

significantly associated with SLE have been positive or closely (<5 mm) margins and the overall treatment time RT ≥ 8 weeks.

Conclusions: The administration of weekly cisplatin dose of 40 mg/m² concomitantly to classical fractionation radiotherapy is a feasible treatment, with a good toxicity profile in patients with head and neck tumours and postoperative risk factors of locoregional recurrence. The positive or closely resection margins and the overall treatment time RT more than 8 weeks were associated with decreased DFS significantly.

8538

POSTER

A Phase II Study of Induction Chemotherapy With Docetaxel, S-1, and Cisplatin in Patients With Locally Advanced Head & Neck Squamous Cell Cancer (HNSCC) – Preliminary Results

K. Min Kyoung¹, S.Y. Song², M.K. Kang³, K.H. Lee¹, H.W. Jang⁴, H.S. Song⁵, K.Y. Kwon⁶, H.M. Ryoo⁶, S.A. Koh¹, M.S. Hyun¹. ¹Yeungnam University College of Medicine, Internal Medicine, Daegu, Korea;

²Yeungnam University College of Medicine, Otorhinolaryngology-Head and Neck Surgery, Daegu, Korea; ³Yeungnam University College of Medicine, Radiation Oncology, Daegu, Korea; ⁴Yeungnam University College of Medicine, Radiology, Daegu, Korea; ⁵Keimyung University College of Medicine, Internal Medicine, Daegu, Korea; ⁶Daegu Catholic University College of Medicine, Internal Medicine, Daegu, Korea

Background: Based on doses from two phase I study (Br J Cancer 2007; 97: 851–56, Oncology 2008; 75: 1–7), we ought to evaluate the efficacy and safety of a docetaxel, S-1, and cisplatin combination chemotherapy for the treatment of locally advanced head and neck cancer in the induction followed by chemoradiotherapy (CRT) strategy.

Patients and Methods: Eligibility criteria included measurable, non-metastatic, histologically-proven stage III or IV locally advanced head and neck cancer (LAHNC). Patients received docetaxel at a dose of 60 mg/m² given as a 3-h intravenous infusion followed by a 1-h infusion of cisplatin at a dose of 60 mg/m² on Day 1 and S1 at a dose of 40 mg/m² bid on Day 1–14 every 21 days for a total of 2–3 cycles, prior to definitive CRT. Patients achieved complete response (CR) after 2 cycles allowed to receive CRT and patients achieved <CR after 2 cycles received additional one cycle of induction chemotherapy. Patients with CR or PR after induction chemotherapy received definitive CRT (cisplatin 100 mg/m² every 3 weeks or cisplatin 40 mg/m² weekly plus 66–70 Gy of radiotherapy). The primary objective of this study was to evaluate tumour response rate for docetaxel-S1-cisplatin combination chemotherapy in subjects with locally advanced head and neck cancer.

Results: Between December 2008 and March 2011, 23 patients were treated. Twenty-two (96%) of patients were male and the median age was 61 (range, 46–69). All patients had squamous cell carcinoma. The predominant locations of the tumour were oropharynx (57%), hypopharynx (17%), and larynx (13%). A majority of patients (87%) had Stage IV disease. A total of 56 courses of study therapy were administered and patients received a median of 2 courses of therapy. For ITT analysis, the overall response rate was 74.0% and CR rate was 34.8% after induction chemotherapy. Grade 3/4 neutropenia was the predominant hematology abnormality (56.5%) and grade 2 anemia was noted in 26% in this study. Non-hematologic toxicities were generally mild but grade 3 diarrhea was observed in 17.4% of patients. Eighteen patients received subsequent CRT (N = 14) or RT alone (n = 4).

Conclusion: Docetaxel-S1-cisplatin combination for induction chemotherapy had therapeutic efficacy with manageable toxicity in patients with LAHNC.

8539

POSTER

Outcome and Prognostic Factors in Adenosquamous Carcinoma of the Head and Neck – a Multicenter Rare Cancer Network Study

U. Schick¹, M. Betz¹, P. Ghadjar², J.H.A.M. Kaanders³, C. Demiroz⁴, M. Ozsahin⁵. ¹Geneva University Hospital, Radiation Oncology, Genève, Switzerland; ²Inselspital, Radiation Oncology, Bern, Switzerland;

³Radboud University Medical Center, Radiation Oncology, Nijmegen, The Netherlands; ⁴Uludağ University Faculty of Medicine, Radiation Oncology, Bursa, Turkey; ⁵Centre Hospitalier Universitaire Vaudois (CHUV), Radiation Oncology, Lausanne, Switzerland

Background: Adenosquamous carcinoma (AC) of the head and neck is a distinct entity first described in 1968. Its natural history is more aggressive than squamous-cell carcinoma. The aim of this study was to assess the clinical profile, patterns of failure, and prognostic factors in patients with AC of the head and neck treated by radiation therapy (RT) with or without chemotherapy (CT).

Materials and Methods: Data from 19 patients with stage I (n = 3), II (n = 1), III (n = 4), or IVa (n = 11) AC, treated between 1989 and 2009, were collected in a retrospective multicenter Rare Cancer Network study. Median

age was 60 years (range, 48–73). Fifteen patients were male, and 4 female. Risk factors, including perineural invasion, lymphangitis, vascular invasion, positive margins were present in the majority (83%) of the patients. Tumour sites included oral cavity in 4, oropharynx in 4, hypopharynx in 2, larynx in 2, salivary glands in 2, nasal vestibule in 2, maxillary sinus in 2, and nasopharynx in 1 patient. Surgery (S) was performed in all but 5 patients. S alone was performed in only 1 patient, and definitive RT alone in 3 patients. Fifteen patients received combined modality treatment (S+RT in 11, RT+CT in 2, and all of the three modalities in 2 patients). Median RT dose to the primary and to the nodes was 66 Gy (range, 50–72) and 53 Gy (range, 44–66), respectively (1.8–2.0 Gy/fr., 5 fr./week). In 4 patients, the planning treatment volume included the primary tumour site only. Eight patients were treated with 2D RT, 7 with 3D conformal RT, and 2 with intensity-modulated RT.

Results: After a median follow-up period of 39 months (range, 9–62), 9 patients developed distant metastases (lung, bone, mediastinum, and liver), 7 presented nodal recurrences, and only 4 had a local relapse at the primary site (all in-field recurrences). At last follow-up, 7 patients were alive without disease, 1 alive with disease, 9 died from progressive disease, and 2 died from intercurrent disease. The 3-year and median overall survival, disease-free survival (DFS), and locoregional control rates were 55% (95% confidence interval [CI]: 32–78%) and 39 months, 34% (95% CI: 12–56%) and 22 months, and 50% (95% CI: 22–78%) and 33 months, respectively. In multivariate analysis (Cox model), DFS was negatively influenced by the presence of extracapsular extension (p = 0.01) and advanced stage (IV versus I–III, p = 0.002).

Conclusions: Overall prognosis of locoregionally advanced AC remains poor, and distant metastases and nodal relapse occur in almost half of the cases. However, local control is relatively better, and early stage AC patients had prolonged DFS when treated with combined-modality treatment.

8540

POSTER

The Treatment Result of Advanced Stage Oropharyngeal Cancer by Radiotherapy With or Without Chemotherapy – the Impact of Intensity Modulation Radiotherapy and FDG-PET

J.T. Chang¹, C.Y. Lin¹, K.H. Fan¹, H.M. Wang², C.T. Liao³, K. Kang³, S.F. Hung³. ¹Chang Gung Memorial Hospital, Radiation Oncology, Taoyuan, Taiwan; ²Chang Gung Memorial Hospital, Medical Oncology, Taoyuan, Taiwan; ³Chang Gung Memorial Hospital, Head and Neck Surgery, Taoyuan, Taiwan

Introduction: To know impact of intensity modulation radiotherapy (IMRT) and FDG PET and the tumour response for tumour control for advanced stage oropharyngeal cancer.

Material and Methods: There were 251 stage III–IV oropharyngeal cancer patients received radical treatment. Majority (90.0%) was male; usually patients had habit of smoking (81.7%), alcohol drinking (69.7%) and betel quid chewing (56.2%). Most (77.7%) were tonsil cancer and tongue base (13.5%). FDG PET was given in 115 patients before radical treatment. The stage distribution was stage III: 54(21.5%), stage IVa: 141(56.2%) and IVb: 56(22.3%). There were 167 (66.5%) patients received IMRT; concurrent Cisplatin based chemotherapy was given in 212(84.4%) patients. The analysis was based on intent to treat.

Results: The 3-year disease specific survival (DSS) and loco-regional control (LRC) in stage III, IVa, IVb were 77.1%, 53.9% and 37.8%. P = 0.000; 68.4%, 51.5%, 31.6%, p = 0.000 respectively. Thirty eight (15.1%) patients had 2nd cancer. Head and neck (19 patients) and esophageal cancer (10 patients) were most common. Smoking, overall stage, FDG PET, overall stage, T stage and RT dose is independent factor for disease control. FDG PET improved tumour control in OS, DSS, LRC and distant metastasis. Patients with IMRT had less incidence of \geq grade 2 xerostomia and dysphagia at 1 year after radical radiotherapy.

Conclusion: FDG PET but not IMRT can improve tumour control and overall survival in oropharyngeal cancer. IMRT can decrease xerostomia and dysphagia.

8541

POSTER

Surgery + Radiotherapy Vs Exclusive Chemo-radiation Therapy in Oral and Oropharyngeal Cancer – Long Term Toxicity Evaluation

M. Garzaro¹, M. Airolidi², L. Raimondo¹, G. Riva¹, O. Ostellino², G. Pecorari¹, C. Giordano¹. ¹University of Turin, Clinical Physiopathology Department, Turin, Italy; ²San Giovanni Battista Hospital, 2nd Medical Oncology Division, Turin, Italy

Background: Treatment of head and neck tumours negatively affects speech, swallowing, and quality of Life (QoL). Our aim was the evaluation of long term toxicity comparing surgery + radiotherapy (S+RT) and exclusive chemo-radiation therapy (CH-RT) regimes.

Material and Methods: Seventy-two patients, homogeneous for demographic and TNM characteristics were affected by a tumour of