Laryngectomy humidification

Following total laryngectomy, the normal warming and humidification that is provided by the native upper airways is lost as inspired and expired air flows directly through the laryngectomy stoma on the front of the neck, bypassing the nose and mouth.

Patients will therefore need an alternative method of ensuring that the gas inhaled into the lungs is humidified. This can be provided by applying specific covers to the stoma that contain hygroscopic material (like in HME filters), which can capture moisture, and to some degree, heat. Most patients will be self-caring shortly after their initial procedure and will be able to apply, remove and care for any bespoke stoma covers themselves. The covers do add a degree of resistance to respiration which may become clinically relevant if the patient develops an acute infection or the covers become blocked with purulent secretions. Any stoma covers should be removed in an emergency for this reason.

A Buchannon bib or similar device is another way of humidifying inhaled gases and is preferred by some patients. These can be used by tracheostomy or laryngectomy patients and come in a variety of styles and designs. Some can disguise the stoma completely and the patient just appears to be wearing a scarf or cravat (see images below)