Total of 40 Malignant Lesions were Randomized into the two arms 19patients(total 22) in CCRT+ gefitinib arm have shown complete response in comparison to 11patients(total 18) in CCRT arm.

Conclusion: EGFR status evaluation in premalignant can be used as a screening tool for detection of transformation into malignant lesions. We can prevent this transformation by EGFR inhibitors. In malignant lesions it can be very important for the role of EGFR inhibitors . Gefitinib has shown good results when combined with the conventional CCRT.

**EP-1056**

Treatment delays are associated with disease upstaging in oropharyngeal squamous cell carcinoma

S. Baker1, R. Banerjee2, B. Debenham3
1Cross Cancer Institute, Radiation Oncology, Edmonton, Canada
2Tom Baker Cancer Centre, Radiation Oncology, Calgary, Canada

Purpose or Objective: Increasingly limited health care resources coupled with a rising incidence of oropharyngeal squamous cell carcinoma (OPSCC) is resulting in longer wait times for definitive treatment. Our objectives were to determine the impact of treatment delays on disease upstaging and outcomes in OPSCC.

Material and Methods: Demographic features, number of days from diagnosis until surgery, and clinical and pathological staging information were determined for 139 patients diagnosed with OPSCC between January 2006 and November 2011. Patients were stratified on the basis of whether or not their disease was upstaged between clinical and pathological T, N or M stage. Statistics were performed using MedCalc Statistical Software.

Results: A total of 62 (45%) of patients were upstaged. Upstaged patients had a longer median time to surgery compared to non-upstaged patients (81 vs 68 days, p=0.017) and 21% (n=13) were upstaged to T ≥ T3 or N ≥ N1. There was a trend to higher incidence of margin positivity in upstaged patients (19%, n=12) compared to non-upstaged patients (9%, n=7) (p=0.141). Groups did not differ in the rate of nodal extracapsular extension (50% and 41%, p=0.363). Median overall survival (OS) for upstaged patients was 5.82 years and was not reached for non-upstaged patients. There was a trend to lower OS in upstaged patients (p=0.0746).

Conclusion: Longer duration between diagnosis and surgery is associated with significant pathological upstaging. Allocating resources to reduce treatment delays may result in overall health care savings due to a reduced rate of requirement for adjuvant treatment, reduced patient morbidity, and improvement in disease outcomes.

**EP-1057**

Impact assessment of Sankol drug on the excretion of radioiodine-131 from patients DTC

S. Saadatmand4
Radiotherapy Sadra Center Qom, Department of Medical Physics and Engineering Isfahan University of Medical Sciences and Healthcare Isfahan- Iran, qom, Iran Islamic Republic of

Purpose or Objective: The aim of this study was to investigate the impact assessment of Sankol drug on the excretion of 131I from patients with differentiated thyroid cancer (DTC).

Material and Methods: Fifty-four patients with DTC who had normal renal function in two groups of control and intervention were included in this study. The herbal diuretic was given orally to the intervention group from 3 hours after the 131I administration, and then every 8 hours for 24 hours. The control patients received placebo with the same timing. The radioactivity of the urine samples from each maturation was measured and expressed as the percentage of the administered dose. Exposure from patients were measured after the drug administration and then at the time of 3, 9, 15, 21 and 24 hours after the patient isolation.

Results: The obtained mean percentage of activity excreted during 24 hours after intake of radioactive iodine in the urine in the intervention and control group were 68.85±4.3, 59.11±5.3 with p=0.001 respectively. The obtained percentage of residual activity in the body after 24 hours was 25.17±4.6, 19.56±3.6 with p < 0.001, respectively. Radiation dose rate at 300cm after 24 hours for the intervention and control group were 9.52±3.4 µSv/h, 11.92 ± 6.0µSv/h with p > 0.05, respectively.

Conclusion: Our results demonstrated that Sankol given as an adjuvant medication in the patients with DTC was caused a significant increase in urinary excretion of radioiodine and shorten the hospital stay.

**EP-1058**

Organ preservation in locally advanced larynx and hypopharynx cancer: non surgical strategy

P. Cucarella Beltran1, M.A. De la Rúa Calderon1, J.R. Alonso Rantiga1
1Hospital Universitario Central de Asturias, Radiation Oncology, Oviedo, Spain

Purpose or Objective: To present protocol larynx preservation results in patients treated for carcinoma of the larynx or hypopharynx in stage II and IV.

Material and Methods: Data from a series of 50 patients treated under the guidance of larynx preservation protocol implemented at our institution in 2007 were analyzed. Treatment protocol is divided into two phases. Patients meeting the inclusion criteria receive CDDP and 5FU cycle. At 3 weeks CT evaluation is performed. If the answer is > 50% are included in the arm radiochemotherapy : CDDP every 3 weeks and RT 70Gy 2 Gy per session 5 days a week. Those who do not respond or <50% are scheduled to total laryngectomy + neck dissection. If indicated received postoperative RT. The cases analyzed belong the period 2007-2012 (minimum three years follow-up). All patients were considered evaluable.

Results: The serie includes 50 patients with a median age of 56 years. 42 men and 8 women with tumors in the larynx (28) and hypopharynx (22); 27 stage II and 23 stage IV. 22 not reached a sufficient response (<50%) and yes they got 27; in one case we missed the information. Laryngectomy was performed in 19 patients out of 22 unanswered (3 refused). Among the 27 respondents, received RT / CT, 6 LT for recurrences were performed. Larynx preservation was achieved in 50% of patients. The survival of the entire group was 51% at 5 years and 62.6% cause-specific survival. The specific survival at 5 years with RT / CT was 60% compared to 65% of total laryngectomy gupo (p = 0.568).

---

**ESTRO 35 2016**

---
Conclusion: The larynx preservation protocol achieves the same survival rates that total laryngectomy, contributing 50% of preservation of organ function. It is necessary more cases for a final evaluation.

Purpose or Objective: To robustly assess features of radiotherapy-induced fibrosis in patients within the reconstructive/plastic surgery clinic and establish a baseline for comparison against following treatment.

Results: Health-related quality of life in these patients was impaired, with 36% of patients overall rating their quality as “fair” or “very poor”. On clinical assessment, movement of the neck was impaired with approximately 50% reduction in flexion and rotation movements. 100% of patients had sensory impairment in the fibrotic region. Microcirculatory changes were seen with increased flux (mean = 411.47 vs. 348.83 contralaterally) and temperature (mean difference of 1.3°C vs. control) in the regions of fibrotic change compared with the contralateral side and with controls respectively. Significant differences in hardness of skin and subcutaneous tissues of the neck were seen between treated and untreated areas and between patients and controls (51.5 vs. 16.8 durometer units). Significant increases in the firmness and fatiguability of the skin were seen on cutometry and non-significant decreases in elasticity.

Conclusion: Our methods provide us with important baseline information about how affected our patients are by radiotherapy-induced fibrosis. This baseline can be compared post-operatively to quantify benefits afforded by fat-graft treatment and guide future research into the underlying mechanisms.

Purpose or Objective: To robustly assess features of radiotherapy-induced fibrosis in patients within the reconstructive/plastic surgery clinic and establish a baseline for comparison against following treatment.

Results: Health-related quality of life in these patients was impaired, with 36% of patients overall rating their quality as “fair” or “very poor”. On clinical assessment, movement of the neck was impaired with approximately 50% reduction in flexion and rotation movements. 100% of patients had sensory impairment in the fibrotic region. Microcirculatory changes were seen with increased flux (mean = 411.47 vs. 348.83 contralaterally) and temperature (mean difference of 1.3°C vs. control) in the regions of fibrotic change compared with the contralateral side and with controls respectively. Significant differences in hardness of skin and subcutaneous tissues of the neck were seen between treated and untreated areas and between patients and controls (51.5 vs. 16.8 durometer units). Significant increases in the firmness and fatiguability of the skin were seen on cutometry and non-significant decreases in elasticity.

Conclusion: Our methods provide us with important baseline information about how affected our patients are by radiotherapy-induced fibrosis. This baseline can be compared post-operatively to quantify benefits afforded by fat-graft treatment and guide future research into the underlying mechanisms.

Purpose or Objective: To robustly assess features of radiotherapy-induced fibrosis in patients within the reconstructive/plastic surgery clinic and establish a baseline for comparison against following treatment.

Results: Health-related quality of life in these patients was impaired, with 36% of patients overall rating their quality as “fair” or “very poor”. On clinical assessment, movement of the neck was impaired with approximately 50% reduction in flexion and rotation movements. 100% of patients had sensory impairment in the fibrotic region. Microcirculatory changes were seen with increased flux (mean = 411.47 vs. 348.83 contralaterally) and temperature (mean difference of 1.3°C vs. control) in the regions of fibrotic change compared with the contralateral side and with controls respectively. Significant differences in hardness of skin and subcutaneous tissues of the neck were seen between treated and untreated areas and between patients and controls (51.5 vs. 16.8 durometer units). Significant increases in the firmness and fatiguability of the skin were seen on cutometry and non-significant decreases in elasticity.

Conclusion: Our methods provide us with important baseline information about how affected our patients are by radiotherapy-induced fibrosis. This baseline can be compared post-operatively to quantify benefits afforded by fat-graft treatment and guide future research into the underlying mechanisms.