analysis were isolated from tumor tissue. After DNA bisulphite modification, methylation of the examined genes was performed by methylation-specific PCR of CpG islands. Results: 65/77 patients had at least one gene hypermethylated. The observed percentage of promoter hypermethylation were: 58% for p16, 34% for MGMT, 36% for DAPK, 23% for WRN, 43% for E-cadherin and 18% for APC gene. E-cadherin hypermethilation showed increase with raising tumor size (T3/T4 vs T1/T2, Fisher exact test, $p < 0.01$). The presence of E-cadherin promoter hyperemethylation was associated with a decrease in overall survival (cancer related survival) (log-rank test, $p = 0.039$). Stratified analysis by the lymph node involvement showed that hypermethylated E-cad is associated with poor prognosis only in N+ patients (log-rank test, $p = 0.024$).
Conclusion: Obtained results indicate that multiple genes are aberrantly methylated in OSCC patients. E-cad promoter methylation analysis may be valuable for the evaluation of tumor aggressiveness and prognosis of oral sqamous cell carcinoma.

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Outcome of T3 laryngeal cancer treated by primary surgery or primary (chemo) radiation

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Background: Laryngeal cancer is the second most common site of head and neck cancer after pharynx cancer. Organ sparing approaches like primary radiotherapy or concomitant chemoradiation permit larynx preservation in patients with locoregional advanced laryngeal cancer but do not provide a survival advantage over laryngectomy.
Methods: Files of patients diagnosed with T3 Nx M0 laryngeal cancer at the Ghent University Hospital between January 1998 and January 2005 were selected. A retrospective analysis was performed studying patient characteristics, treatment modality and outcome.
Results: 71 patients with laryngeal cancer were withheld for this analysis (87% men, 13% women). Mean age at diagnosis was 63.1 years for men, 57.9 years for women. 42 patients were treated with primary surgery followed by adjuvant radiotherapy (except for 2 patients). After a mean FU of 4.59 years in this group, 19 patients (45%) were alive. Locoregional control rate was 88%. 29 patients were treated with primary (chemo) radiation. After a mean FU of 3.42 years in this group, 10 patients (35%) were alive. Locoregional control rate was 76%. In this study, 15 patients were diagnosed with T3N0M0 glottis cancer. 5 patients received primary surgery, none of them showed a local recurrence (mean FU of 5.4 years). 10 patients received primary (chemo)radiation. After a mean FU 4.2 years, 2 patients showed a local recurrence and received a salvage laryngectomy after which one patient remained disease free.
Conclusions: This retrospective analysis of 71 patients diagnosed with laryngeal cancer shows acceptable outcomes with regard to survival and locoregional control rate fot both primary surgery and primary (chemo)radiation.

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Functional and psychological evaluation after exclusive chemo-radiation therapy in oral and oropharyngeal cancer

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Background: The treatment of head and neck tumours often negatively affects speech, swallowing, body image and quality of Life (QoL). Aim of this study was the evaluation of the impact of exclusive chemo-radiation therapy (CH-RT) on QoL and psychological functioning.
Materials and Methods: Twenty-eight patients, affected by a carcinoma of the oral cavity and oropharynx received exclusive CH-RT. Late effects of CH-RT and psycho-oncological assessment included: Radiation Therapy Oncology Group (RTOG), European Organisation for Research and Treatment of Cancer (EORTC) late radiation morbidity scoring system, DISCHE morbidity recording scheme, Hospital Anxiety and Depression Scale (HADS), Montgomery Asberg Depression Rating Scale (MADRS), Mini Mental Adjustment to Cancer (MINI MAC) and EORTC QoL Head and Neck 35.
Results: After a median follow-up of 42 months (range 12−60 months) moderate-severe late toxicity was as follows: taste impairment (89.20%), salivary function (82.12%), subcutaneous tissue (7.08%). Concerning dysphagia 39% of patients complained some discomfort, 28% had a more severe toxicity whereas 7% could not have an oral feeding; patients with severe dysphagia showed higher levels of anxiety ($p < 0.05$): dysphagia influences the QoL, fatigue and physical-social functioning. Rates of depression and anxiety were generally low: 78.6% of our sample did not show clinical relevant anxious symptoms and 82.1% of patients did not reach the threshold of an overt depression. Just a fair concordance in rate of depression between self- and hetero-evaluated scale was observed, with higher rates relieved by MADRS compare to HADS depression subscale using 8 or 10 cut-off (Cohen's k test = 0.401)
Conclusions: Our data suggest low rates of anxiety and depression, in patients treated with CH-RT, with a different evaluation between self-evaluative and hetero-evaluative scales.

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Induction chemotherapy with cysplatin and epirubicin followed by radiotherapy and concurrent cysplatin in locally advanced nasopharyngeal carcinoma observed in a non-endemic population

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Background: Chemoradiotherapy (CRT) represents the main therapy choice in the treatment of locoregionally advanced nasopharyngeal carcinoma (NPC). Aim of this study was the clinical evaluation of neoadjuvant chemotherapy (NACT) followed by CRT in a non endemic population affected by advanced NPC.
Materials and Methods: Patients with locoregionally advanced NPC were treated with three cycles of induction chemotherapy (CHT) with cysplatin (100 mg/m^2) plus epirubicin (90 mg/m^2), followed by cysplatin (100 mg/m^2) and concomitant radiotherapy (70 Gy).
Results: In 40 patients treated with such protocol, after the completion of induction CHT and CRT we observed the objective response rates of 90% and 100% respectively. Treatment tolerability and toxicity were easily controllable. With a median follow-up time of 54.5 months 3 and 5 years disease free survival was 75% and 65.4% and 3 and 5 years overall survival was 84% and 77.5%. Three and five years loco-regional control was 82.4% and 70.3% and five years distant metastases free survival was 75%.
Conclusions: NACT with cysplatin and epirubicin followed by concomitant CRT represents a feasible, efficient treatment for patients with advanced NPC. This regimen ensures an excellent locoregional disease control and overall survival with a low incidence of distant metastases.

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Induction chemotherapy with carboplatin and taxol followed by radiotherapy and concurrent weekly carboplatin + taxol in locally advanced nasopharyngeal carcinoma

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Background: in nasopharyngeal carcinoma (NPC), the role of chemo-therapy (CHT), remains controversial for the initial management of the disease. Recent trials and meta-analysis highlight that now, concomitant chemo-radiationtherapy (CRT) appears to be the standard treatment for locally advanced (T2b and more) and/or node positive patients. No phase II trials have investigated a two-drug combination during conventional, non splitted, RT after a complete course of induction CT. Aim of this study is the evaluation of the clinical outcome of neoadjuvant CHT with carboplatin + taxol followed by RT with weekly carboplatin + taxol combination in locally advanced NPC observed in a non endemic population.
Materials and Methods: patients with locoregionally advanced NPC were treated with three cycles of induction chemotherapy (CHT) with paclitaxel (175 mg/m^2) plus carboplatin (AUC 6), followed by paclitaxel (60 mg/m^2) plus carboplatin (AUC 1) and concomitant RT (70 Gy).
Results: in 30 patients treated with such protocol, after the completion of induction CHT and CRT we observed the objective response rates of 90% and 100%, respectively. Treatment tolerability and toxicity were easily controllable. With a median follow-up time of 54 months, 3- and 5-year disease-free survival was 80% and 73% and 3- and 5-year overall survival was 92% and 83%. Three- and 5-years locoregional control was 94% and 80%, and 5-year distant metastases free survival was 85%.
Conclusions: NACT with paclitaxel and carboplatin followed by paclitaxel plus carboplatin and concomitant CRT represents a feasible, efficient treatment for patients with advanced NPC. This regimen ensures an excellent locoregional disease control and overall survival with a low incidence of distant metastases.