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POSTER

Free ileocolic autograft – the preferable method of reconstruction following advanced hypopharyngeal tumor resection

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Background: Patients with carcinoma of the hypopharynx or cervical esophagus usually undergo total laryngectomy with hypopharyngoesophagectomy. They, consequently, lose the ability to swallow and speak. Free-tissue transfers using microvascular anastomoses have been used progressively to restore swallowing, but some of them to restore speaking also.

Material: The medical records of 12 patients who underwent immediate reconstruction of circumferential hypopharyngeal defect after ablative surgery for the advanced squamous cell carcinoma were reviewed to analyze the results, complication rates, and success of early and late functional results.

Methods: Twelve patients underwent free ileocolic autograft reconstruction with microvascular anastomoses in the neck. Digestive tract was restored by the caecum and ascending colon, while the last ileal loop, protected by the Bauhini valve for food aspiration, was anastomosed to the cervical trachea. Patients were monitored to assess complications and recovery of satisfactory swallowing and speech. The statistical significance of differences in rates for selected complications and parameters were determined by t-Student, Fisher's exact, and Mann-Whitney tests. Cumulative autograft survival rates were calculated by Kaplan-Meier method and analyzed by Wilcoxon's and Cox-Mantel tests.

Results: The most common complication after surgery was autograft necrosis due to vessel thrombosis. It resulted in graft removal in two patients. In other patients we observed no anastomotic fistulas. The patients started an oral food intake on 10–15 postoperative day. The medium length of their hospital stay was 27 days. Two-year survival rate for ileocolic transfers was 66.7%. The power of speech was restored in all patients with free ileocolic flap reconstruction due to Bauhini valve vibration. **Conclusion:** This study revealed that free ileocolic transfer could be considered as a good alternative option for pharyngoesophageal reconstruction, offering an immediate restoration of swallowing and good voice function.

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Socio-economic study of mortality in patients undergoing curative radiation therapy (RT) for squamous cell carcinoma (SCC) of the head and neck

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Purpose: Socioeconomic conditions such as race may be related to cancer treatment outcomes, but the reasons are not well understood. This study analyzes prognostic factors for mortality among patients undergoing curative RT for SCC of the head and neck at a large urban hospital.

Materials/Methods: In 2000–2002, 203 head and neck cancer patients were seen in the department of radiation oncology at the Medical Center of Louisiana at New Orleans. Among 186 charts available for review, 108 patients with SCC were treated with curative intent. Survival was determined from the date of the last radiation treatment. The following variables were analyzed for association with mortality using a Cox proportional-hazards model: dose, time, age, gender, race, financial class, 1997 AJCC stage, larynx primary, post-op RT, pre-RT feeding tube, chemotherapy, completion of prescribed radiation, and residence.

Results: The median follow-up was 22 months (0–57) and median actuarial survival was 27 months. The median primary dose/fractions/time was 70 Gy (2–79)/35 fractions (1–66)/50 days (1–204). The median age was 56 years (30–90), 88% were male, and 59% and 37% were African- and Caucasian-American, respectively. Patients with VA care, free care, Medicaid and Medicare comprised 41%, 30%, 12% and 4%, respectively. The distribution of stages was: Stage I: 11; II: 7; III: 16; IV: 69. Larynx primaries accounted for 40%, post-op RT was delivered in 28%, a pre-RT tube was placed in 41%, chemotherapy was delivered in 54% and radiation was completed in 87%. Patients living in New Orleans accounted for 45%.

Single variables significantly associated with increased mortality were: dose ($p < 0.0001$), post-op RT ($p = 0.03$), RT completion ($p < 0.0001$), and larynx primary ($p = 0.03$); those with decreased mortality were: pre-RT tube ($p = 0.006$) chemotherapy ($p = 0.04$) and stage ($p = 0.007$). In a multivariate model, dose ($p = 0.004$) and post-op treatment ($p = 0.001$) associated with decreased mortality and stage ($p < 0.0001$) and African-American race ($p = 0.05$) associated with increased mortality.

Conclusions: African-American race may be independently associated with increased mortality in patients treated with curative RT for SCC of the head and neck at a large urban hospital. The reasons for this are complex and require further investigation.

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Combined chemo-irradiation for locally advanced nasopharyngeal cancer

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Purpose: This retrospective study tried to evaluate the effectiveness of combined treatment using radiation therapy and cisplatin based chemotherapy in the management of locally advanced nasopharyngeal cancer.

Materials and methods: From March 1988 to August 2002, 104 patients of locally advanced nasopharyngeal cancers (AJCC stage II, III, IV) were treated curative radiation therapy (total 70–82.8 Gy; median 70 Gy) and cisplatin based chemotherapy. Follow-up ranged from 5.5 to 201 months (median 50.8 months). Forty two patients (40.4%) were treated with induction chemotherapy using cisplatin 100 mg/m² for 1 day and 5-fluorouracil 1 g/m² for 5 days followed by radiation therapy. 45 patients (43.3%) were treated with cisplatin concurrent chemoradiation (CCRT) using cisplatin 100 mg/m² on D1, D22, and D43 and 17 patients (16.3%) were treated with induction chemotherapy followed by CCRT.

Results: Seventy three (70.2%) patients achieved clinical complete response and 24 (23.1%) patients showed partial response. Patterns of failure were as follows: locoregional recurrence 22.7% and distant metastasis 17.0%. Among these patients, 6 patients (5.7%) failed locoregionally and distantly. Five years overall survival rate (OS) was 53.5% and 5 years disease-free survival rate (DFS) was 51.5%. AJCC stage and response to chemoradiation were significant prognostic factor for OS and DFS ($p < 0.05$). According to treatment group (induction chemotherapy followed by radiation vs CCRT vs induction chemotherapy followed by CCRT), there were no significant OS and DFS difference. The grade 3–4 mucositis, nausea/vomiting and hematologic toxicity were noted in 43.6%, 12.7% and 12.7% respectively. Major prolongation of radiation therapy duration (>2 weeks) was inevitable in 26.5%. Thirty six patients (58.1%) completed planned 3 courses of cisplatin and 19 patients (30.6%) received 2 courses of cisplatin.

Conclusions: Combined cisplatin based chemoradiation therapy in locally advanced head and neck cancer showed high response rate, reasonable locoregional control, and survival rate. As expected, acute toxicities were increased, but compliance to treatment was acceptable. Our study could not show survival benefit in concurrent chemoradiation compare to induction chemotherapy followed by radiation. But limitation of retrospective study, further accrual and follow-up were required.

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Initial results of a prospective clinical study of cisplatin/paclitaxel-based hyperfractionated chemoradiation (3DCRTHF) in squamous cell head and neck cancer (HNC) stages III-IV

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Background: It is well established that chemoradiotherapy produces better results than radiotherapy alone in some subsets of LAHNC. However, few studies have examined the combination of Cisplatin and Taxanes with 3DCRThf. In this study we have analyzed the tolerance, response and patterns of recurrence of a cohort of Stage III-IV HNC patients prospectively treated with simultaneous Cisplatin/Paclitaxel-based chemotherapy and 3DCRThf.

Materials and methods: The treatment regimen included 3DCRThf (74.4 Gy/1.2Gy.b.i.d./62Rx) with weekly Cisplatin (30 mg/m²) and Paclitaxel (50 mg/m²). The PTV1 included the GTV-T, CTV-T, GTV-N, and elective nodal areas with 1-cm margin and was treated to 40.8 Gy. The PTV-2