related to resistance to chemo- and RT, and the T19007C polymorphism at codon 118 may be associated to reduced ERCC1 mRNA expression and protein levels. We retrospectively studied the prognostic value of the T19007C polymorphism in high- or intermediate-risk HNSCC pts treated with adjuvant CRT.
Patients and Methods: Pts diagnosed with non-metastatic SCC of oral cavity (OC), oropharynx (OP), hypopharynx (HP) or larynx (L), presenting high- or intermediate-risk features (EORTC), submitted to surgery with curative intent and adjuvant CRT were included. CRT consisted of 60−70 Gy (2 Gy/d, 5 times/wk) and CDDP 100 mg/m^2 on days 1, 22 and 43. ERCC1 genotyping was analyzed by PCR-RFLP. Results: 69 pts were included, median age 56 y, 81% male.
Primary sites: OC 41%, OP 12%, HP 16%, L 32%. Stage III 14%, IV 86%, being T3-T4 78%, N2-N3 58%; 27 pts had nodal extracapsular spread (ECS) and 18 pts had positive margins. Overall, high-risk features were present in 40 pts (58%) and intermediate-risk features in 29 pts (42%). During the median follow-up of 47 mo, 18 pts relapsed (11 loco-regional and 7 distant), and 29 deaths were observed (20 disease-related). The median PFS was 36.6 mo, and the median OS was 52.5 mo. Neither positive margins nor ECS were found to be prognostic in terms of OS, but negative margins were associated to a non-significant higher median OS (53.8 vs. 42.0 mo; HR 0.67, 95% CI 0.27−1.51; p = 0.308). 29/46 pts (63%) presented the T19007 polymorphism. This polymorphism was related to a non-significant higher median OS (50.3 vs. 43.2 mo; HR 1.35, 95% CI 0.56−3.34; p = 0.494). Second primary tumors were diagnosed in 10 pts and their incidence was not related to the T19007C polymorphism (p = 0.40, Fisher).
Conclusion: Non-significant higher OS was detected in HNSCC pts presenting the T19007 ERCC1 genotype and treated with adjuvant cisplatin-based chemoradiation. ERCC1 polymorphisms must be further explored in HNSCC pts in order to improve their risk stratification.

8546 POSTER

The prognostic value of p16 status in advanced stage oropharyngeal carcinoma according to treatment regimen

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Background: The overexpresion of p16 in tumors has been proposed as a surrogate marker for clinically relevant human papilloma virus (HPV) infection. There is prospective evidence that HPV positive/p16 positive head and neck squamous cell carcinomas have an improved prognosis when compared to HPV negative tumors. In-vitro studies suggest that chemotherapy and altered fractionation may enhance the tumorocidal effects of radiotherapy in HPV positive tumors. The purpose of this retrospective study is to examine the prognostic effect of p16 status in two separate cohorts of loco-regionally advanced oropharyngeal carcinomas treated with chemoradiotherapy (CTRT) or accelerated fractionation (AF) radiotherapy alone in the province of British Columbia.
Methods: Eligibility criteria were stage 3 or 4, biopsy proven squamous cell carcinoma of the oropharynx, treated with curative intent CTRT or AF. From January 1, 2000 to July 1, 2007, our provincial database yielded 78 eligible cases: 45 in the CTRTcohort and 33 cases in the AF cohort. Formalin- fixed paraffin-embedded tissue biopsies were stained using the commercially available mouse monoclonal antibody p16 (CINtec p16-INKa histology kit, MTM Laboratory AG). The expression of p16 was scored by an independent pathologist blinded to the outcomes of cases.
Results: The CTRTcohort of 45 cases were treated with 70 Gy in 35 fractions with concurrent cisplatin (100 mg/m^2) every 3 weeks. The median age was 57 (30−73) years and median follow up was 42 (5−62) months. At two and three years, disease-free survival (DFS) was 79% (68−90) and 74% (62−86), and overall survival (OS) was 88% (81−94) and 81% (70−91), respectively. The AF cohort of 33 cases were treated with 66 Gy in 33 fractions over 38 days or 33 days. The median age was 58 (36−77) years and median follow up was 39 (4−77) months. At two and three years, DFS was 65% (48−82) and 58% (40−75) and OS was 74% (58−89) and 71% (54−87), respectively. p16 status will be tested in univariate and multivariate analyses to examine the prognostic value for DFS and OS, in each of the cohorts. The results will be presented.
Conclusions: This study will provide the first estimate of HPV prevalence, according to p16 status, in loco-regionally advanced oropharyngeal cancer in British Columbia. The relative prognostic effect of p16 status in each therapeutic regime may be hypothesis generating in determining the ideal treatment approach in HPV positive oropharyngeal cancer.

8547 POSTER

Retrospective study of nasopharyngeal carcinoma managed at a UK tertiary referral centre

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Background: Nasopharyngeal carcinoma is an uncommon cancer in the West. The optimum treatment has evolved over the past 15 years with increasing use of concurrent chemoradiotherapy.
Materials and Methods: Retrospective review of case notes from all patients coded as presenting with nasopharyngeal carcinoma between 1995 and 2005. Of 139 identified patients 126 were treated curatively for nasopharyngeal carcinoma. World Heath Organisation (WHO) tumour grade information was available for 80 patients.
Results: Patients treated with chemoradiotherapy showed a significantly better overall survival than those treated with radiotherapy alone (p = 0.003). Patients with histological grade 3 tumours showed a better overall and recurrence free survival than those with grade 1 or 2 tumours although chemoradiotherapy showed the greatest benefit in patients with grade 1 tumours. At presentation a bimodal age distribution was noted with 12 (9.5%) patients presenting under the age of 30 compared to the majority of patients who presented between the ages of 50 and 70. The most common mode of presentation was with a neck lump (52%) with 49% of patients presenting for treatment later than 3 months after onset of symptoms.
Conclusions: Chemoradiotherapy confers an advantage over radiotherapy alone in the treatment of nasopharyngeal carcinoma in a UK based population. Grade 1 tumours, less likely to be Epstein Barr Virus related, showed the greatest benefit from chemoradiotherapy. Many patients with nasopharyngeal carcinoma present for treatment late with advanced tumours likely to adversely affect outcome.

8548 POSTER

Long-term outcome after endoscopic resection in patients with hypopharyngeal carcinoma invading the subepithelium

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Background: Recent developments in endoscopic diagnosis have enabled gastrointestinal endoscopists to detect hypopharyngeal carcinoma in an early stage, especially in Japan. Patients with such early lesions can be treated with endoscopic resection (ER) with minimal invasiveness. However, strict indication for ER in cases of hypopharyngeal carcinoma is unclear. Carcinoma in situ or slightly invaded carcinoma seems to be an indication for ER; however, there is no evidence supporting this hypothesis. In this study, we evaluated long-term outcome after ER in patients with hypopharyngeal carcinoma invading the upper subepithelial layer.
Patients and Methods: From June 2003 through March 2008, 17 patients with squamous cell carcinoma of the hypopharynx underwent ER at Hokkaido University Hospital. The same techniques as those used for gastrointestinal carcinoma such as endoscopic submucosal dissection were used for patients under general anesthesia in the current study. Nine of the patients had histologically confirmed shallow invasion of the subepithelium (the remaining 8 patients having carcinoma in situ). None of those 9 patients wished to undergo open surgery or adjuvant chemoradiotherapy, and they were observed to assess the outcome. Lesion size ranged from 0.9 to 2.5 cm (mean (SD), 2.0±0.5 cm). Depth of tumor invasion in the subepithelium ranged from 300 to 720 μm (mean (SD), 480±150μm). After treatment, all 9 patients were monitored to detect local or distant recurrence every 3 months during the third year and every 6 months afterward. Follow-up evaluations included gastrointestinal endoscopy, laryngoscopy, CT, and physical examination by an otolaryngologist. Informed consent for all procedures and for participation in observation study was obtained from all subjects.
Results: As of March 2009, none of the 9 patients have died of recurrent hypopharyngeal carcinoma or intercurrent diseases. None of them have had local recurrence or metastasis. No early or late complication due to ER has occurred in the patients. The median follow-up period after treatment in the 9 patients was 43 months (12 months to 66 months). Kaplan-Meier estimates of relapse-free survival rates at 5 years in the 9 patients were 100%.
Conclusion: Although the number of patients in this study was small and further multicenter studies are needed to draw firm conclusions, the results of this study suggest that hypopharyngeal carcinoma with slight invasion to the subepithelium can be successfully treated by ER.