

Laryngectomees and novel corona virus: Suggestions for protection.

Suggestions how head and neck cancer patients (including neck breathers) can protect themselves from novel coronavirus (COVID -19) infection

Head and neck cancer (HNC) patients and neck breathers (including laryngectomees) may be at increased risk of suffering from severe COVID-19 infection. The risk of serious illness is especially high in those who are currently receiving or have recently received chemotherapy or immunosuppressive therapy.

It is prudent that HNC patients and neck breathers follow the government and local health authorities' instructions and avoid exposure to the virus by strictly isolating themselves.

Neck breathers are susceptible to lower respiratory tract infections because the virus may enter their respiratory tract directly through their neck stoma. Respiratory viruses can also access the body through the mouth, nose and conjunctiva. It is therefore imperative that such individuals exercise extra care to prevent becoming infected.

COVID-19 can cause a serious infection in individuals with compromised airways. The airways of laryngectomees may be compromised because their trachea and bronchi are often dry and chronically irritated, and their lung capacity may be reduced because of partial collapse of their lower lobes (atelectasis).

Measures that can reduce the risk of infection include:

Frequent hand cleaning:

- Washing hands often with soap and hot water for at least 20 seconds, especially after being in a public place, or after cleaning their neck stoma, blowing their nose, coughing, or sneezing.
- If soap and water are not readily available, use a hand sanitizer that contains at least 60% alcohol.
- Avoiding touching the eyes, nose, mouth, and stoma with unwashed hands.

Avoiding close contact:

- Avoiding close contact with people who are sick
- Putting distance between oneself and other people. This is especially important for people who are at higher risk of getting very sick.

Taking steps to protect others:

- Staying home when sick, except to get medical care.
- Covering coughs and sneezes

March 30th 2020. Dr Itzhak Brook.

Laryngectomees and novel corona virus: Suggestions for protection.

- Covering the mouth, nose, or stoma with a tissue when coughing or sneezing or using the inside of the elbow.
- Throwing used tissues in the trash.
- Immediately washing hands (see above)
- Wearing a facemask when sick

Cleaning and disinfecting:

- Cleaning and disinfecting frequently touched surfaces
- Avoid touching surfaces that are not clean
- Wash hands immediately after touching a surface that was not clean

Laryngectomees can protect themselves by taking these additional steps:

- Wearing a Heat and Moisture Exchanger (HME) 24/7 if they are able to. An HME provides humidification of inhaled air and some level of (mechanical) filtration depending on the size of the particle relative to the pore size of the HME material and the solid lid prevents direct contact between the finger and the stoma (i.e. Provox XtraMoist and Provox XtraFlow from Atos Medical). HMEs with high filtration efficiency would work better in reducing the risk of inhaling the virus (i.e., Provox Micron from Atos Medical)). Provox Micron is an HME that has an integrated electrostatic filter which provides a filtration efficiency of >99% for bacteria and viruses and it's cover prevents direct finger contact with the stoma. The electrostatic filter provides filtration irrespective of the direction of the airflow, so wearing it also protects other individuals from becoming infected when the laryngectomee is infected. (see picture 1)
- Wearing a hands free HME, which does not require touching when speaking, in those using tracheoesophageal speech with a voice prosthesis. Those who use a regular HME should wash their hands before touching their HME.
- Wearing a facemask (preferably N95) over the stoma (see pictures 2-4). A facemask with four strings can be modified to fit over the stoma. One of the strings can be extended with an extra string; and the lower pair of strings can be tied behind the back.
- Wearing facemask over the nose and mouth, and protective glasses. This can prevent the virus from entering the body through these sites.

If worn properly, a facemask can help block large-particle droplets, splashes, sprays or splatter that may contain germs (viruses and bacteria). Facemasks may also help reduce exposure of the wearer's respiratory secretions to others.

March 30th 2020. Dr Itzhak Brook.

Laryngectomees and novel corona virus: Suggestions for protection.

HNC patients (including laryngectomees) should consult their physicians about any additional steps to take in order to protect themselves. Individuals should contact their physicians upon any signs of respiratory infection.

Finally, although all these measures may be helpful in protecting HNC patients and neck breathers from COVID-19 infection, they are not necessarily fool-proof and are not certainly guaranteed to prevent acquiring an infection.

Itzhak Brook MD

Department of Infectious Diseases

Professor of Pediatrics and Medicine

Georgetown University School of Medicine

Washington DC

USA

Disclaimer

Dr. Brook is not an expert in otolaryngology and head and neck surgery. This message is not a substitute for medical care by medical professionals. Patients should consult with their personal physicians before making any decisions about their medical care. Physicians and other providers reading this message should make independent, informed decisions about the care of their patients based on the individual condition and circumstances of each case.

More information can be obtained at: <https://laryngectomeenewsletter.blogspot.com/>

March 30th 2020. Dr Itzhak Brook.

Laryngectomees and novel corona virus: Suggestions for protection.



Figure 1: wearing Provox Micron.



Figure 2-4: Modifying a facemask to cover the stoma