Position Statement

Nebulisation and COVID-19

Position

Adults – Avoid nebulisation.

Children – Avoid nebulisation. Do not withhold therapy if indicated.

Background

Nebulisation is NOT recommended in patients with COVID-19 as it may contribute to the spread of the virus.

For patients self-managing COVID-19

A puffer or spacer should be used in preference to a nebuliser.

Nebulisers do not work as well as puffers and spacers for people with asthma even during an acute attack. Nebulisers disperse infectious virus particles often metres around and can rapidly spread infection from respiratory viruses, such as influenza and SARS-CoV-2.

The National Asthma Council has issued advice for patients as has the Department of Health.

Additional advice

The National Asthma Council: Australian Asthma Handbook:

- Bronchodilator treatment
- Managing asthma during the COVID-19 pandemic.

In children

Whilst nebulisation in children should be avoided, treatment should not be withheld if indicated. Information on paediatric treatment is available from

- The Royal Children’s Hospital Melbourne clinical guideline: Airborne precautions (full PPE including N95 mask) must be maintained if child requires high-flow oxygen, non-invasive ventilation or nebulised therapy.
- Queensland Health: Children’s Health Queensland and Health Service advice brochure.

Further information

Aerosolisation is the production of small particles of water which, rather than falling to the ground as droplets, can flow through the air and spread more widely. The principles of managing the airway are to keep particle spread to a minimum and avoid aerosolisation as far as possible.
Nebulisation may be regarded as a non-aerosol generating procedure. However, nebuliser treatment induces coughing, and this may contribute to virus spreading. The Australian Society of Anaesthetists has developed a statement on processes and techniques required to protect staff and prevent transmission of infection during airway procedures for patients with known or suspected COVID-19 infection.

In addition, the risk of infection transmission via aerosols may increase during nebulisation due to the potential to generate a high volume of respiratory aerosols that may be propelled over a longer distance than occurs with natural dispersion.

Resources

The Commission has produced a number of resources to promote infection prevention and control in the COVID-19 environment. These illustrate the use of personal protective equipment (PPE).

- Infection Prevention and Control COVID-19 Personal Protective Equipment
- Special precautions for COVID-19 Designated Zones

References

The following references provide additional information on nebulisation as an AGP for consideration in COVID-19:


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If you have feedback regarding this position statement, please email: medsafety@safetyandquality.gov.au