

# Vocal fold palsy

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This may be unilateral or bilateral ( Figure 52.55 ). Unilateral cord palsy is most commonly idiopathic. In non-idiopathic cases, left vocal fold palsy is most common because of the long intrathoracic course of the left recurrent laryngeal nerve, which arches around the aorta and may be commonly involved in inflammatory and neoplastic conditions involving the left hilum or lung apex. Lung cancer should be considered the cause of a left vocal fold palsy until proved otherwise. Tumours of the nasopharynx, larynx, thyroid gland or oesophagus may also cause vocal fold palsy . Bilateral vocal fold paralysis is uncommon and tends to occur after thyroid surgery or head injuries.

Summary box 52.14 Causes of vocal fold palsy /uni25CF /uni25CF /uni25CF /uni25CF /uni25CF /uni25CF /uni25CF /uni25CF /uni25CF /uni25CF /uni25CF Clinical features Unilateral recurrent laryngeal nerve palsy of sudden onset produces hoarseness, difficulty in swallowing liquids and a weakened cough. These symptoms may be short-lived and the voice may return to normal within a few weeks as the muscles in the opposite vocal fold compensate and move it across the midline to meet the paralysed vocal fold, which usually lies in the paramedian position. Bilateral recurrent laryngeal - nerve palsy is an occasional and serious complication of total thyroidectomy . On anaesthetic reversal, acute dyspnoea occurs as a result of the paramedian position of both vocal folds, which reduce the airway to 2–3 /uni00A0 mm and which tend to get sucked together on inspiration. This can be temporarily relieved by positive pressure mask ventilation, but, in severe cases, tracheostomy or intubation is necessary immediately , otherwise death occurs from asphyxia. Investigation of vocal fold paralysis is by a CT scan from the skull base (including posterior fossa) to the diaphragm. Approximately 20–25% of vocal fold paralysis occurs without known pathology and spontaneous recovery may occur. When compensation does not occur, a unilateral paralysed fold may be medialised by injection or external thyroplasty . In bilateral vocal fold palsy , surgery may be carried out to divide the posterior aspect of one vocal fold (cordotomy) or a portion of one arytenoid cartilage (arytenoidectomy). These procedures are most easily performed endoscopically with a carbon dioxide laser. They increase the size of the posterior glottic airway , allowing the patient to be decannulated or even avoid an initial tracheostomy .

Congenital (infants) Acquired Traumatic Direct to neck Post surgery (e.g. thyroidectomy) Infective Viral (rare) Neoplastic Carcinoma of the lung involving the left hilum Carcinoma of the nasopharynx, larynx, thyroid and oesophagus Vascular Aortic aneurysm Neurological Lower motor neurone disease Figure 52.55 Vocal fold positions: (a) normal; (b) unilateral vocal fold palsy.

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