Methods and Materials: Eighty-eight patients with T1N0M0 glottic cancer who had been treated between 1989 and 2008 were reviewed using direct laryngoscopy. Effects of T-stage (T1a or T1b), involvement of anterior commissure, involvement of pars cartilaginea, treatment time, and fraction size on local control were analyzed in all 88 patients; 57 had T1a glottic cancer and 31 had T1b glottic cancer; 17 showed involvement of pars cartilaginea while the other 71 did not. Anterior commissure was involved in 26 patients. Treatment time ranged from 45 to 78 days, and fraction size ranged from 2.0 to 2.5 Gy. The median follow-up period was 50.3 months.
Results: The 5-year actuarial local control rates were 92.8% for all 88 patients with T1 glottic cancer. In univariate analysis, local control rates for patients with involvement of pars cartilaginea were significantly lower than those without involvement (66.7% vs. 100%, p = 0.000013). On the other hand, the local control rates did not differ significantly between patients with T1a and T1b glottic cancer (93.8% vs. 91.1% N.S. P = 0.172). In multivariate analysis, involvement of pars cartilaginea was also the only significant factor affecting local control (p = 0.0049). Median time from the completion of the radiation therapy to the recurrence in patients with involvement of pars cartilaginea was 10 months. The cause-specific survival rate at 10 years was 100% regardless of involvement of pars cartilaginea, because the patients who had the recurrence were saved by salvage operation.
Conclusion: Involvement of pars cartilaginea is a significant factor for radiation control of T1 glottic cancer. Patients with involvement of pars cartilaginea had lower local control and shorter time to recurrence than patients without the involvement.

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Update of a phase II trial of induction chemotherapy with docetaxel/capecitabine (DC) for patients with locally advanced head and neck cancer

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Background: Capecitabine(C) is an oral fluoropyrimidine that is preferentially activated in tumor tissues. Thymidine phosphorylase(TP) is an enzyme that converts capecitabine to 5-FU in tumor cells. The combination of docetaxel and capecitabine has shown synergism in preclinical studies. In addition, docetaxel and 5-FU have shown activity in head and neck cancer. We updated survival data of a phase II trial of DC induction chemotherapy in locally advanced head and neck cancer
Material and Methods: Between June 2001 and December 2003, 34 patients were enrolled. The treatment schedule consisted of D 75 mg/m^2 IV on day 1 and C 850 mg/m^2 PO BID on days 1−14, every 3 weeks. After 3 cycles of chemotherapy, all patients received radiotherapy up to 75 Gy of doses.
Results: Median age was 65 years old (33−77). The subjects included 31 males and 3 females with disease in the nasopharynx (7), oral cavity (4), oropharynx (4), hypopharynx (4), and larynx (15). The staging was III/IV = 12/22, with 28 squamous cell and 6 undifferentiated cell and PS 0/1/2 = 2/25/6. Eight patients did not complete treatment. The dose intensity was 98.2% (D 97.9%, C98.4%). Grade3/4 hematologic toxicities included 5 neutropenia (4.8%) and 2 neutropenic fever (1.9%). Grade 2/3 non-hematologic toxicities included 13 myalgia (12.6%), 25 oral mucositis (24.4%), 3 hand-foot syndrome (2.9%), 4 diarrhea (3.9%), and 4 peripheral neuropathy (3.9%). The overall response rate of induction chemotherapy was 94.1%: 3 CRs (8.8%), 29 PRs (85.3%), 1 SD (3%) and 1 PD (3%). The response rate after radiotherapy was 19CRs(79.2%) and 5 PRs (20.8%). The median duration of follow-up was 37 months (5−82). The median disease-free survival(DFS) and overall survival(OS) were 28 months (12−82) and 41 months (5−82) respectively. The 5-year DFS and OS rate were 29.4% and 38%. The three 2nd primary cancers were occurred (1 lung, 1 esophagus, 1 genitourinary) during follow-up period.
Conclusions: The DC regimen as a induction chemotherapy showed high response rates and tolerable. The results of survival data were also comparable. The DC regimen could be used one of effectinve induction chemotherapy regimen.

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Comparison of clinical features and treatment outcome in elderly head and neck cancer patients with younger patients

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Background: The elderly patients often receive treatment less intensive than the younger patients because of age-related organ dysfuctions, co-morbidities, and poor tolerance to treatment. However, recent data reported that elderly patients are tolerable to chemotherapy and radiotherapy as much as younger patients. So we analyzed elderly head and cancer patients to compare clinical features and treatment outcome with younger patients
Material and Methods: We analyzed the clinical data of 180 head and neck cancer patients who were diagnosed at our center retrospectively, from January 2001 to December 2008. The analysis was conducted to compare clinical features and treatment outcome between elderly patients(EP⩾70 years old) and younger patients (YP <70 years old). Patients with thyroid cancer, lymphoma, sarcoma, skin cancer were excluded for analysis.
Results: The 180 patients were included with 57 elderly patients(31.7%). No sex (male, E: Y = 84.2%: 88.6%, p = 0.413), histology(squamous cell, E: Y = 94.7%: 88.6%, P = 0.615) and amount of smoking(>40 PYS, E: Y = 82.5%; 78.9%) differences were observed. The difference of involving primary site was not also observed except nasopharynx(oral cavity, E: Y = 14%; 13.9%, p = 0.433, oropharynx, E: Y = 8.8%;8.3%, p = 0.45, larynx E: Y = 33.3%: 36%, P = 0.54, sinus, E: Y = 14%: 11.1%, p = 0.67). Involvement of nasopharynx was less common in the elderly(E: Y = 8.8%: 15.6%, p = 0.02). The advanced stage was more common in the elderly (E: Y = 12.3%: 4.1%, p = 0.07) Concurrent chemoradiation were conducted more in the younger(E: Y = 7.2%: 22.5%, p = 0.03) but not induction chemotherapy followed by radiotherapy(E: Y =21.5%: 20.8%, p = 0.29) Best supportive care was performed more common in the elderly(E: Y =12.5%: 1.7%, p = 0.04) The patients who complete radiotherapy were more common in younger patients(E: Y = 89.3%: 98.9%, p = 0.01) and total radiation dose received were also more in the younger(E: Y = 59 Gy: 64.3 Gy, p = 0.01). The median overall survival received curative treatment was longer in the young patients(E: Y = 16.6 months(3−120): 24months(1.0−180), p = 0.03).
Conclusions: The elderly head and neck cancer patients have similar clinical characteristics but treatment pattern, tolerance to radiotherapy and outcome were different than younger patients.

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Re-irradiation with Cetuximab in relapsed squamous cell carcinoma of the head and neck (HNC)

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Background: Patients with relapsed HNC after initial treatment including radiation (RT) may benefit of re-irradiation (R-RT). Most cases however cannot reach an adequate RT dose level. Cetuximab (C-mab) is a potent radiosensitivity restore agent and has shown benefit in combination with RT, with minor changes in RT toxicity. On these basis, the combination of C-mab and R-RT, even if at unadequate dose, could represent a good palliative approach.
Materials and Methods: from December 2003 and June 2006, nine pts with far advanced, relapsed, heavily symptomatic with poor pain control, HNC, underwent to a compassionate program of R-RT (30 Gy, 2 Gy/d, 5d/week, given every other week) combined with carboplatin AUC 6 (day 1−22−43) and weekly C-mab at loading dose 400 mg/m^2 given the week before R-RT, repeated weekly at the meinteinance dose of 250 mg/m^2 (6 cumulative doses of C-mab). All the accrued pts signed a informed consent to the treatment. All of them received prior RT, surgery and 2−3 prior chemotherapy lines.
Results: disease extension was evaluated with CT scan and physical examination. Pain was evaluated using a ten points visive analog scale (VAS). Toxicity was analyzed using the NCI-CTC version 2.0. At the start of treatment, all pts had uncontrolled pain tumor related (VAS ranges between