

## THERAPEUTIC STUDY

### *Speech therapy for the laryngectomy patient*

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Speech therapy

THE OBJECT OF THIS INQUIRY was to discover the outcome of laryngectomy by analysing the geographical distribution, nature, and anatomical site of the primary neoplasia, the type of operation, age, sex and occupation, and to relate this to the availability of speech therapy and the eventual functional prognosis.

#### Method

Questionnaires were compiled to obtain information about laryngectomized patients from their general practitioners. Through the *Journal of the Royal College of General Practitioners*, interested doctors were invited to send for a questionnaire which was divided into two main sections:

*Part I* To collect information concerning the geographical distribution, age, sex and occupation of each patient plus aetiology, diagnosis, date and place of operation and this was completed by the practitioner from his own records.

*Part II* was completed by the practitioner with the help of the patient and was related to the speech and general rehabilitation; and was an attempt to find out whether or not speech therapy was available and to what extent the patient's return to gainful employment was affected by his altered speech capabilities.

#### Results

Eighteen completed *pro formas* were returned to the Royal College of General Practitioners Epidemic Observation Unit for analysis. All the patients had carcinoma of the larynx, 14 were intrinsic, three extrinsic, and in two women the lesion was postericoid. Six were women and 12 men. Their average age was 67 with a range from 50–80. They fell into the following social classes: Class I, 2; Class II, 1; Class III, 2; Class IV, 6; Class V, 1; housewives were not classified.

No conclusion could be drawn to the relationship between the site of the carcinoma and the quality of the acquired pseudo-voice.

The type of operation was not specified except for one pharyngo-laryngo-oesophagotomy. The average age at operation was 58 years within a range of 28–76. Eight patients were operated upon in London and the other ten were carried out throughout the country. It was noted that only one was resident in London even though the others came from such large conurbations as Birmingham.

#### Survival

One patient has since died of coronary thrombosis another is dying of secondary carcinoma.

Up to date the survival rate is as follows:

Age group in years	..	..	1-5	5-10	10-15	15-20	7-10
Number surviving	..	..	7	3	4	2	2

All patients except one received speech therapy.

#### *Part II—Vocal rehabilitation*

This was completed for all except two patients; one patient had died and the other was in

hospital awaiting therapy after convalescence.

All sixteen patients except the pharyngo-laryngo-oesophagotomy were seen at some stage by a therapist. This section was subdivided into the following:

*Pre-operative consultation.* Eight patients were seen prior to the operation. Eight patients were introduced to another laryngectomee.

It is not always possible to introduce patients to a suitable laryngectomee although this may encourage (or dishearten) the patient more than the therapist can.

*Postoperative consultation.* All 16 patients received postoperative therapy.

**Treatment**

*Immediate postoperative*

On average therapy was commenced 31 days after the operation. This varied between three days and one year (the figure of one year is excluded in the average, as this raised the interval to 53 days). The duration of treatment lasted four-and-a-half weeks (ranging from one week to ten weeks) and made up of eight sessions (range 2–28 sessions).

Factors influencing the initiation of speech therapy included the physical and psychological condition of the patient and the availability of a therapist. Patients may have been seen earlier by a therapist on a 'social' visit and have not considered this as part of the therapeutic programme. Seven patients received no immediate therapy.

*Long-term and follow-up*

The average length of treatment was 64 weeks, ranging from two weeks to 710 weeks, most laryngectomies attended for follow-up at intervals. The average number of sessions in the long-term therapy was 44 but two patients received no long-term therapy.

*Pseudo-voice production*

Confusion between gastric and oesophageal voice made it impossible to ascertain the methods employed. This was due to the fact that both the patient's and general practitioner's comprehension of the methods had been over estimated and there is also confusion in terminology in speech therapy textbooks. With oesophageal speech it is difficult to establish the standard of speech attained, as general practitioners are normally unfamiliar with alaryngeal speech and the patients may have seen only one or two other patients.

*Patient's opinion of own speech*

5 bad  
6 satisfactory  
5 good

*Observer's opinion*

5 bad  
5 satisfactory  
6 good

The two opinions agreed when both thought the speech was bad or when both thought it was good. Although the patient's speech may have been good initially, as they become older there appeared to be a deterioration as they and their relations or friends became deafer and there was a greater difficulty in communication. Among factors affecting the acquisition of good oesophageal speech must be included the patient's age, insight and motivation, and the type of surgical repair.

*Instruments*

Six therapists used tape recorders as a part of treatment and in one instance the patient sent tapes to the therapist in London. Two patients used electrical aids. The only one specified was the oral vibrator (Tait) which produced satisfactory speech but was rejected for cosmetic reasons.

**Rehabilitation**

Prior to the operation 12 patients were in gainful employment, four were not.

*Postoperative.* Housewives were not affected, ten patients returned to work but two retired prematurely, three returned to alternative work because of their speech capacity, but the extent of them returning to the same job may have been affected and limited by their speech. The interval between operation and the return to work appeared to be on average five months varying between five weeks and nine months. Whether the patient dated the interval from the discharge from hospital or from the operation is ambiguous and this figure is only approximate.

The type of work to which the patient returns to obviously influences the length of this interval. No patient attended a rehabilitation centre.

### Discussion

The response from general practitioners was poor. There are several reasons possible for this. Almost half of the operations were performed in London and contact may have been lost between the patient, hospital and general practitioner. This could also explain the poor follow-up in speech therapy on a long-term basis.

Secondly, this is an area where many general practitioners have little opportunity to gain experience and hence may have little interest. Speech therapy appears as a minor ancillary service of which medical students hear no mention during their training, and communications between the local therapist and the general practitioner are either non-existent or weak. How many doctors are aware of a speech therapist working in their district, let alone her function?

Most laryngectomized patients are quickly absorbed into the community and have little need, with the exception of the usual minor ailments, to contact their family doctor, when their oesophageal speech becomes a secondary feature. It would have been interesting to find out the number of therapists available for those patients returning to the provinces and whether on therapy was given because no therapist was available.

An important point is that less guidance and help from the therapist is given to the patients and relatives when only occasional visits to London can be made, which means that the patient has to cope with his own problems.

It has been suggested that the number of laryngectomies is decreasing, presumably due to earlier diagnosis and radiotherapy but this view would not be supported by the most recent figures. In 1966, 330 laryngectomies were performed and in 1967, 410, a considerable increase.

With better surgical techniques and a higher survival rate more extensive operations are being undertaken and these present a greater problem to the speech therapist. With such patients electrical aids may be necessary but can we expect a patient to accept a dental plate with a wire hanging out of the corner of the mouth or a vibrator sounding like a 'Dalek'? Of course this is better than no voice at all but it is an area open to a great deal of research and development when one third of all laryngectomized patients fail to produce voice.

A patient quoted by Arnold (1963) must surely encourage more investigation and experimentation with laryngectomies:

"I am most grateful to my surgeon for having saved my life, but life without a voice is not worth living".

### Summary

This paper analyses the information on 18 laryngectomized patients. It attempts, by examining the type of patient who had such an operation, the availability of speech therapy and the eventual functional prognosis, to draw up a profile of a laryngectomee.

A need for closer communication between the general practitioner and the speech therapist is discussed and also between the hospital and general practitioner.

The importance of further research is suggested because of the increase in the number of laryngectomies performed and also the greater severity of the operations now undertaken.

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