair loss
- 2. Kidney failure
- 3. Chronic fatigue syndrome
- 4. Post-traumatic stress syndrome
- 5. Encephalomyelitis myalgiac

#### Routine for singing after CoVid19

- Respiratory exercises 10 minutes also using an inspirometer
- 2. Humming exercises without effort for as long as possible
- 3. Resonance exercises with  $/\tilde{N}/$ , /ania/
- 4. Semi-occluded exercises in triads
- 5. Dynamic routines to coordinate the movements of the body with voice exercises

#### Covid 19 Patient follow up and hygiene

- 1. Oximeter reading of between 90 and 99 oxygen saturation
- 2. Temperature
- 3. Write all the symptoms and have a follow up with the doctors
- 4. Analyze your regular activities and body functions
- 5. Take preventive measures against the coronavirus
  - Hand washing and disinfection
  - Sneezing and coughing into the elbow joint
  - Avoid touching face, hair and head
  - Use of masks, goggles, hair protection, face shield in enclosed spaces

## Singing activities

1. Warm up and cool down before and after rehearsals or

performances

- 2. Avoid coming into contact with respiratory disease patients
- 3. Change clothes and shoes upon returning from work or other activities outside the home
- 4. If possible, avoid singing in enclosed spaces and maintain a distance between singers of 3 meters with air ventilation and purification

#### General health systems

- 1. Proper nutrition
- 2. Avoid irritants such as spicy food (chili), acids such as oranges, coffee, black tea, chamomile tea, beverages such as Coca-Cola, chocolate
- 3. Sleep for a correct length of time and keep to a schedule
- 4. Improvement of Immune system: all the substances have to be approved by your general practitioner
- 5. Taking adequate supply of vitamins A, C1, D, E and Zinc is recommended

Singers who contracted COVID-19 need to undergo a follow-up laboratory examination and a tomography of the lungs to check that no damage had been done and that the vocal system can be used. It is known that this virus can cause (temporary) damage to the larynx, causing deglutition and voice production problems.



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- Collegium Medicorum Teatri. Elected president in May 2018.
- Medical Doctor Specialized in Phoniatrics and Audiology.
- Medical studies at the Nat. Autonomous Univ. of Mexico.
- Doctorate studies in Phoniatrics, General Hospital of Vienna, University of Vienna, Austria (Artistic Voice Phoniatrics) 1980-1982.
- Fellowship (special government invitation) Charité Hospital, University Alexander von Humboldt Berlín, Germany (Surgical training and Singing voice), 1987.
- Board Member: WVConsortium since 2006.
- Organizer and host Int. Congress Collegium Medicorum Theatri "Experts in artistic voice", March 2009, Mexico.
- Nat. Coordinator World Voice Day since 2000. Nat.
  Coordinator European Union of Phoniatricians since 2013.
  Active member of national and international societies.
- Conferences, courses and workshops in different cities in Mexico, USA, Canada, Brazil, Venezuela, Argentina, Egypt, China, Korea, India, Turkey, Italy, Germany, Austria, the Czech Republic, France, Spain, Portugal, Holland, Belgium.
- Professor of courses and workshops for Pediatricians,
  ENT, Phoniatricians, Audiologists, Singing and acting teachers, Voice Professionals.
- Clinical, surgical and rehabilitation activities.
  Development in rehabilitation techniques for voice professional users. Teleducation programs for risky voice professional users.
- Workshops in Endoscopical indirect surgery for artistic voice.
- International research in the air pollution and environment effects on the voice.
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