GLOSSECTOMY

by

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In recent years several patients who have undergone partial or total Glossectomy have been referred to us for help in re-establishing adequate speech. I have been unable to find references to this type of case in available speech journals. I wish to present therefore, a case of total Glossectomy followed by comments on partial Glossectomy and Glossectomy plus total Mandibulectomy based on my own limited clinical experience.

Total Glossectomy – A Case History.

H.W. was an Afrikaans speaking Coloured male 56 years of age. He was illiterate.

Medical History: In 1956 he presented to the Radiotherapy Department with a carcinoma of the tongue and received a course of radiotherapy. He was followed up regularly and biopsies in June 1957 and August 1959 revealed no signs of malignancy.

He remained well until November 1962 when he presented with a hard ulcerating lesion of the left tip of the tongue 2.5 x 1.5 x 1.5 cms. Arrangements were made for his admission to hospital for the excision of this lesion but the patient failed to turn up.

He reappeared in January, 1963, the lesion having more than doubled its size. On 5th Feb. 1963 a total Glossectomy was performed and 10 days later the patient was transferred to a convalescent home. On 8th March, 1963 he was followed up in the Radiotherapy Department who reported "appears satisfactory but cannot swallow" and referred him for Speech Therapy.

On examination the patient still had a nasal feeding tubes in situ. (He administered his own nasal feeds at the required intervals.) He was edentulous. He could not swallow and had difficulty in directing his saliva into the oesophagus resulting in frequent clearing of his throat and coughing to relieve glottal irritation. His soft palate functioned normally and his lips were very mobile.

His speech attempts were almost unintelligible. Resonance was markedly distorted, but all vowels and diphthongs were distinguishable when imitated in isolation.

Consonants p, b, m were normal. He had already developed an accoustically corrent n and his t and d were distinguishable accoustically from p and b; f and v were approximately correct; k and fricative g were glottal; s and z were absebt altogether. All other consonants were distorted, r and l causing perhaps the most difficulty.

Treatment was directed towards:-

1. Teaching him to swallow by watching, feeling and imitating the raising and lowering of the larynx during swallowing. He was soon able to do this and was very anxious to resume oral feeding. Within a week he could manage porridge and soup and the nasal tube was removed.

2. Developing the flexibility of his lips and thereby assisting their adaptation as prime articulators for all consonant sound.

3. Teaching him accoustically adequate compensatory articulation for all consonants previously made with the tongue. He achieved spontaneously correct f, v, n, t and d sounds. He acquired excellent s and z sounds, but had more difficulty in incorporating these into spontaneous speech. He produced an adequate l and untrilled r. All these consonants were produced with the lips.

   His spontaneous compensation of the glottal stop fork and fricative g added to the glottal irritations caused by his difficulty in directing fluid and food into his oesophagus. A rasping hoarseness was resulting. It was essential to reduce laryngeal irritation, but pharyngeal substitutes were not possible being a total Glossectomy. He was encouraged to compensate labially. The sound

he achieved accoustically approximated a t rather than k. This, however, reduced vocal abuse and his vocal tone improved.

4. Improving vocal tone and resonance. All vowels and diphthongs were readily distinguishable but resonance remained markedly distorted.

Treatment was discontinued after about six weeks the patient having returned to his home. He regarded his speech as adequate saying "As hulle vir my mooi luister kan hulle vir my verstaan" (if they listen to me carefully they can understand me).

Partial Glossectomy.

Vlinical experience with 3 cases of partial glossectomy - one involving half the anterior third, one the whole anterior third and one the whole anterior half of the tongue - has shown how readily and with very little help such patients can adopt articulatory positions to produce normal speech.

Total Glossectomy and Mandibulectomy.

I have had the opportunity to observe and assist one such patient during several stages of his rehabilitation, which is not yet complete.

This patient is an Afrikaans speaking illiterate Coloured male in his fifties. He underwent the total removal of his tongue and mandible and associated soft tissue with the exception of the lower lip which was disected out along its lower border and attached temporarily to the hyoid bone. A pedicle was raised from his abdomen and used to reconstruct the lower half of face and the lower lip was returned to the appropriate position.

The only mobile articulator for consonant sounds this patient has is his upper lip. This has become very mobile. He achieves adequate p, b, m, f, v, t, d, n sounds and a very creditable s sound, r and l are distorted, k and fricative g are glottal. With the help of gesture and personality he makes himself understood.

Summary.

Experience with this limited number of patients seems to indicate that we can expect the normal speaker, who has to undergo removal of part or the whole of his tongue, to re-establish normal or adequate oral communication fairly rapidly post-operatively. This readjustment may be largely spontaneous requiring help primarily in finding compensatory articulation for sibilants and velar plosives and fricatives.

Opsomming.

Ondervinding met hierdie beperkte aantal pasiente dui blykbaar aan dat ons die herbevestiging van normale of bev édigende mondelinge kommunikasie redelik spoedig kan verwag van 'n normale spreker wat die gedeeltelike of algehale verwydering van sy tong operatief moes ondergaan.

Hiefdie heraanpassing mag grootliks spontaan wees, maar hulp en leiding is nodig in verband met kompensatoriese artikulasiebewegings vir sisklanke, velare plosiewe en frikatiewe klanke.