Nasal Cannula

Purpose

To standardize use of low flow oxygen therapy as ordered by physicians.

Policy

- Respiratory Care Services will provide equipment and therapy according to physician's orders for patient requiring supplemental oxygen to maintain adequate blood levels of oxygen.
- Nasal Cannulas ordered at 3 liters flow or less will be set up without humidification unless the physician specifically orders it (or the patient is admitted to pediatrics/ISCU)
- Nasal Cannula oxygen therapy is assumed to be continuous unless otherwise specified.

Accountability/Special Training

Training must be equivalent to the minimal therapist entry level in the Respiratory Care Service with age specific requirement of patient population recognition.

Physician's Order

The written physician's order must include:

- Liter flow of oxygen
- Adults 1-6 L/min
- Neonatal/ Pediatric - 0.1-5 L/min
- Specified FIO_2 for blender when being used to wean neonatal patients.
- Mode of administration.
- In the absence of a complete order, nasal cannula oxygen therapy will be administered only in an emergency. The order must be secured at the earliest possible time after an emergency administration has occurred. Otherwise, the complete order must be secured before the therapy can be administered.

Indications

Documentation of need with arterial blood gases or oximetry, or as indicated by respiratory distress or other acute or chronic indicators.

Contra-indications

Nasal Cannula therapy may be contraindicated for:

- Patients with nasal blockage.
- Patients with facial injuries that would preclude the use of a cannula.
- Patient who will not leave the nasal cannula in place.

Goals

- To treat hypoxia and/or hypoxemia.
- To decrease the work of breathing.
- To decrease myocardial work.

Equipment and Supplies

- Disposable nasal cannula and tubing.
- Humidifier (if greater than 3 L/min for Adults, always humidify for Pediatric)
- Oxygen Flow meter.

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Procedure

Step	Action
1	Check patient's medical record for details of physicians order.
2	Explain safety rules to the patient and visitors in the room. Suggest removal of all smoking materials. Observe the area for possible safety hazards. Follow RCS Policy 03.10.
3	With flow meter turned off, plug into outlet.
4	Attach humidifier cap to pre-filled humidifier and connecting tube to humidifier cap, making sure that all connections are tights, if applicable.
5	Leave cannula in wrapper.
6	Attach humidifier to flow meter and adjust flow meter to desired flow, if not using humidifier attach cannula to flow meter and adjust to desired flow.
7	Connect nasal cannula with connecting tube to humidifier. Listen and/or feel for flow of gas.
8	Occlude tubing to check pop-off valve on humidifier, if applicable.
9	Place cannula properly on patient.
10	Record initiation of therapy in EPIC and on department treatment card, per RCS Policies # 7.1.1 and # 7.1.2.

Discontinu-ation of Therapy

Patient will be evaluated after every treatment. A complete pulmonary assessment will be done every 72 hours as indicated. Based on the assessment the therapist will make recommendations for changes in therapy or discontinuance as needed.

Infection Control

Follow as outlined in the Healthcare Epidemiology Policies and Procedures #2.24; Respiratory Care Services
http://www.utmb.edu/policy/hcepidem/search/02-24.pdf

Assessment of Outcome

- Arterial blood gas and/or mixed venous blood gas measurements.
- The clinical observation of skin color, alertness, respiratory rate, work of breathing, pulse rate, and blood pressure.
- Pulse oximetry.

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Patient Teaching

Instruct the patient as follows:

- Explain to the patient why he/she is receiving oxygen. Relate it to his/her disease or injury state.
- Reassure the patient that this is a safe procedure.
- Inform the patient that he/she may remove the oxygen device only with physician order.
- Instruct patient in safe use of oxygen.

References

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