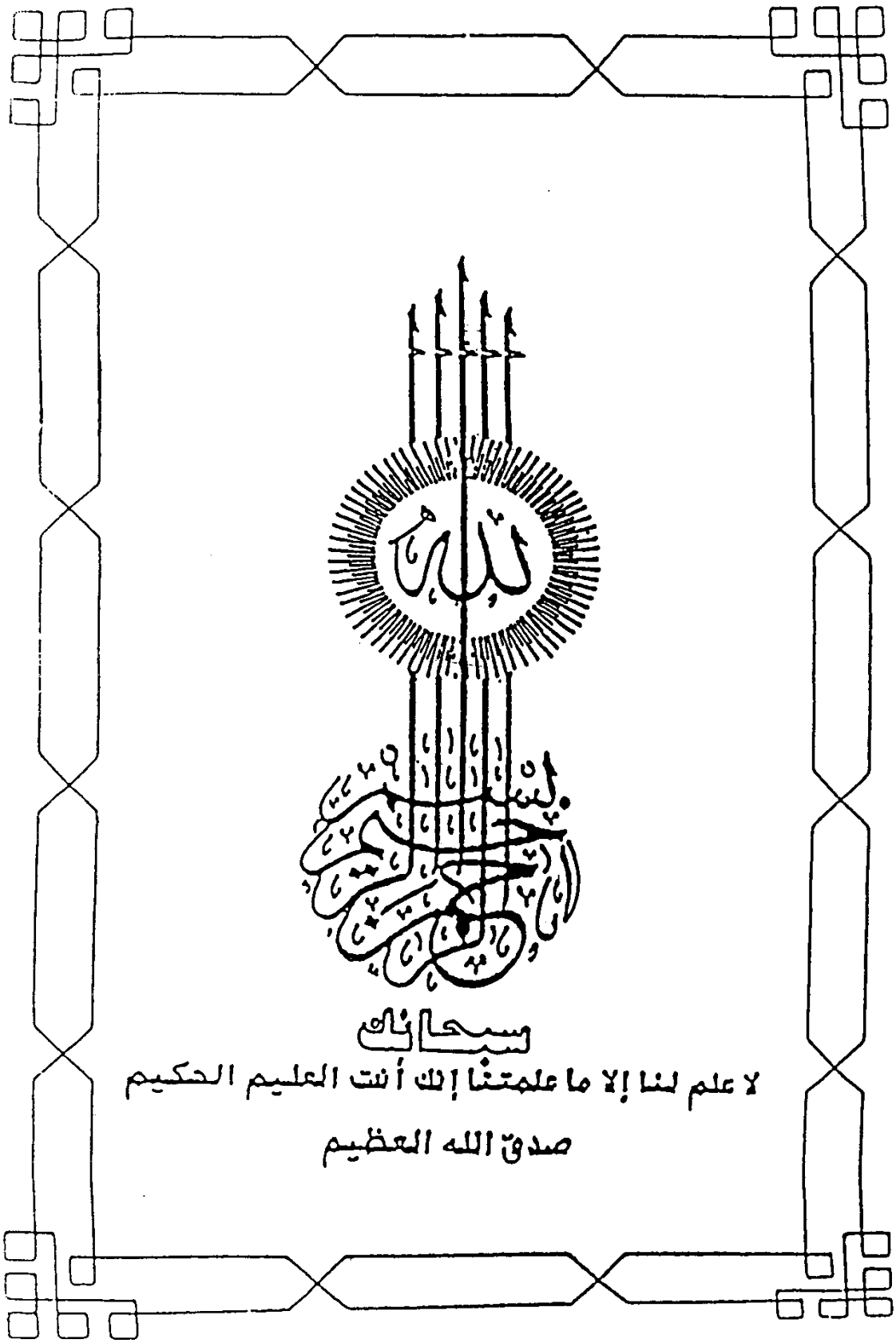

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صدق الله العظيم

REHABILITATION OF DIFFERENT TYPES OF LARYNGECTOMY

THESIS SUBMITTED FOR THE FULFILMENT OF

MASTER DEGREE IN

PHONIATRICS

BY

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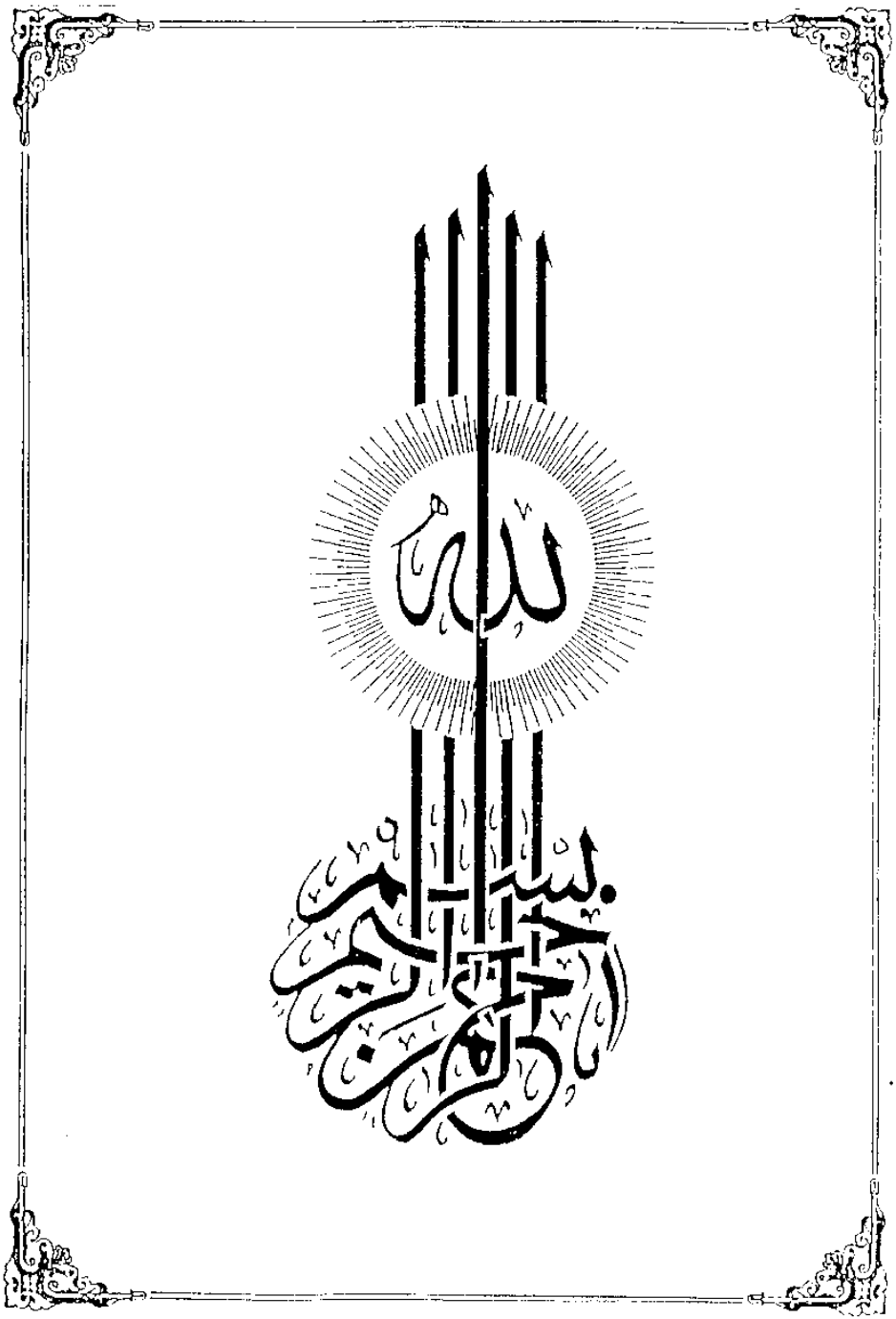

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A. El Saadany

AIM OF THE THESIS

The aim of this thesis is to :

1) To study the effect of laryngectomy, total or partial on the psychological and organic conditions of the patients in order to plan a better rehabilitation programme.

2) To study the different methods for voice rehabilitation and training in order to be able to make a better choice of the rehabilitation method for the different patients.

INTRODUCTION

In the early days when cancer of the larynx meant death, and during the later periods of low survival rate, surgeons were largely concerned with post operative recovery. They had only a "passive or laisser fair" attitude toward rehabilitation. In the present period in which large numbers of victims of cancer of the larynx survive, there is a great need for guiding the patients to solve their communication, physical, emotional, social and economic problems.

Rehabilitation of a laryngectomized persons begins during the interview in which the surgeon informs the patient that he has cancer, and that the larynx must be removed. (Damste 1985)

The surgeon must be prepared for marked reactions of the patient to his fearful news : cancer, fear of death, loss of speech, loss of job and of friends. Reports in the medical literature indicate that some patients are so distrubed that they attempt or think of suicide (Gardner, 1966) .

When the patient is informed by the surgeon that he has cancer of the larynx, a dark train of thoughts about his fate and that of his family rushes through his mind. The patient is warried and confused. It is very important for the phoniatrician to take time patiently to explain in a sympathetic and understanding manner that many of the patient's fears are not justified. Removing the cancer may save and prolong his life. The surgeon should assure the patient that he can begin speech

lessons as soon as his wounds are well healed. The surgeon can also prepared the patient for certain physical changes that he will expreience, including the fact that he will breathe through an opening in his throat instead of through his nose.

The patient will lose the sense of taste and smell at first. However, he may regain them to some extent (Deidrich and Young-Strom, 1966). He will have difficulty in swallowing which will be quickly overcome as it becomes once again a reflex habit. The patient likewise should return to most of the social and sporting activities he enjoyed before, except that he will not be able to swim (Martin,1963).

It is so urgent to warn the patient that he will has marked notions of regret, frustation and anger. It is also the responsibility of the phoniatrician to orient the patient's family. He will be of great help to all concrened if he discusses how the patient can make it easier for his family. Assurance that the larynagectomee will be able to speak after surgery has been one of the most important features of preoperative and postoperative programs of orientation.

PSYCHOLOGICAL REHABILITATION

PROBLEMS THAT FACE THE LARYNGECTOMEES

1- THE MUCOUS

One of the most important problems is the excess mucous production in the trachea. This is greatest in the immediate postoperative period. The causes are due to the sudden change from nasal to "neck" breathing which leads to excessive mucous production in the trachea, also the presence of the tracheal tube itself, stimulates mucous production. At the same time the presence of an active cough reflex protects the patient from serios lung complications.

The family is told that the excess mucous production will gradually decrease as the trachea becomes accustomed to the raw atmosphere.

2- INCRUSTATION

Incrustation around the trachea near the stoma is somewhat similar to mucous that becomes dried within the nostrils. As it is a product of dryness, control of the moisture content of the environment is of first importance in preventing its occurance.

For removing the crusts from the stoma, saline solution is commonly used, other materials such as petroleum jelly or even peroxide may also be used.

3- COUGHING

During the first year after laryngectomy, coughing is a problem. With careful hygeine under the surgeon's supervision and through his instructions, the conghing should decrease rapidly in succeeding months. Removal of the mucous is of great help in decreasing the conghing.

4- PROTECTING THE STOMA FROM WATER DURING SHOWERS

Several procedures are mentioned to take care of the stoma during showers. A most simple methods is to fold a washcloth into a square and hold it over the stoma while cleaning the body with the other hand. A shower shield is also available. Another suggestion is to have the shower head placed lower so that the water strikes the lowest part of the body.

5- SPORTS

As mentioned before in page 2 , the laryngectomee likewise should return to most of the sporting activities he enjoyed before, except that he will not able to swim (Martin, 1963).

6- LIFITING

It has been assumed that the open stoma prevents the patient from performing heavy manual work because of the lack of the closing valve of the glottis which immobilizes the chest and gives greater strength to the muscles of the shoulder girdle. This assumption has

been disputed by Coyne (1968), who examined laryngectomees, using measurements of intra-abdominal pressure and electromyographic tracings. As a result of these studies the lifiting power of the laryngectomee is not impaired.

Analysis of a IO years material of laryngectomy was done by Broman, Kotby and Arlin (1977). The results showed certain tendencies in the type and degree of the patients's handicap that may help in a more realistic understanding of the post-laryngectomy life.

The following results will show the difficulties that face the patients before and after the laryngectomy :

1. 56% of the cases were shocked to hear that they have had carncer, 32% were severly depressed after the operation, of these 69% had suicidal thoughts.

2. 46% of the cases had reduced social activities.

3. 24% of the cases had reduced contact with friends.

4. 62% of the cases used esophageal voice.

5. 38% of the cases used vibrator voice. Average age of the esophageal voice group is (54,6 years), which is significantly younger than the average age for the vibrator voice group (62,2 years).

6. 5% of the vibrator voice group had an intact sense of smell compared to 45% of the esophageal voice. This may be due to the fact that in esophageal voice production there is an active air movement in the mouth cavity and probably also in the nasal cavity. Such air movement helps to carry the odopherous particles to the olfactory nasal mucosa.

7. Incidence of fistula in the postirradiated group is (20%) compared to the non-irradiated group (7%).

SPECIAL PROBLEMS OF WOMEN LARYNGECTOMEES

Gardner, 1966, studied the problems of women laryngectomees, there are certain differences were obtained between men and women. First , women react with more despondency than do men when threatened with removal of the larynx. Some of women were married at the time of surgery, some of them were supported by the presence of their husbands when cancer was reported. Few husbands asked for a divorce, other said that their business relations would be jeopardized. The total picture however, favors the married women in regarded to support, sympathy, and the ability to face the operation. Sixty percent of the women were shocked at their appearances, and several fainted.

Upon returning home, some of the wives stated their husbands avoided them, pitied them, or babied them too much. Others, wrote about the loyalty of their husband and their displays of confidence.

Specific to speech, more married women accepted esophageal speech than did unmarried women. Effective speakers emphasized that working women should return to employment as soon as possible and speech would improve thereby. More than half of the women returned back to work after surgery. Successful job holders advised others to cover the stoma with attractive scarf, bib or lacy material.

PSYCHOLOGICAL REHABILITATION OF TOTAL LARYNGECTOMY

When the patient is informed by the surgeon that he has cancer of the larynx, a dark train of changeable thoughts about his fate and that of his family rush through his mind. Hence, serious study of the topic of speech after laryngectomy must include an examination of such issues as patient's reaction to the diagnosis of laryngeal cancer and the subsequent surgery, presurgical and postsurgical anxieties, fears, trauma and reations to altered physical appearance, body state, related medical and social problems, and the extent to which psychological factors may be related to successful acquistion of speech after laryngectomy.

Pre-operative orientation of the patient is of great importance. Laryngectomy is a mutilating operation which deprives a person of one of his most prescious possessions. As Dugnay (1966) has pointed out, many patients have quite unrealistic ideas about speech after laryngectomy. Every effort should be made to prepare the patient for the situation that awaits him and to reassure him that he will be able to speak again.

The surgeon and phoniatrician can prepare the patient for certain physical changes that he will experience, including the fact that he will breathe through an opening in his throat instead of through his nose. The patient must know that he will lose the senses of taste and smell at first (Broman, Kotby, Arlin, 1977). However, he may regain them to some extent. The patient will have difficulty in swalloowing which will be quickly overcomed as it becomes once again a reflex habit. The patient likewise should return to most of the social and sporting activities he enjoyed before, except that he will not be able to swim (Martin, 1963).