Voice rehabilitation

Voice rehabilitation

The loss of the larynx as a generator of sound does not prevent patients speaking as long as an alternative source of sound can be created by vibration in the pharynx. This can be achieved - in one of three ways: 1 A small one-way valve may be inserted through the back wall of the tracheal stoma into the pharynx (Figure 52.59 This allows air from the trachea to pass into the pharynx, but does not allow food and liquid to pass into the airway . These valves must not be confused with tracheostomy tubes. Like all foreign bodies, the speaking valves are asso ciated with minor complications, such as the formation of granulations, bleeding or leakage of pharyngeal contents, and have an ongoing financial cost because of the need for regular replacement (Figure 52.60). Mark I Singer , contemporary , head and neck surgeon, San Francisco, CA, USA. Eric D Blom , contemporary , speech pathologist and medical device inventor, Carmel, IN, USA. 2 An external battery-powered vibrating device that when). applied to the soft tissues of the neck produces sound, which is turned into speech by the vocal tract compris - ing the tongue, pharynx, oral cavity , lips, teeth and nasal sinuses (Figure 52.61). - 3 Oesophageal speech, when air is swallowed into the phar - ynx and upper oesophagus. On regurgitating the air, a segment of the pharyngo-oesophageal mucosa vibrates to produce sound, which is modified by the vocal tract into speech (Figure 52.62).

Figure 52.59 A Blom–Singer valve within a surgically fashioned tracheo-oesophageal /f_i stula and an outer stoma valve. Figure 52.60 Provox voice valve prosthesis viewed in rear wall of trachea. Figure 52.61 Electrolarynx. Figure 52.62 Production of oesophageal speech.

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