

of 5-FU for 4 days from day 2. Patients without progression of disease received radiotherapy concurrent with platinum-based chemotherapy within 4 to 7 weeks after completing chemotherapy. Utilizing 6 MV photons, radiotherapy was performed at an exposure of 1.8–2.0 Gy five times per week to a total dose of 66–70 Gy. The primary end points were toxicity and response.

Results: From December 2007 to May 2008, 14 patients with advanced nasopharyngeal cancer were treated with TPF. Forty cycles were administered to 14 patients. One patient lost to follow-up after the first post-treatment blood test. Thirteen patients received concurrent radiochemotherapy after TPF. The median follow-up time was 5.75 months (range: 0.25–12 months). The major acute toxicities to TPF were neutropenia, anemia and mucositis. Grade 3 neutropenia, anemia, and mucositis were 14.3%, 21.4%, and 42.8%, respectively. Grade 4 neutropenia was 28.6%. The overall objective response rate to TPF was 78.6%, with 7.1% CRs and 71.5% PRs. In addition, the definitive radiochemotherapy increased the objective response to 85.7% and increased the CR rate to 42.8%. There were no progression of the disease or treatment-related death in this study.

Conclusion: TPF has an acceptable toxicity profile for patients with advanced epithelial carcinoma of the nasopharynx. Definitive radiochemotherapy enhanced the objective response of this cancer after induction TPF chemotherapy. Longer follow-up are needed to confirm the contribution of neoadjuvant chemotherapy to standard chemoradiotherapy for nasopharyngeal cancer.

8573

POSTER

Effect of different chemotherapy methods on immune and oxidative processes in patients with malignant tumours of maxilla

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Background: To study features of immune changes and oxidative system in treatment of local spread malignant tumours of maxilla.

Materials and Methods: There examined 63 patients with local spread malignant tumours of maxilla, nasal and paranasal sinuses of T₃ and T₄ stages at the department of head and neck tumours of our centre. Patients were divided in 3 groups depending on therapy methods: 1) intraarterial chemotherapy (CT) with local UHF – hyperthermia with the frequency 40 MHz increasing the temperature up to 41–43°C in the tumour and radiotherapy (RT) (22 patients), 2) intraarterial CT and RT (21 patients), 3) systemic CT and RT (20 patients) (scheme: Cisplatin 100 mg; Fluorouracil 3000 mg and Doxorubicin 60 mg). There identified CD markers of T- and B- lymphocytes and their sub-populations phagocyte activity of neutrophils (FAN), content of malondialdehyde (MDA) and activity of antioxidant difference-superoxide dismutase (SOD) and catalase. Numeric material was processed by variation statistics.

Results: There established decrease CD3, CD4 against a background CD8+ cells that indicated of T-cellular immunodeficiency development, disturbance of natural factors of antitumor defense. There noted intensification of POL against a background of inhibition of enzymes AAD. Between MDA level and CD3, CD4, FAN rates were noted moderate negative correlation, CD+8 positive connection. Low activity of SOD and catalase correlated positively with CD3, CD4, FAN levels. Polychemotherapy aggravated immunodeficiency, disbalance in the POL-AAD system and their expressivity depended on CT method. CD3, CD4, FAN and IRI rates decreased in a lesser degree in 1 and 2 groups patients in comparison with 3 group ones. In intraarterial polychemotherapy with UHF-thermia and RT the expressivity of their changes manifested in a lesser degree. This associated with their concentration increase in lesion focus and maximal damage of tumour cells in minimal effect of chemicals on different body organs and systems.

Conclusion: Neoadjuvant therapy in 2 group patients, particularly in 1 group, allows reducing significantly negative response of polychemotherapy and increase direct results than in 3 group.

8574

POSTER

A phase II study of combination chemotherapy with capecitabine and cisplatin in patients with metastatic or recurrent head and neck cancer

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Background: The higher efficacy of capecitabine than 5-fluorouracil (FU) and clinically proven synergistic activity of the cisplatin and 5-FU regimen

support the rationale for a clinical evaluation of the capecitabine and cisplatin (XP) combination. The authors conducted a phase II study in order to assess the efficacy and safety of XP regimen in patients with metastatic or recurrent head and neck cancer.

Materials and Methods: The study design was a prospective, open-label, single center phase II study. 45 patients with histologically confirmed metastatic or recurrent nasopharyngeal cancer (NPC) (9 patients) and squamous cell carcinoma of head and neck (SCCHN) (36 patients) were enrolled. One chemotherapy cycle consisted of capecitabine 1,250 mg/m² orally twice a day on day 1 to 14 and cisplatin 60 mg/m² intravenously on day 1. Each cycle was repeated every 3 weeks. Maximum cycles of treatment were 6 cycles.

Results: Of the 45 patients, 42 patients were evaluable for tumor response. 25 patients achieved complete response (CR) or partial response, and 5 patients had stable disease. The overall response rate and CR rate were 55.6% and 2.2%, respectively. The median progression free survival was 3.8 months (95% confidence interval (CI), 2.1–5.5 months), with the median response duration of 7.8 months. The median overall survival (OS) and 1-year OS rate were 12.6 months (95% CI, 4.8–20.4 months) and 40.0%. Additionally, the overall response rates of SCCHN and NPC were 50.0% and 77.8%, respectively. A total of 175 cycles were administered. Common grade 3 or 4 non-hematologic adverse events were anorexia (6.9%), diarrhea (5.1%), stomatitis (4.0%), fatigue (3.4%), hand-foot syndrome (1.7%). The most common grade 3 or 4 hematologic adverse event was neutropenia (15.4%), followed by leucopenia (8.0%) and anemia (1.1%). There was no treatment-related mortality.

Conclusion: The results showed that the XP regimen is an effective and well-tolerable treatment option in patients with metastatic or recurrent head and neck cancer.

8575

POSTER

Mini intrusive operations at the lymphadenopathy of the antero-upper mediastinum

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Objective: To apply procedure of performance video assisted lymph dissection in the anterior-upper mediastinum at metastases of a cancer of a thyroid gland, as alternative of a sternotomy. To analyze the complications nearest and long-term results.

Materials and Methods: With 2002 it is executed 66 video assisted surgical interventions. Operation is carried out at the confirmed cancer of a thyroid gland and metastasises in lymph nodes of the anterior-upper mediastinum, and also at a lymphadenopathy taped at inspection. After a surgical intervention on a thyroid gland – the thyroidectomy, a subtotal resection of a thyroid gland, from the same access, through a bulbar cutting, retrosternal is introduced a telescope, by means of endoscopic instruments block excision and paratracheal fats on a neck from both parties and in the anterior-upper mediastinum under the video control of returnable laryngeal nerves, frames of a mediastinum that reduces to a minimum possible intraoperative complications is effected.

Results: At scheduled morphological research at 47 (71.2%) patients are taped metastasises of a cancer of a thyroid gland: the papillary form at 38 patients, the papillary-follicular form at 3 patients, the medullary form in 5 cases, low graded the follicular form at 1 patient. At 19 (28.2%) patients of metastasises of a cancer of a thyroid gland have not been taped. The quantity of the removed lymph nodes on the average 8–9 is maximal 26. Time of operation in comparison with a sternotomy was reduced twice. According to 5 years observations from 66 patients in 4 cases advance of tumoral process is taped, in 1 case there was a relapse of metastasises of a cancer of a thyroid gland, in 42 cases at complex inspection of relapse of metastasises in a mediastinum has not been taped. Complications bound to performance of the given operation it is noted.

Conclusions: Application of the video assisted procedure of lymph dissection the anterior-upper mediastinum at metastasises of a cancer of a thyroid gland it is possible to consider application of the video assisted procedure adequate and radical. The given kind of a surgical intervention reduces an operational trauma in comparison with a sternotomy, and possesses the best cosmetic effect.

8576

POSTER

Involvement of pars cartilaginea in the vocal fold affects local control in patients with T1 glottic cancer

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Background: To determine the effects of involvement of pars cartilaginea in the vocal fold on local control in patients with T1 glottic cancer.

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%, $p=0.00013$). 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.

8577

POSTER

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/m² IV on day 1 and C 850 mg/m² 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%). Grade 3/4 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 effective induction chemotherapy regimen.

8578

POSTER

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 dysfunctions, comorbidities, 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 neck 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(10–180), $p=0.03$).

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.

8579

POSTER

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 inadequate 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/m² given the week before R-RT, repeated weekly at the maintenance dose of 250 mg/m² (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