CANCER OF PHARYNX TREATED BY SURGERY

BY

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An assessment of the results obtained in the treatment of patients with cancer by various methods should be made at intervals to determine the benefit the patients derive and to evolve the most satisfactory techniques with our present knowledge of the disease. It is an impossible task, with the available treatments, to save all, but many are enabled to live on for many years with freedom from the disease. Some are treated so that they can live with the disease in comfort for variable periods, and this amelioration is an important object of our work. We must endeavour not to leave a patient any worse off after treatment than he was before it was given. When the results of surgical treatment for cancer are assessed an answer should be sought to these questions: Are distressing symptoms relieved? Are complications caused by the disease, which may be mortal, avoided? What is the length and quality of the patient's life after the operation?

The object of this paper is to present the late results of the surgical treatment of 24 patients with carcinoma of the pharynx who were operated on during 1948 to 1952 and followed up in October, 1956. The interval that had elapsed after operation is adequate for an assessment of results.

The operative techniques used in the treatment of these patients and the earlier results obtained were described in previous papers (Raven, 1952, 1953, 1954).

Carcinoma of Oropharynx

A man aged 62 had an ulcerating carcinoma involving the tonsils, faucial pillars, soft palate, and the base of the left side of the tongue. The left upper deep cervical lymph nodes were enlarged and hard. Operation: partial palato-glosso-pharyngectomy and radical neck lymphatic dissection were performed on July 22, 1949. Histological examination showed a squamous-cell carcinoma of the oropharynx with metastases in cervical lymph nodes. Follow-up,

October, 1956: patient has had no recurrence; swallows well; and works regularly (Fig. 1). Survival period, seven years three months.

Carcinoma of Hypopharynx

Case 1.—Woman aged 67 with a carcinoma of the hypopharynx for which a gastrostomy had been performed elsewhere. Operation: laryngo-oesophago-pharyngectomy in two stages. First stage performed on March 28, 1949;

second stage on July 5, 1949. Description of carcinoma: the carcinoma fills the hypopharynx from the cervical oesophagus to the arytenoid cartilages. Histology: a well differentiated squamous-cell carcinoma which had infiltrated widely, including the capsule of the thyroid gland; no lymph-node metastases. Follow-up, October, 1956: patient has had no recurrence and swallows satisfactorily. Survival period, seven years, seven months.

Case 2.—A man aged 67 with a carcinoma of the hypopharynx which had been treated with irradiation elsewhere. Operation: laryngo-pharyngectomy in one stage, performed on October 17, 1950. On December 3, 1951, excision of right cervical lymph nodes. Description of carcinoma: a deep malignant ulcer in the right pyriform fossa. Histology: a squamous-cell carcinoma; metastases in cervical lymph node. In June, 1954, he developed a second primary carcinoma in the posterior third of the tongue which was treated by radiotherapy and diathermy. Follow-up: died May 5, 1956, from carcinoma of the tongue. Survival period, five years seven months.

Case 3.—A man aged 64 with a carcinoma in the hypopharynx which had been treated with irradiation elsewhere. Operation: laryngo-pharyngectomy in multiple stages; acromio-pectoral tubed pedical grafts were used for the reconstruction of the hypopharynx; first stage performed on December 13, 1950, and the final reconstruction operation on September 10, 1952. Description of carcinoma: in the left pyriform fossa is a malignant ulcer 3.8 by 1.3 cm. whose medial margin reaches the aryepiglottic fold; a nodule of growth 0.7 by 0.4 by 0.2 cm. projects on the posterior surface of the epiglottis at the level of the centre of the ulcer. At the posterior margin of this nodule is a small perforation which communicates with the base of the ulcer in the pyriform fossa. There is a tumour 1 cm. diameter invading the posterior margin of the left sternomastoid muscle. Histology: a squamous-cell carcinoma; tumour in neck—active, keratinizing squamous-cell carcinoma infiltrating dense fibrous tissue and fibrosed muscle. Follow-up, October, 1956: patient has had no recurrence and swallows satisfactorily. Survival period, five years ten months.

Case 4.—A woman aged 61 with a carcinoma in the hypopharynx. Operation: laryngo-oesophago-pharyngectomy in two stages. First stage performed on January 31, 1951, second stage on March 7, 1951. Description of carcinoma: in the anterior wall of the hypopharynx is a malignant ulcer extending from the cervical oesophagus to just below the arytenoids; it invades the oesophago-tracheal septum and bulges into the trachea at the level of the first three rings. Histology: a keratinizing squamous-cell carcinoma; no metastases in the regional lymph nodes. Follow-up, October, 1956: patient has had no recurrence and swallows satisfactorily (Fig. 2). Survival period, five years nine months.

Case 5.—A man aged 62 with a carcinoma in the hypopharynx. On August 24, 1949, an emergency tracheotomy was performed elsewhere. In October, 1949, he was given telurium therapy, dose 6,500 r in 46 days. The disease was not controlled. Operation: laryngo-oesophago-pharyngectomy in

FIG. 1.—Photograph of patient alive seven years three months after left partial palato-glosso-pharyngectomy and radical dissection of neck lymph nodes for extensive carcinoma of oropharynx and cervical lymph-node metastases. No recurrence.

FIG. 2.—Photograph of patient (Case 4) alive five years nine months after laryngo-oesophago-pharyngectomy for carcinoma of hypopharynx. No recurrence.

multiple stages; acromio-pectoral tubed pedicle grafts were used for the reconstruction of the hypopharynx. First stage performed on January 24, 1951; the final reconstruction operation on May 21, 1952. The severe degeneration of the skin of the neck with infection and dermatitis which also affected the anterior chest wall before surgical treatment began, necessitated long intervals between the operations. Description of the carcinoma: a malignant ulcer 3.5 by 2.5 cm. involves the right pyriform fossa and passes on to the posterior pharyngeal wall crossing the mid-line; it infiltrates into the larynx, forming a malignant ulcer 1 by 0.5 cm. between the true and false vocal cords. Histology: an anaplastic squamous-cell carcinoma; metastases in the cervical lymph nodes. Follow-up, October, 1956: patient has had no recurrence, swallows satisfactorily, and works regularly. Survival period, five years nine months.

Case 6.—A woman aged 60 with a carcinoma in the hypopharynx. Operation: laryngo-oesophago-pharyngectomy in two stages. First stage performed on June 27, 1952, second stage on September 16, 1952. Description of carcinoma: this extends from the arytenoids downwards for 7.2 cm. and encircles the wall of the hypopharynx. It penetrates the posterior wall of the trachea, involving an area 2.2 by 1.1 cm. Histology: a well-differentiated squamous-cell carcinoma; metastases present in the cervical lymph nodes. Follow-up, October 1956: patient has had no recurrence; swallows satisfactorily. Survival period, four years four months.

Case 7.—A woman aged 64 with a carcinoma in the hypopharynx. Operation: laryngo-oesophago-pharyngectomy in two stages. First stage performed on September 30, 1952; second stage on November 25, 1952. Description of carcinoma: an ulcerating tumour 6 by 5 cm. in the hypopharynx, infiltrating as high as the epiglottis. Histology: an anaplastic squamous-cell carcinoma; no metastases in the regional lymph nodes. Follow-up, October, 1956: patient has had no recurrence; swallows satisfactorily. Survival period, four years one month.

Discussion

Carcinoma of Oropharynx.—A small number of patients have been treated by partial pharyngectomy and its modifications—partial palato-pharyngectomy, partial glosso-pharyngectomy, and partial palato-glosso-pharyngectomy. More time must elapse before the results can be assessed. The case reported above, in which the patient was well and at work seven years three months later, is an encouragement, for he had an extensive oropharyngeal carcinoma with metastases in the cervical lymph nodes—an unsatisfactory lesion for radiotherapy. Surgical treatment is worthy of consideration for a carcinoma in this site, especially when other methods have not controlled it or cannot offer any lasting benefit, as in this case. Patients who are in this situation have everything to lose and their last months are full of suffering. Before an operation is undertaken it must be established that the carcinoma can be removed radically and a satisfactory pharyngeal reconstruction performed.

Carcinoma of the Hypopharynx.—There are 23 patients in the series who were treated surgically three or more years ago. The survival periods are computed from the date of the excisional operation for the carcinoma. Thirteen patients died with cancer from 4 to 33 months later; three died from causes other than cancer; and seven were alive more than four years later, five of them having survived for five years or more; the longest survivor has so far lived seven years seven months.

Clinical Condition of the Patients before Operation.—The results should be judged against this dark background. The patients suffered severely from dyspnoea, stridor, and dysphagia; one had a palliative gastrostomy and another a palliative tracheotomy. Some had been pronounced untreatable and were awaiting death with the help of sedatives. Others had received radiotherapy, but the disease was not controlled and they presented difficult problems to solve concerning degenerative and inflamed tissues in the

neck. The carcinomas affected extensive areas of the hypopharynx and often infiltrated the cervical oesophagus, larynx, trachea, and thyroid gland. In 50% of the patients metastases were present in the cervical lymph nodes. The only encouraging feature was the splendid spirit of the patients, their will to fight for life and desire that something should be done to enable them to achieve it. This attitude by patients makes it hard to decide not to carry out a radical operation for certain reasons.

Clinical Condition of Patients After Operation.—These surgical procedures do not cause mutilation; the patients have a normal neck except for healed incisions and a tracheostomy. The latter must be a pleasure for those who have struggled with stridor and dyspnoea. They can dress normally and swallow everything, and I have not had a case of fibrous stricture formation at the junction of the skin pharynx and cervical oesophagus or elsewhere. They are taught tracheostomy management, and wear a perforated metal shield over it by day and a tube by night. Speech therapy is given; but they do not speak so well as following laryngectomy, although many make themselves understood. Respiratory infections are not more frequent than in others. They are able to work, live almost normal lives, and are amongst the happiest patients I know, for their present comfort is contrasted with the intense suffering of the past. In addition to giving the patients a chance of permanent benefit, radical surgery affords immediate relief from stridor, dyspnoea, and dysphagia.

Some Facts About the Operation.—Every patient is studied as an individual problem, for surgical techniques are available for each condition encountered; these include one-, two-, and multiple-stage operations. The length of stay in hospital varies from three weeks for the one-stage operation to eight or more weeks for the two-stage operation. The plastic reconstruction operations when surgery follows radiotherapy take a long time to complete, for lengthy intervals are necessary between the stages, as seen in the case records cited. When the two-stage operation is done the patient is left with a pharyngostomy and an oesophagostomy after the first operation and is fed through a tube passed through the oesophagostomy into the lower end of the oesophagus. I usually allow an interval of about eight weeks to elapse between the two stages for wound consolidation to occur. Occupational therapy helps the patients to pass the time in hospital between the stages in an interesting way. The risk of these operations is small; there was no operative mortality in this series of patients.

Summary

The late results of the surgical treatment of 24 patients with carcinoma of the pharynx who were operated on during 1948 to 1952 are presented and details are given of eight patients who underwent a radical surgical operation with survival periods of four years one month to seven years seven months. Their clinical condition before and after operation is described and some facts are given regarding the operations. This and subsequent experience in a large series of cases shows there is a place for radical surgery in the treatment of carcinoma of the pharynx, and in some cases when radiotherapy has failed to control the disease, for, in addition to giving patients the chance of permanent benefit, distressing symptoms are relieved at once.

REFERENCES

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In the first nine months of last year there was an increase of 19% in the number of both men and women student-nurses in mental hospitals; in mental deficiency hospitals the increase was 22% for men students and 24% for women. These figures were given last week at Chelmsford by Mr. J. VAUGHAN-MORGAN, Parliamentary Secretary to the Ministry of Health.