

# MANAGEMENT OF TERMINAL RESPIRATORY SECRETIONS IN PALLIATIVE CARE PATIENTS

## *Staff this document applies to:*

All Clinical Staff of Austin Health

## *State any related Austin Health policies, procedures or guidelines:*

Guidelines for Care of the Dying Patient

Syringe Driver NIKI T34: Subcutaneous medication administration

Palliative Care Consultancy Service: Referral Guidelines

Palliative Care Unit: Admission Guidelines

Oncology Unit Protocol Manual

Clinical Haematology Manual

Mouth Care for Oncology/Haematology Patients

## *Principles of Management:*

To reduce the impact of excessive oropharyngeal and / or pulmonary secretions in the dying patient.

## *Definition:*

Terminal respiratory secretions (also known as “death rattle”) cause a rattling or gurgling respiratory noise, due to a patient’s inability to cough effectively or to swallow and clear secretions from the oropharynx. Family and friends of the dying person may become concerned that the noisy respirations cause the patient distress.

## *Objectives:*

- To reduce family/caregiver and staff concerns that “death rattle” is distressing to the patient
- To manage/minimise the noisy effect of secretions by utilising nursing and/or pharmacological measures

## *Clinical Alert:*

- Gentle oral suctioning should only be used if effective and tolerated – avoid pharyngeal suctioning as this is generally poorly tolerated.
- If active hydration is provided, it may be contributing to the secretions, and its value should be reviewed by the medical team in consultation with the patient and family.
- Pharmacological treatment can contribute to the drying of the mouth, and thus there is a need for more frequent mouth care.

## *Suggested Interventions:*

- Explain to the family/caregiver why secretions develop and reassure them that it is a normal part of the dying process and not usually distressing or uncomfortable for the patient.
- Often repositioning the patient side to side, with the head of the bed slightly elevated, is all that is needed to shift secretions and reduce the noise.

- If required, anticholinergic drugs should be commenced earlier rather than later, as literature suggests this will improve effectiveness, however recent evidence from a single placebo controlled trial suggests that medication is no better than a placebo. More studies are needed to investigate this further.
- See table below for information about the usual anti-secretory medications used. The literature reviewed does not show any agent to be more effective than the other.
- Doses can be titrated according to the patient's response, and can also be given continuously via a syringe driver.

Medication	Starting Dose	Route	Frequency	Max dose/24 hrs
Glycopyrrolate	0.2 – 0.4 mg	Subcut	2-4 hourly	1.2 mg
Hyoscine <i>butylbromide</i> (Buscopan)	20 – 40 mg	Subcut	2-4 hourly	100 mg
Hyoscine hydrobromide	0.4 mg	Subcut	2-4 hourly	2.4 mg

Subcut = subcutaneous

**Note:**

- Glycopyrrolate and hyoscine *butylbromide* do not readily cross the blood-brain barrier, and are therefore unlikely to cause or exacerbate delirium.

**Expected Outcome:**

With appropriate education, nursing measures and pharmacological management, the impact of noisy respiratory symptoms at end of life will be minimised enhancing the potential for a peaceful death.

**Communication Strategy:**

All Austin Health Staff - Forward emails to all of the below.

**Medical Documents**

Email to DL Medical Education All  
Email to DL CSU Medical Directors

**Nursing Documents**

Email to DL CNE  
Email to DL Nursing Group

**Allied Health Documents**

Email DL Allied Health Austin 5

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### Legislation/References/Supporting Documents:

- Heisler M et al. Randomized double blind trial of sublingual atropine vs. Placebo for the management of death rattle. *J Pain Sympt Manage*, in press, 2012
- Back, I. N., Jenkins, K., Blower, A., Beckhelling, J., 2001 A Study Comparing Hyoscine Hydrobromide and glycopyrrolate in the treatment of death rattle. *Palliative Medicine*. 15: 329 – 336.
- Bennet, M., Brennan, M., Hughes, A., O'Donnell, V. and Wee, B. 2002 Using Anti-muscarinic Drugs in the Management of Death Rattle: Evidence –Based Guidelines for Palliative Care. *Palliative Medicine*, 16, 369-373
- Ellershaw, J. Sutcliffe, J. M. and Saunders, C. M. 1999 Dehydration and the Dying Patient. *Journal of Pain and symptom Management*. 10:3 192-197
- Hugel, H., Ellershaw, M. A. and Gambles, M. 2006 Respiratory Tract Secretions in the Dying Patient: A Comparison between Glycopyrronium and Hyoscine Hydrobromide. *Journal of Palliative Medicine*. 9:2 279-284
- Kass, R. M. and Ellershaw, J. 2003 Respiratory Tract Secretions in the Dying Patient: A Retrospective Study. *Journal of Pain and Symptom Management*. 26:4 897-902.
- Therapeutic Guidelines Limited 2010. *Therapeutic Guidelines: Palliative Care (Version 3)*. North Melbourne, Victoria: Therapeutic Guidelines Limited.
- Wee B, Hillier R. Interventions for noisy breathing in patients near to death. *Cochrane Database of Systematic Reviews* 2008.
- Wildierse, H., and Menten. J. 2002 Death Rattle Prevalence, Prevention and Treatment. *Journal of Pain and Symptom Management*. 23:4 310-317.
- Woodruff, R., 2004 4<sup>th</sup> Edition *Palliative Medicine* Evidence-based symptomatic and supportive care for patients with advanced cancer. Victoria, Australia: Oxford University Press.
- Eastern Metropolitan Region Palliative Care Consortium (Victoria) Consortium Clinical Group End of life care: management of respiratory secretions June 2013

### Authorised/Endorsed by:

Cancer Services Medical Group  
Nursing Standards Committee February 2014  
Drugs and Therapeutics Committee  
Clinical Policies and Procedures Committee

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