TERMINAL SECRETIONS

WHAT ARE TERMINAL SECRETIONS?

Terminal secretions, previously referred to as the "death rattle," are noises produced by turbulent movement of saliva in the upper airways. They occur when the larynx relaxes during the inspiratory and expiratory phases of respiration in patients who are actively dying. Patients usually are unresponsive and unable to clear secretions through swallowing or coughing. Most patients die within 48 hours of developing terminal secretions.[1]

NURSING ASSESSMENT

■ Clinical assessment: Complete a focused history and physical exam, including history of symptoms (onset, pattern, precipitating and relieving events, and response to medications). Review laboratory/diagnostic test results.[1]

▶ Type 1 or "real" death rattle occurs when a patient's level of consciousness has decreased.[1]

▶ Type 2 or "pseudo" death rattle is caused by bronchial secretions typically formed due to pulmonary pathology such as infection, aspiration, or edema.[1]

▶ A combination of types 1 and 2 may exist.

■ The Victoria Respiratory Congestion Scale is used to quantify terminal secretions with a 0–3 scale, depending on the distance at which noisy congestion is audible.[1]

INTERVENTIONS

NONPHARMACOLOGICAL INTERVENTIONS	PHARMACOLOGICAL INTERVENTIONS
• **Reposition** the patient to his or her side or in a semi-prone position to facilitate postural drainage if needed.[2] • **Reduce fluid intake** and reevaluate whether the patient should be receiving intravenous (IV) fluids, tube feedings, or other IV medications.[1]	• **Anticholinergic agents*** are typically used to decrease secretions. Efficacy is questionable. Type 1 secretions are typically amendable.[1] Treatment will also depend on care setting. **Atropine** 1% ophthalmic drops, one or two drops sublingually every one to two hours if allowed in presence of contact isolation policies and procedures; **Scopolamine** one to three patches transdermally every three days; **Glycopyrrolate** 0.2–0.4 mg IV or subcutaneously every four to eight hours as needed; **Hyoscyamine** 0.125 mg via orally disintegrating tablets every three to four hours as needed.[3] Monitor for dry mouth, urinary retention, delirium, restlessness, and constipation.[1,2] Glycopyrrolate and hyoscyamine do not cross the blood-brain barrier and are less likely to cause confusion or delirium.[3]

*DISCLAIMER: Medication dosing for symptom management is only a recommendation for nursing to discuss with prescribers and for prescriber consideration after careful history, physical exam, and review of laboratory/diagnostic studies. Dosing should be adjusted based on each patient's clinical case, presentation, and prescriber's clinical judgment.

FAMILY & TEAM DISCUSSIONS

Patient and Family Education and Support:

- Provide education on underlying etiology of secretions, treatment options, medications, and anticipated effects.
- Discuss with family that although the secretions may be distressing, the patient is not uncomfortable. Explain that terminal secretions are a normal part of the dying process for many people.[1]
- Provide information to the family about nonverbal and behavioral indicators that affirm the absence of discomfort.[1]
- Set realistic expectations for symptom trajectory, with reassuring education on management strategies.
- Instruct on appropriate nonpharmacological strategies and safety.

REFERENCES

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