SOCIETIES' PROCEEDINGS

THE SCOTTISH OTOLARYNGOLOGICAL SOCIETY

THE EIGHTY-EIGHTH MEETING OF THE SOCIETY WAS HELD ON SATURDAY, MAY 16TH, 1964, IN THE WESTERN INFIRMARY, GLASGOW. THE PRESIDENT, DR. H. D. BROWN KELLY, WAS IN THE CHAIR.

The proceedings opened with two short papers, the first by Mr. I. A. McGregor of the Department of Plastic Surgery, entitled "The Use of the Temporal Flap in Faucial Cancer—A Method of Repair". Mr. McGregor illustrated his remarks with colour slides of a patient who was in attendance at the meeting.

Summary

The excision of a cancer of the faucial region leaves a defect of mucosa and muscle which, particularly if the resection is an extensive one involving perhaps fauces and tonsil, lateral and even posterior wall, base of tongue and soft palate, must inevitably be extremely difficult or impossible to close by direct suture.

To be able to repair the defect by means of a flap would be advantageous from several points of view; by extending the field of operability on to the posterior pharyngeal wall, and by giving greater freedom of excision knowing that the defect can be readily repaired.

The present communication presents such a method.

The Method

(a) *Excision.* The tumour is excised in the usual way, either with or without dissection in continuity of the neck glands depending on the local situation, using Hayes Martin type of incision, though it is not always necessary to split the lower lip. Resection of the ascending ramus of the mandible and a varying segment of horizontal ramus depending on the anterior extent of the tumour allows the oropharynx and tonsillar region to be approached readily.

(b) *Repair.* A temporal-based flap of forehead skin is raised and turned downwards *into an inverted position with its skin surface facing inwards and its raw surface facing outwards.* In this position it is lying along the line of the mandible, separated from it by the thickness of the cheek. By dissecting a tunnel through the cheek in the region of the parotid (a procedure readily done without giving rise to facial palsy or salivary fistula) the flap can be threaded through, brought to and readily sutured to, the defect.

The secondary forehead defect is split-skin grafted and the graft is continued down over the raw outer surface of the flap until it enters the cheek tunnel so that no external raw surface is left.

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Three weeks later the flap is freed in the tunnel and divided, the bridge segment being returned to the temple and insertion of the intra-oral segment being completed.

The method has been found to work well, the flap settling well into the oral cavity and there is the major advantage that in extensive oral cancer where it is so difficult to be sure of cure, the repair is completed without even temporary salivary fistula and the patient is quickly fit to go home in a condition acceptable to his relatives. It also leaves a site fit for subsequent irradiation, even if previous radiotherapy has been given.

Although the repair is being recommended in this paper for faucial cancers, it is extremely versatile and has been successfully used for squamous carcinoma of tongue, floor of mouth, buccal mucosa, and alveolus, where direct closure was difficult because of the extent of the excision.

The second paper was given by Dr. A. Brownlie Smith, in which he described the results of an investigation into the vascularity of the stapedius tendon. The work is being carried out in Dr. Smith's department by Dr. A. G. Maran and Dr. J. Atkins. Dr. Smith recalled that in 1958 he had pointed out the possibility that disruption of the incudo-stapedial joint might produce necrosis of the distal part of the long process of the incus as its nutrition was probably derived from the head of the stapes around the capsule of the joint. The blood supply of the head of the stapes would appear to be derived from vessels in the stapedius tendon, and the present investigation is to try to verify this. Drs. Maran and Atkins have been removing stapedius muscle and stapes from the cadaver within 24 hours of death. The specimens are examined after fixation and staining with hæmatoxylin and eosin. Of 50 tendons examined so far, only one could be said to be extremely vascular. Some showed minute vessels and others none at all. There is great technical difficulty in making sure of the tendon, and that the fine vessels do not disintegrate in the process.

Dr. Smith's opinion remains unaltered, and he feels that in the future these cases which develop necrosis of the incus after stapedectomy are those who have a very vascular stapedius which has been interrupted by the operation. The investigation is still continuing.

Six cases were shown by Dr. J. Fulton Christie. These included a case of chronic suppurative otitis media with acute exacerbation infected with *B. proteus*. After radical mastoidectomy signs of cerebellar abscess appeared, and after investigation and treatment of this, an acoustic neuroma was found and removed by Mr. A. Paterson, neuro-surgeon.

Two cases of nasal tumour, one of angioendothelioma and one of papillary adenocarcinoma, demonstrated the value of lateral rhinotomy followed by radiotherapy where appropriate. Considerable discussion resulted in which Mr. James Dixon, Dr. C. D. Weir, Dr. Cyril Gabriel, and the President took part.

Dr. Christie also showed a case of leiomyoma of the larynx which presented as a pedunculated mass attached to the aryepiglottic fold, causing intermittent dyspnœa. It was removed completely by endoscopic diathermy after emergency tracheotomy.

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Lively discussion followed the showing of a small boy with grossly enlarged tonsils and adenoids which had been treated by frequent short courses of oral antibiotics.

Dr. G. C. McKinlay showed several cases of carcinoma of the larynx. One had a long history of chronic laryngitis which had gone on to frank malignancy, which was treated by radiotherapy. A small localized recurrence was able to be dealt with by laryngo-fissure.

Two cases of supra-glottic carcinoma were shown which had been treated by laryngectomy with unilateral neck dissection *en bloc*. One had histological evidence of tumour in the neck nodes, the other had not. In both cases the nodes were not palpable clinically. This gave rise to a good deal of discussion, one view being that all cancer cases should be given a trial of radiotherapy in the hope of conserving the larynx, and Dr. W. C. Brown suggested there was a place for partial laryngectomy as carried out by Ogura. Considerable support was given, however, to the idea that radical surgery in certain cases, particularly supra-glottic, offers a better chance of cure than radiotherapy, at least for the present, and Dr. McKinlay quoted seven such cases during the past 8 years of which six are alive and well. This contrasts with 25 per cent. survival of surgery following failed radiotherapy in the series 1951-57.

Several other cases were shown, including a case of carcinoma of the trachea treated successfully by radiotherapy 3 years ago, and an extremely rare tumour of the frontal sinus in a young girl thought at first to be a mucocele, but which proved to be a form of psammoma. This case exactly resembles one reported in the course of an article by Scarff and Thomson (1958). Dr. McKinlay also showed a case of carcinoma of the tonsil in a man of 63 who had been treated by Mr. I. A. McGregor by the method discussed in his paper.

Dr. W. G. Wood also showed a series of cases demonstrating the value of stapedectomy even in advanced deafness due to severe otosclerosis. In each case the patient was improved sufficiently to make good use of a hearing aid which had previously been impossible. Dr. Baillie and the President recalled similar cases, and Mr. Dixon congratulated Dr. Hood on his results.

Dr. Hood also showed two cases of unilateral deafness due to otosclerosis with good results following stapedectomy. Dr. Hood commented favourably on the teflon piston operation, but showed one case in a woman of 54, showing only slight improvement in hearing in spite of an apparently mobile piston. He agreed with Mr. McLay that possibly the piston was too short, and did not satisfy the dictum of Dr. Simson Hall that the piston should project 0·25 mm. below the surface of the footplate. His other cases included bilateral congenital deformity of auricles accompanied by conductive deafness the drumheads being normal. It was generally agreed that exploration of the middle ears was fully justified.

There were also two cases of Van der Hoeve syndrome from a large genealogical tree which has been worked out by Professor A. Brownlow Riddell of the Ophthalmic Department. Stapedectomy was successful in the younger patient. The case of unilateral total deafness gave rise to a good deal of discussion, both as to causation and the frequency of its occurrence.

The meeting was concluded with some discussion on the following demonstrations:

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(1) A summary of 24 cases of acoustic neuroma investigated by Dr. J. Fulton Christie and all subsequently operated upon at the Neurosurgical Unit at Killearn. This was the subject of general congratulations both from the point of view of content and presentation, the latter being carried out by the Department of Medical Illustration, University of Glasgow.

(2) Dr. W. G. Hood showed a series of specimens to illustrate the normal ossicular chain and also the various surgical methods of replacing the stapes in otosclerosis.

The President expressed the appreciation of the meeting for the meticulous and painstaking work.

Dr. I. A. Levy of the Department of Anæsthetics had kindly shown his humidifier for use in post-operative tracheotomy and laryngectomy cases. This consists of a thermostatically-controlled tank of warm water over which is driven room air by a simple fan, the air being delivered to the patient through tubing via a T-piece. The water is maintained at about 100° F. and the apparatus delivers 30 litres of air per minute. Dr. McKinlay strongly advocated its use; it had, in his experience, revolutionized the post-operative management of laryngectomy cases. Much less aspiration of secretion is called for and the patient is much more comfortable.

REFERENCE

Scarff, R. W., and Thomson, A. D. (1958) *Brit. J. Surg.*, **45**, 512.

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