PLASTIC AND RECONSTRUCTIVE SURGERY


In this case report, the authors describe a novel method of performing a nerve graft after resection of a parotid tumor. In previous reports of end-to-side neurorrhaphy, nerves are sutured into the sidewall of a healthy, functioning nerve. When multiple branches of the facial nerve must be sacrificed, cable grafts are usually sutured directly to the stump of the facial nerve. It is the authors’ contention that the axonal regeneration is disturbed in such a manner and the efficiency of the recovery is inferior to the end-to-end nerve anastomosis between single nerve stumps. The authors describe a technique in which one end of the grafted sural nerve is sutured with the stump of the facial nerve in an end-to-end manner. Epineural windows are made on the nerve graft, and the distal stumps of the facial nerve branches are sutured with the grafted nerve in an end-to-side manner. In the one patient in whom this was performed, functional recovery of all branches was satisfactory at 2 years.

Electromyographic studies and photographs of the patient are included in the report.

David Larson, MD

RADIOLOGIC SCIENCES


Between 1979 and 1997, 69 patients with head and neck mucosal melanoma were treated with curative intent with surgery alone (30 patients) or combined with postoperative radiotherapy (RT) at the Institut Gustave-Roussy. Primary sites were sinonasal in 46 patients (67%), oral cavity in 19 patients (28%), and hypopharyngolaryngeal in four patients (6%). Forty-seven patients (68%) had T1–T2 tumors, and 22 patients (32%) had T3–T4 tumors. Sixteen patients (23%) presented with clinically positive neck nodes; 17 patients were subsequently found to have pathologic evidence of cervical lymph node metastases. Patients with locally advanced tumors were more likely to receive postoperative RT \((p = .02)\). The median follow-up was 3.8 years (range, 8–384 months).

Thirty-seven patients (54%) experienced a local recurrence. The likelihood of local recurrence was significantly influenced by T classification \((p = .01)\); age, sex, primary site, and extent of surgical excision did not significantly impact this end point. Multivariate analysis showed that the addition of postoperative RT significantly reduced the risk of local failure \((p = .05)\). Local control was 26% after surgery alone and 62% after surgery and RT, despite that patients with locally advanced tumors were more likely to receive adjuvant RT.

Sixteen patients (23%) experienced recurrence in the regional nodes; five of 16 had no evidence of a local recurrence. Forty-seven patients (68%) developed distant metastasis, including 16 of 17 patients with pathologically involved lymph nodes. Advanced T classification \((p = .0005)\) and pathologically positive nodes \((p = .0008)\) were significantly associated with a higher risk of hematogenous dissemination. The 2- and 5-year survival rates were 47% and 20%, respectively. The likelihood of...
Long-Term Survival after Cisplatin-Based Induction Chemotherapy and Radiotherapy for Nasopharyngeal Carcinoma: A Pooled Data Analysis of Two Phase III Trials. DTT Chua, K Ma, JST Sham, HQ Mai, DTK Choy, MH Hong, TX Lu, HQ Min, J Clin Oncol 2005;23:1118–1124.

Data from 784 patients who participated in two phase III randomized trials comparing radiotherapy (RT) to RT combined with two to three cycles of induction cisplatin, bleomycin, and fluorouracil, or cisplatin and epirubicin were pooled. The median follow-up interval was 67 months for surviving patients. The 5-year outcomes after chemotherapy and RT compared with RT alone were as follows: relapse-free survival, 51% versus 43% (p = .014); cause-specific survival, 64% versus 58% (p = .029); and overall survival, 62% versus 58% (p = .092).

Although induction chemotherapy resulted in significantly improved relapse-free and cause-specific survival, there was no significant improvement in overall survival.

William M. Mendenhall, MD


Oscillopsia, the illusion of movement of the environment in an oscillatory or blurred pattern with motion of the head, is an unusual complication of radiotherapy (RT) for nasopharyngeal carcinoma (NPC). Causes of oscillopsia in patients undergoing such treatment include loss of the vestibulo-ocular reflex (VOR) and nystagmus due to brain metastasis or radiation necrosis. In this study, the authors quantify the incidence and examine the etiology of oscillopsia in patients undergoing RT for NPC by reviewing the records of 300 consecutive patients between January 1991 and December 2000. Radiation dose and otologic examinations were documented; in addition, the dynamic illegible E test (DIE), bithermal air caloric, rotational testing, audiogram and MRI were performed on each patient.

Of 255 patients who underwent a single course of RT with a total dose of 70 to 79 Gy, four (2%) developed oscillopsia. Of 45 patients who underwent RT a second time for recurrence, with a total dose of 130 to 139 Gy, eight (18%) developed oscillopsia. Of the 12 patients with oscillopsia, one had stage I disease; seven, stage II; two, stage III; and two, stage IV at initial presentation (American Joint Committee on Cancer, 2002). Patients with stages III and IV disease were also treated with cisplatin/5-fluorouracil chemotherapy. The correlation of development of oscillopsia with increased radiation dose was found to be statistically significant. The DIE was 100% abnormal in all nine patients who could undergo such testing; all 12 patients had abnormal saccades, cold air caloric, and VOR gain. The authors mention that only four patients had normal otoscopic examination bilaterally; tympanometry was not included. MRI revealed no evidence of intracranial tumor or radiation necrosis of the brain.

The authors therefore conclude that the oscillopsia that develops in patients undergoing RT for NPC is due to the loss of the VOR and that the risk of its development increases with a second course of RT.

Ian S. Storper, MD

PATHOLOGY


This is a retrospective review of 100 patients who underwent thyroidectomy, 85 preceded by fine-needle aspiration (FNA), all by a single surgeon. The author initially used mainly a monolayer technique (MT), in which the aspirate was placed directly into a preservative solution without immediate adequacy check. He later used mainly conventional smears (CS), and a cytopathologist performed adequacy checks.

There was an overall 15% inadequate rate, with 26% of MT and only 3% of CS aspirates inadequate. CS had a higher accuracy than MT (92% vs 79%), a higher sensitivity (100% vs 75%), a higher negative predictive value (100% vs 86%), and a higher positive predictive value (90% vs 69%) than MT.

I would concur with the author that the inadequate (unsatisfactory) rate is lower with CS than MT. I would also concur that an experienced surgeon can achieve an adequacy rate comparable to that of a cytopathologist. Furthermore, I would agree with the author that the most important elements of FNA are to avoid false-negative results and to increase the percentage of
patients who are operated on for malignant nodules.

Many pathologists would not agree with some of this author’s statements. Cellular architecture, colloid, and cytoplasm are not necessarily best seen on air-dried preparations. Most pathologists do not prefer MT for evaluation of thyroid FNAs. CS has better nuclear detail, better preservation of cellular architecture, and better preservation of background colloid than MT. There is a role for MT in evaluating the needle rinse and increasing the adequacy rate of marginal aspirates. For the head and neck surgeon or other physician performing thyroid FNAs, it is optimal to communicate with the pathologist to optimize FNA for patient management.

Mary R. Schwartz, MD