



The ALS Association Greater Philadelphia Chapter
321 Norristown Rd. Suite 260 Ambler, PA 19002
Phone: (215) 643-5434 or Toll Free: (877) 434-7441
Email: alsassoc@alsphiladelphia.org
Website: www.alsphiladelphia.org

Secretion Management in ALS

Definition of Problem and Symptoms

Some patients with ALS experience problems with excessive oral secretions or experience thick phlegm that they cannot cough up. Excessive secretions are experienced when the weakened muscles of the mouth, tongue and throat are not able to swallow the normal oral secretions. Secretions may pool in the mouth and cause drooling, or may collect in the back of the throat where they may cause choking or aspiration into the lungs, increasing the risk of pneumonia. Controlling the secretions is important to decrease the chance of respiratory complications.

Drying Secretions

Medications commonly prescribed to decrease saliva production include amitriptyline (Elavil[®]) and other tricyclic antidepressants, glycopyrrolate (Robinul[®]), and scopolamine (Transderm Scop[®]) patches. Possible side effects of these medications include dry mouth, constipation, and urinary hesitancy. Less common side effects are sedation and confusion. Atropine drop in the mouth may be helpful in some cases. Botulinum toxin (Botox[®]) is often prescribed if the medications noted above are ineffective. Botulinum toxin is injected by a physician directly into the parotid and submandibular glands, where the saliva is made, causing a decrease in saliva production. It often takes 1-2 weeks for maximum effectiveness, and if it is successful, the effects usually last up to 12 weeks. For sleeping difficulties due to the build-up of saliva, try elevating the head of the bed with pillows or by placing a bed wedge under the mattress.

There are times when a person with ALS may develop excessive nasal secretions that drip and cause build up in the back of the throat. You can first try over the counter anti-histamines such as Claritin[®] or Allegra[®]. If these don't work, then we advise that you contact your primary care physician for a prescription form of an antihistamine. There are some that are available in liquid form, such as levocetirizine (Xyzal[®]) which may be effective for nasal congestion.

Thinning Secretions

Thick secretions are caused by several factors 1) drying of secretions with medications; 2) low airflow as a person's breathing capacity declines 3) loss of diaphragm muscle strength which diminishes the ability to cough. Management of these "thick secretions caught in the back of the throat" often requires several approaches in combination:

- Make sure you are adequately hydrated

- Guaifenesin (which is contained in Robitussin Chest Congestion[®] or Mucinex[®]) can be taken orally or (if in liquid form) given through a feeding tube. Robitussin is taken as 1-2 teaspoons every 4 hours. Mucinex is a 600 mg pill, taken twice a day. You can check with your pharmacist to see if he can order large quantities of Guaifenesin that may be less expensive than smaller purchases. The recommended dose is 400mg every four hours. If prescribed as liquid, this usually is 4 teaspoons every 4 hours.
- Other medications that break up thick secretions are Albuterol, Mucomyst or DuoNeb. These medications are administered via a nebulizer, a machine that changes the liquid medication into a mist, which is then inhaled via a mask. These nebulized treatments can be taken up to four times a day and should be performed on a routine basis to prevent build up of secretions in the back of the throat or lungs. The nebulizer machine will be provided by a respiratory therapy company. Some of the companies supply the medicine that is added to the machine or it may need to be prescribed by your doctor to the pharmacy of your choice.
- A suction machine is used to remove secretions by inserting the catheter into the mouth.

Mobilizing Secretions

The respiratory therapist or nurses can help you and your family learn how to perform an augmented manual cough with a bag or with abdominal pressure. Following a nebulizer treatment, a mechanical insufflator-exsufflator (CoughAssist[®]) device can help the person cough up the secretions. The insufflator-exsufflator machine produces a pressure that helps the person with weakened muscles produce a stronger, more effective cough.

If you still have problems with thick secretions after combining all these approaches a high-frequency chest wall oscillation (VEST[®]) device may be considered.



This is a rapidly oscillating device that resembles a vest, and dislodges mucus from the bronchial walls and mobilizes secretions and mucus from the smaller to larger airways where it can be cleared by coughing or suctioning. The device requires special insurance justification and may not be available to all patients through their insurance

Managing secretions in ALS is frequent problem. A combination of approaches can help. Please contact us for further questions about managing this problem.