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Published in:
Acta Oto-Laryngologica

1970

Acta Otolaryng. 263, 119–123, 1970

THE SITUATION OF THE LARYNGECTOMIZED PATIENT

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The patients' psychological and social problems in connection with laryngectomy have been studied by an extensive pre- and postoperative inquiry. Smoking habits seemed to decrease postoperatively, whereas no influence or a slight increase in the consumption of alcohol was registered. Some patients experienced depression, more often as a reaction to the impairment of speech rather than to the diagnosis of cancer. Most of the patients under 65 have learnt to communicate by oesophageal speech and are also working full-time in their original occupations. The importance of careful pre-operative penetration of surgical, mental and socio-medical problems as well as oesophageal speech demonstrations is emphasized. This is best achieved by intensive information given to the patient, his relatives and his employer by a team consisting of the surgeon, the phoniatrist, the logoped and the social worker.

The incidence of laryngeal cancer has increased in Sweden as well as in many other countries during the last decade. The reason is not known. Smoking has been supposed to be an important aetiological factor, and the increasing industrial outlet of dusts and fumes has also been suspected. In the opinion of most authors, stage I of laryngeal cancer can be successfully treated by radiotherapy. Stages II and III also seem to have a fairly good prognosis, provided prompt and adequate surgery is performed. In spite of this, however, it is clear that great social problems will appear for the individual patient after the operation. The loss of normal voice constitutes indeed a great handicap, but not to such an extent that necessary and well planned surgical intervention needs to be postponed in favour of radiotherapy alone. The aim of this report is to present a pilot study regarding medical, social and psychological problems in connexion with laryngectomy in order to obtain information of the patients' reactions and the degree of handicap after this type of operation.

METHOD AND MATERIAL

The patients were checked from three points of view from the moment of diagnosis through the pre- and postoperative stages and also during a rehabilitation period of varying length. The follow-up programme included repeated personal interviews, which were completed by an extensive questionnaire containing 100 questions. This had been prepared in collaboration with sociologists and psychologists.

This preliminary report includes only 27 cases. A more extensive survey including a brief review of the relevant literature is in preparation (Kitzing & Toremalm, 1970). Only problems regarding speech rehabilitation, occupational rehabilitation, smoking habits, alcohol consumption and some psychological reactions after the operation will therefore be summarized here.

The number of patients, who were all men, and their ages at operation are shown in Fig. 1. Seventeen patients were under 62 years, while 10 were over 65. Eight patients had from the beginning been judged appropriate for radiotherapy in spite of a growth which was classified as at least stage II. They were, however, later subjected to operation owing to recurrence of their cancer or insufficiency of pre-

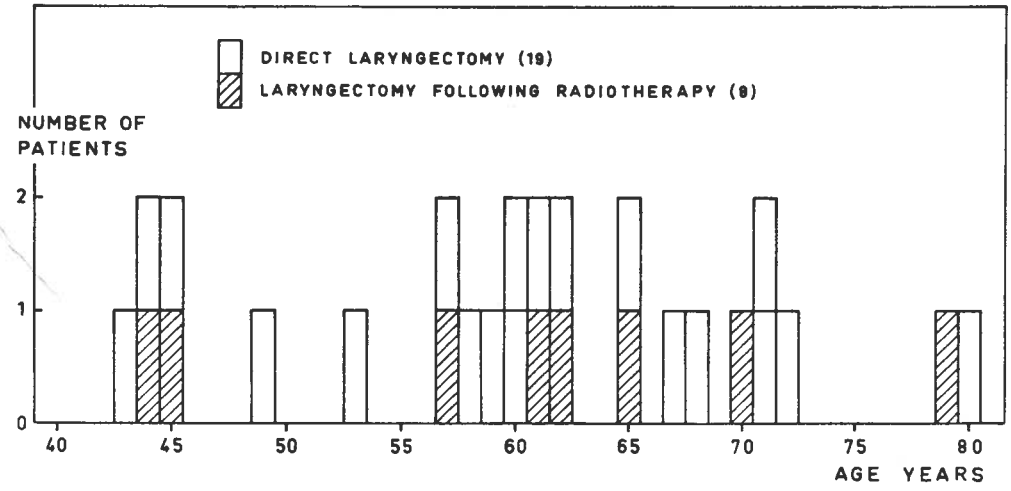

Fig. 1. Distribution of the patients according to age and pre-operative treatment.

liminary treatment. Neck dissection was indicated only in three cases without obvious influence on their ability to practise oesophageal speech.

RESULTS AND DISCUSSION

It is always difficult to make an objective estimation of the effectiveness of oesophageal speech ability. We have, in our study, practised a type of double control. The patients subjectively estimated their own capacity to speak comfortably and to make themselves understood in different social situations. This control was supplemented by repeated tape recordings and by the logoped's opinion. In this way a satisfactory evaluation was possible. The results are shown in Fig. 2. It is clear that the age of the patient is of great importance in speech rehabilitation. Among eight patients over 67, only one attained good verbal ability. Below 65, however, speech rehabilitation was nearly 100 per cent. Only two men in this group failed to learn to speak. One of them had been treated for schizophrenia for many years, and the second was an uncommunicative independent workman. Three patients, af-

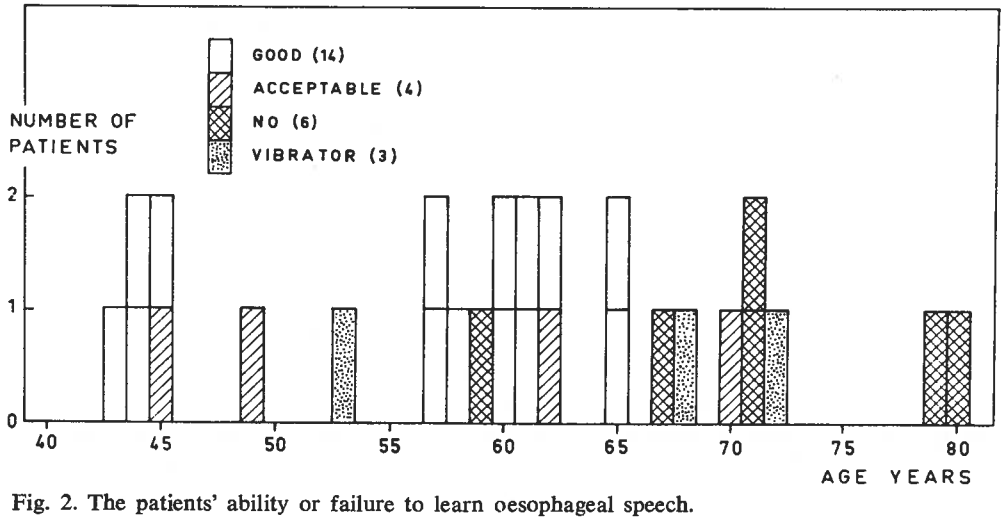

Fig. 2. The patients' ability or failure to learn oesophageal speech.

ter long but fruitless training, had to be equipped with an "artificial larynx" (vibrator). Thus, a total of 18 patients became good oesophageal speakers (67 per cent). This agrees with previous reports on series of unselected patients from Europe and the U.S.A. (Horn, 1962; Seeman, 1958).

Many questions were designed in order to observe psychological reactions to the operation. The investigation confirms an earlier supposition, viz. that patients with cancer of the larynx very often are "compulsive smokers and heavy drinkers" (Nahum & Golden, 1963). It is, however, not possible to decide if these statements have had an aetiological influence because these questions are of a very complex nature. Another aetiological factor, which does not seem to be given sufficient attention in the literature, is the effect of chemical air pollution. As many as 19 of our patients had been exposed to air contamination during long periods, either in their present or a previous occupation. Above all, metal dusts and chemical fumes were reported.

The patients' smoking habits are illustrated in Fig. 3. Before the operation, there were two non-smokers and 19 heavy smokers with a consumption exceeding 20 cigarettes a day. The patients had, on the average, started to smoke when they were between 14 and 17 years of age. Postoperatively, most patients stopped smoking and none smoked heavily. Five patients are still moderate smokers. Instead of smoking through the tracheal stoma, they have learnt to practise a special mouth-puffing technique which may not be dangerous with regard to a concomitant bronchial cancer.

Contrary to smoking habits, alcohol consumption does not seem to be influenced statistically by the operation (Fig. 4), but it must be borne in mind that subjective information as to drinking habits must always be looked upon with scepticism. Our findings based on frequent postoperative consultations and our good contact with the patients' relatives suggest that a moderate increase in alcohol consumption occurs postoperatively. This is also in accordance with previous French and American reports (Vallery & Cornut, 1962; Webb & Irving, 1964). The increased alcohol consumption may be a symptom of some depressive neurosis, which can prevent effective speech training and thus delay the patient's rehabilitation.

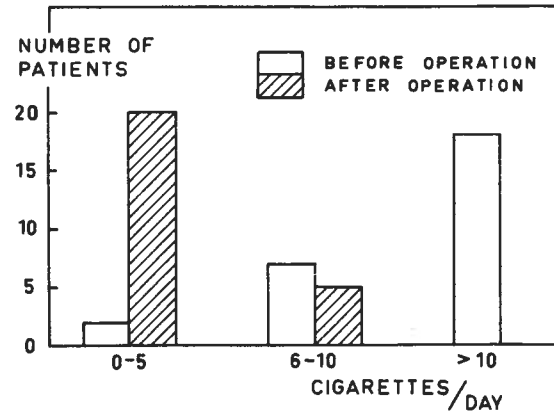

Fig. 3. Pre- and postoperative smoking habits.

Only 10 of our 27 patients had gone through the operation without any signs of depressive reactions. Among those who suffered from such symptoms, only five could be classed as severe cases, but none of them had contemplated suicide. Depression was most pronounced in the period between diagnosis and operation. It seems therefore valuable to keep the patients with laryngeal cancer under close observation and give them adequate and frequent information during this period. We have prac-

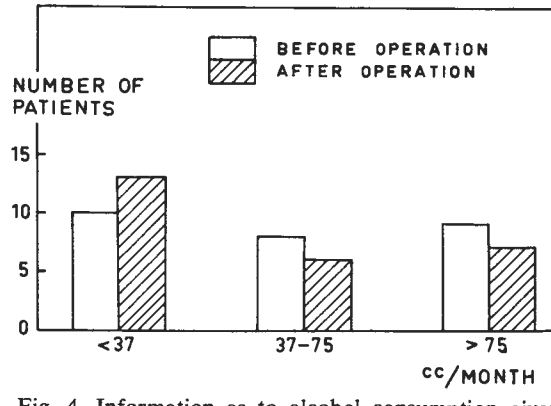

Fig. 4. Information as to alcohol consumption given by the patients.

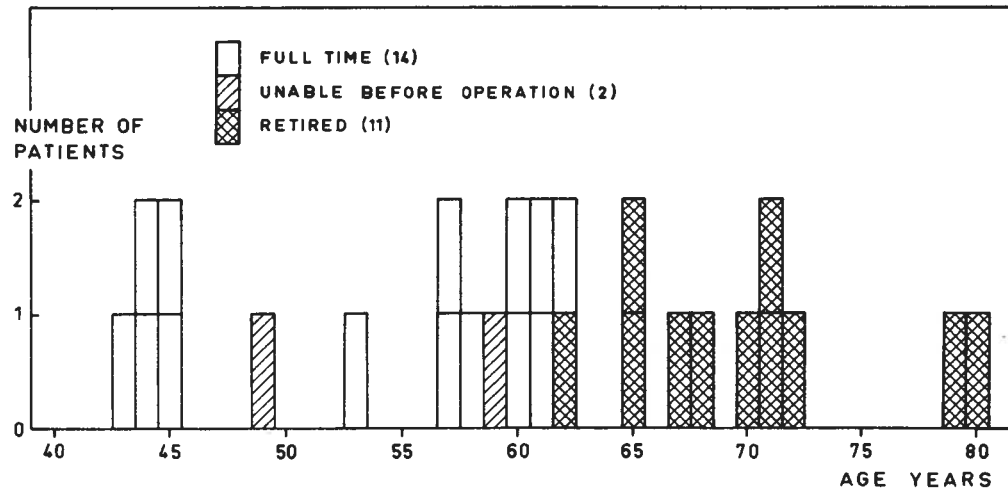

Fig. 5. Age distribution, working capacity and occupational rehabilitation.

tised group information given by the surgeon, the phoniatrist, the logoped, the social worker and, last but not least, confronted the patient with a well-rehabilitated and good oesophageal speaker.

Many authors report a period of depression in direct connexion with the operation due to the enforced postoperative aphonia. Such reactions were seen in only two of our patients. We believe that this shows that the pre-operative information was not only sufficient, but also exerted a positive influence on the course of healing. The greatest psychological problem was obviously the loss of the normal voice. This was stated by 13 patients before the operation, and none of them had changed opinion 6 months later. The fear of cancer *per se* was initially indicated as the most serious problem by 12 patients. This figure was, however, reduced to nine immediately after the operation and to only seven 6 months later. Thus, the fear of cancer decreases as a result of a post-operative course without complications.

Only five patients were worried about their occupational situation and the family economy after the operation. The best help to overcome these problems was provided by close relatives in 15 patients and by the above-mentioned team of informers in 13. Seventeen patients reported postoperatively the same good mental condition as they had had before the operation, whereas seven had become more restless and nervous.

It is a well-known fact that some deaf persons often have a tendency to be aggressive due to difficulties in establishing personal contacts. We found the same reaction in three cases after laryngectomy followed by insufficient speech rehabilitation, and presume an analogous explanation for this. Fortunately enough, 22 patients expressed the opinion that relatives, friends, and also strangers, are appreciative of their strange handicap. The same patients also stated that the thorough information, the listening to a good oesophageal voice and our preliminary contact with the respective employers had been the most positive steps to prevent depressive reactions.

Finally, some information as to occupational rehabilitation will be of interest. Most patients under 65 years returned to their former work, and only a few changed occupations (Fig. 5). The only exceptions were again the schizophrenic mental patient and a chronic alcoholic addict.

Although the present case material is small, it has given us a good insight into the patients' reaction patterns. The extensive questionnaire and the repeated interviews may be considered overambitious as a routine, but we are of the

opinion that psychological considerations are as important as medical and surgical ones, and that they are often overlooked or underestimated for the sake of purely technical problems.

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