Results: Regardless of the other factors, the influence of the pretreatment tumour diameter on the OS, but not on the DFS in cervical squamous cell cancer patients, was demonstrated, HR = 1.7 [1.0, 2.8], p = 0.044, p = 0.08. We did not demonstrate the influence of the tumour diameter on the OS and the DFS in cervical adenocarcinoma patients.
Conclusion: The pretreatment assessment of the tumour diameter may be important in cervical squamous cell, but not in adenocarcinoma patients. Cervical adenocarcinoma is usually more aggressive and tends to disseminate earlier, than squamous cell cancer, regardless of the tumour size.

8053 POSTER

Knowledge and Applications of the Midwives and Nurses Working in the Woman Labor Clinics of an Educational Hospital on the Early Diagnosis of Cervix Cancer

K. Beydag[1]. *[1]Okan University, School of Health Sciences Department of Nursing, Istanbul, Turkey*

This study was made to determine the knowledge levels and application situations of the midwives and nurses working in the woman labor clinics of an educational hospital giving service in the European side of Istanbul. This descriptive study was made with the participation of 96 midwives and nurses. Data were collected with the survey form which was prepared by the researcher. Obtained data were evaluated in a computerized environment by using frequency distribution and chi-square significancy test. 62.5% of the midwives and nurses included in the research stated that they never go to a routine gynaecological control without any complaints, 54.1% of them stated that they did not see themselves as being under risk in the aspect of cervix cancer, 18.7% of them stated that they had no information about the risk factors related to the cervix cancer. 54.2% of the participants stated that they had at least one pap smear test, 20.8% of them stated that they did not see having a pap smear test as mandatory. 91.7% of the participants knew about the HPV vaccine, 54.2% of them learned about the HPV vaccine from visual and published media and 78.1% of them wanted to have HPV vaccination.
A statistically significant difference was found between the the knowledge levels and application situations of the midwives and nurses included in the research; and their age groups, educational status, and marital status ($p < 0.05$). It was also determined that the participants who were in the age group 32 and over, who had undergraduate or more education and who were married; had more desirable knowledge and applications.

Oral Presentations (Sat, 24 Sep, 11:15–13:20)
Head and Neck Cancer

8500 ORAL

Impact of Smoking Pack-years on Anatomic Disease Outcomes for HPV-related Oropharyngeal Cancer Treated With Radiotherapy With or Without Chemotherapy

B. O'Sullivan[1], S.H. Huang[1], B. Perez-Ordonez[2], I. Weinreb[2], W. Xu[3], L. Cheng[3], J. Kim[1], E. Chen[4], D. Goldstein[5], J. Waldron[1]. *[1]Princess Margaret Hospital/University of Toronto, Radiation Oncology, Ontario, Canada; [2]Princess Margaret Hospital/University of Toronto, Pathology, Ontario, Canada; [3]Princess Margaret Hospital/University of Toronto, Biostatistics, Ontario, Canada; [4]Princess Margaret Hospital/University of Toronto, Medical Oncology, Ontario, Canada; [5]Princess Margaret Hospital/University of Toronto, Surgical Oncology, Ontario, Canada*

Background: Smoking pack-years (PY) has been reported to impact survival of HPV(+) oropharyngeal cancer (OPC) following radiotherapy (RT) +/- chemo (CX). However, the differential influence of PY on anatomic disease control (local, regional, and distant) vs. survival has not been emphasized in the recent literature. This study is designed to address this question.
Methods: All OPC patients treated with RT +/- CX from 2001–2009 on a prospectively assembled cohort with point of care outcome assessment were included. Actuarial 3-year overall survival (OS), cause-specific survival (CSS), local control (LC), regional control (RC), distant control (DC), and late toxicity (RTOG >= 3) were compared for HPV(+) vs. HPV negative [HPV(−)], and stratified by smoking PY (⩽10 vs. >10) for HPV(+) OPC. Univariate and multivariate analysis identified outcome predictors.
Results: HPV status (p16 staining) was assessed in 451/899 (50%) consecutive OPC revealing 346 HPV(+) and 105 HPV(−). Clinical characteristics including outcomes were identical for known vs. unknown HPV status. Median follow-up was 3.6 years. HPV(+) cases (n = 346) had higher OS (81 vs. 45%), CSS (87 vs. 59%), LC (93 vs. 77%), and RC (94 vs. 78%) with lower late toxicity (16 vs. 38%) vs. HPV(−) cases (n = 105) (all $p < 0.01$). The DC rate was similar (88 vs. 84%, p = 0.39). HPV(+) ⩽10 PY smokers (n = 173) had higher OS (88 vs. 74%, $p < 0.01$), marginally better CSS (92 vs. 83%, p = 0.04) vs. >10 PY smokers (n = 173), but identical LC (95 vs. 92%, p = 0.29), RC (96 vs. 92%, p = 0.12), DC (89 vs. 88%, p = 0.632), and late toxicity (12 vs. 19%, p = 0.11). Multivariate analysis revealed HPV status was the strongest predictor for OS, CSS, LC and RC (all $p < 0.01$), but not for DC (p = 0.21). N category was predictive for OS, CSS, RC and DC while T category was predictive for OS, CSS, LC and DC (all $p < 0.01$). Smoking PY was a strong predictor for OS, CSS, LC, RC (all $p < 0.01$) and DC (p = 0.02) in univariate but only for OS (Hazard Ratio 1.65, p = 0.03) in multivariate analysis (Table 1).
Conclusions: HPV(+) OPC has superior outcomes and lower toxicity compared to HPV(−) (except DC) when treated with RT +/- CX. HPV(+) minimal smokers fare especially well. Smoking PY affects overall survival but appears not to influence loco-regional control in HPV(+) OPC.

Table 1. Multivariate Analysis of Outcome Predictors

	Hazard Ratio (p)				
Variable	OS	CSS	LC	RC	DC
HPV(−)	2.64 (**<0.01**)	2.44 (**<0.01**)	3.28 (**<0.01**)	2.63 (**<0.01**)	1.51 (0.21)
>10 PY	1.65 (**0.03**)	1.62 (0.08)	1.32 (0.47)	2.05 (0.12)	1.21 (0.53)
Older age	1.03 (**<0.01**)	1.02 (0.11)	1.02 (0.27)	0.99 (0.43)	1.01 (0.47)
N2b–N3	2.15 (**<0.01**)	2.17 (**<0.01**)	1.30 (0.40)	2.63 (**<0.01**)	3.50 (**<0.01**)
T4	1.94 (**<0.01**)	1.91 (**<0.01**)	2.64 (**<0.01**)	1.47 (0.29)	2.68 (**<0.01**)

8501 ORAL

Phase II-trial of Concomitant Hyperfractionated-accelerated Radiotherapy (HART) With Cisplatin (Cis) Plus Cetuximab (Cet) for Locoregionally Advanced Inoperable Squamous Cell Head and Neck Cancer − Early Response and Acute Toxicities

T. Kuhnt[1], A. Schreiber[2], A. Pirnasch[1], M. Hipp[3], P. Hass[4], F. Sieker[5], R. Engenhart-Cabillic[6], M. Richter[7], K. Dellas[8], J. Dunst[9]. *[1]University of Rostock, Radiooncology, Rostock, Germany; [2]Private Praxis, Radiooncology, Dresden, Germany; [3]University of Regensburg, Radiooncology, Regensburg, Germany; [4]University of Magdeburg, Radiooncology, Magdeburg, Germany; [5]University of Halle (Saale), Radiooncology, Halle (Saale), Germany; [6]University of Marburg, Radiooncology, Marburg, Germany; [7]University of Halle (Saale), Center of Clinical Trials, Halle (Saale), Germany; [8]North European Radiooncological Center, Radiooncology, Kiel, Germany; [9]University of Luebeck, Radiooncology, Luebeck, Germany*

Background: Cet is a potent inhibitor of the epidermal growth factor receptor and has shown activity in squamous cell carcinoma of the head and neck (SCCHN) enhancing both radiotherapy and chemotherapy. We conducted a single arm phase II-trial to investigate the feasibility, efficacy and safety of combination therapy with Cis, Cet and HART.
Materials and Methods: Patients (pts) with stage III or IV, M0 SCCHN were enrolled and treated with an initial dosage of Cet (400 mg/m^2), followed by weekly dosage of 250 mg/m^2 during HART, which started with a prescribed dosage of 2.0 Gy per day for three weeks followed by 1.4 Gy twice daily to a total dosage of 70.6 Gy to the gross tumour volume. Cis 40 mg/m^2 was administered weekly (d1, 8, 15, 22, 29, 36).
Results: From February 2007 through November 2010, 74 pts were enrolled, 68 pts with a median age of 56 years (range 37 to 69 years) were evaluable. Of these 65 pts (96%) ⩾90% RT dosage, 50 pts (74%) ⩾90% Cet dosage and 56 pts (82%) ⩾4 cycles Cis 40 mg/m^2 were applied. Complete remission rate (CR) was observed in 23/68 (34%). Selective lymph node dissection was performed 6−8 weeks after end of radiation treatment for 16 pts (24%) with CR on primary tumour but residual neck disease. Furthermore partial remission (PR) was achieved in 29/68 (43%), so an overall response (OR) of 52/68 (77%) was reached. No change/stable disease occurred in 3/68 pts (4%) and progressive disease (PD) occurred 1 pt (1%). 3 pts have died due progression of disease. The most common grade ⩾3 toxicity were mucositis (59%) and dysphagia (52%), grade >2 Cet related toxicity included dermatitis acneiform (15%) within the radiotherapy portals.
Conclusions: Combination therapy of SCCHN consisting of HART-Cis-Cet is an highly active regimen. Further phase III-trials have to investigate the novel concurrent radiochemoimmunotherapeutic with the standard chemoradiation approach.