Respiratory Secretions at the End of Life

Robin Love
March 2015 Oceanside
(Sao Paolo, 2008)
Respiratory secretions “RS”

“sounds audible at the bedside produced by movement of secretions in the hypopharynx or bronchial tree, in association with respirations”
Types

1. Last days
   - Upper airway (salivary - hypopharynx)
   - Respiratory (bronchial)

2. Longer term (weeks to months)
   neuromuscular disease eg ALS
RS at the end of life...

- 25 - 50% of patients
- More common with lung cancer
- As death approaches:
  - Weaker
  - Unable to swallow
  - Unable to cough
- Secretions accumulate
pathology

- Salivary secretions
- Bronchial secretions
- Infection
- Tumor
- Blood
- Aspiration
Goals of care

● How close to the end of life?

● Who is it a problem for?
  ▪ Patient?
  ▪ Family?
  ▪ Staff
  ▪ Roommates

● Does it need to be treated in this case?
Practical

- Is it upper airway secretions?
  - How likely is it to respond?
- Is it pulmonary (lower)?
  - Pulmonary edema uncommon in cancer
  - May be a factor in cardiac disease
Non pharmacological measures

- Educate the family
- Don’t over hydrate
  - Reduce or stop parenteral hydration
- Positioning
  - Lateral or semi-prone
  - Varies according to patient
- Suctioning - rarely, carefully, gently
  - Above all do no harm
- Cover or mask
  - Music
Pharmacological measures: anticholinergics

- Decrease secretions and abolish noisy respirations
- Usually when patient is unconscious
- Prevents new secretions
  - Doesn’t dry up existing secretions
  - Start early
Last days

- Hyoscine hydrobromide 0.4 - 0.8 mg sc q4h and prn
  - May need to “stack” a few doses close together at the beginning
- Atropine .4-.8 mg s.c.
- Atropine 1% eyedrops 1-2 drops q1h
- Scopolamine “patch” (Transderm)
- Glycopyrrolate 0.1-0.2 mg sc or sl q 4-8 h
  - (may be less CNS side effects)
effectiveness

- 60-70 %
- Choose the right patients and situations

Remember:
- Who is it a problem for?
- Do no harm
- Start early
Longer term use: ALS, MS …

- May be for months
- Suction (self controlled)
- Anticholinergics
  - Tricyclic antidepressants
  - Scopolamine patch
  - Scopolamine / hyoscine butylbromide

- Botox
  - Inject into salivary glands (ultrasound or an experienced clinician)