

Name: Scooby

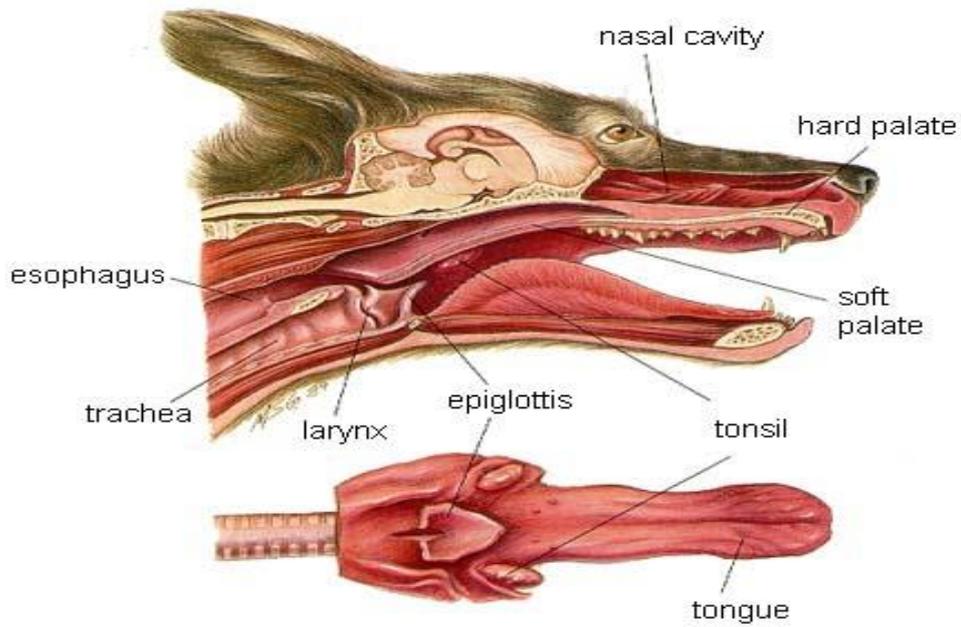
Age: 12yr

Problem: Laryngeal paralysis

Diagnosis

Scooby was presented to the vet with dyspnoea (difficulty breathing). The first step taken was medication to try and help Scooby, two different drugs were used one a steroid, to reduce any inflammation in the throat and the second a bronchodilator (to increase the size of the airways). The owner noticed no improvement, walking was becoming a very stressful ordeal for both parties. Patients with dyspnoea often panic or become stressed, this leads to tension in the throat which further exacerbates the problem, which can lead to collapse and cyanosis, (cyanosis is when there is insufficient oxygen in the blood which then causes the gums to turn a shade of blue.) This is then an emergency. The decision was made to have a look in Scooby's throat.

Scooby was given a small dose of anaesthetic to make him sleepy without being unconscious; a light anaesthetic maintains the gag/swallow reflexes of the larynx. The vet used a laryngoscope to visualise down Scooby's throat, (this is a device that flattens the tongue with a light so you can see down the throat). Using the laryngoscope the vet could see Scooby's larynx was not moving when he was breathing.



This meant that the vocal folds that come together to control the in/outlet of air were stationary in an almost closed position, making adequate intake of air difficult. The air vibrating against the closed vocal folds was causing the loud noise when Scooby was trying to breathe. The only way to treat this condition is with surgery.

FIGURE 2
Paralyzed larynx

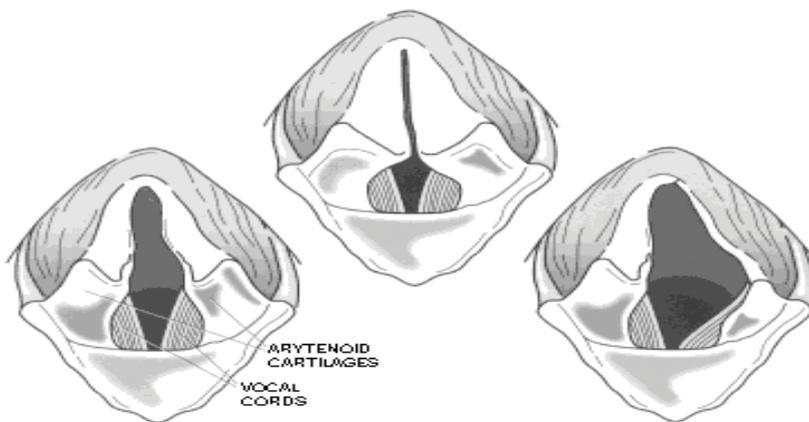


FIGURE 1
Normal larynx
with the arytenoid
cartilages in resting
position

FIGURE 3
After unilateral
larynx surgery

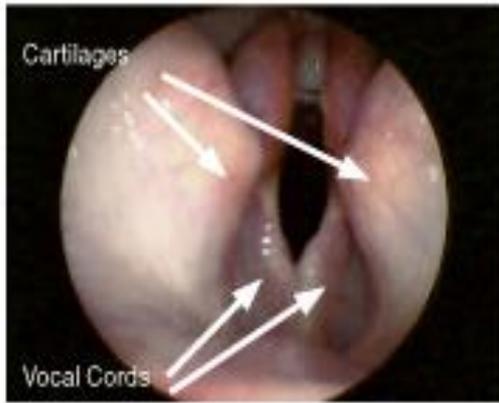
Surgery

Surgery involves using sutures to tie back the arytenoid cartilage on one side of the larynx (see picture) to increase the size of the entrance to the trachea. Only one side is tied back to prevent the larynx from being fully open, as this may cause aspiration pneumonia. The surgery is done through an incision on the side of the neck. It is very delicate surgery as the space created through the incision is only small and the surgeon needs to avoid the large blood vessels e.g. carotid artery, jugular vein and many of the facial nerves, which if damaged can cause some degree of paralysis. Close monitoring from the nurse observing respiration rate, oxygen saturation and depth of anaesthesia is paramount.

Complications:

- Aspiration pneumonia, which can be fatal, is when food is inhaled into the lungs and causes inflammation of the small lung sacs. So close monitoring when feeding is essential!
- Facial paralysis, from nerve damage.
- Surgery failing, due to sutures breaking or cartilage tearing.

The nurse carefully monitored Scooby on recovery, as the critical point in recovery is when the tracheal tube is removed and the patient has to take back control of its' airway, (this is when the reflexes return, meaning the patient can swallow, and protect its' airway with the epiglottis) the procedure from start to finish took over 2 hours to complete.



Before Surgery – Laryngeal Paralysis



After Surgery – Laryngeal Tie-Back

Recovery

Scooby's recovery has been very good, and the surgery has been successful. The owner can now exercise Scooby without increased breathing effort or noise, which in turn means that Scooby is happier, and can look forward to walks. However to prevent undue strain on the surgical site or the larynx he must be always be walked using a harness and never a collar. He can now live out his years in comfort. Continual monitoring from the owner is essential, to spot any relapses or coughing. Feeding now has to be a slow affair, much to Scooby's disappointment.