of cure. In contrast to that, if they noticed the symptoms in themselves, as much as 5% of medical students and 9% of students of other schools would seek medical advice only when they made everyday functioning impossible.

Conclusion: The level of HNC cancer knowledge among young population is alarmingly low. A large number of students of non-medical schools and universities are unaware of its risk factors and early symptoms. This group would benefit from increasing the number of educational campaigns, which would lead to earlier presentation, diagnosis and treatment of HNC.

EP-1102
Parotid toxicity in head and neck cancer patients treated with IMRT

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Purpose or Objective: The aim of this study was to evaluate the parotid glands toxicity and its relationship with the dose in a cohort of head and neck cancer patients treated with IMRT.

Material and Methods: 78 patients out of 110 treated in our department between January 2011 and October 2015 were included in the analysis. Criteria to select patients were: at least 6 months follow up, the omo-lateral parotid (OP) close to the high (HR) and/ or intermediate (IR) risk CTV. Characteristics of the studied patients population are shown in Table1. The GTV, whenever present, CTV HR (regions at high risk of microscopic disease), CTV IR (regions at intermediate risk) and CTV LR (regions at low risk) were contoured on each slice. The targets were expanded 3mm to obtain the PTVs. The prescribed dose was 66-70 Gy (2 - 2.13 Gy /fr) to PTV HR, 59.4 - 66 Gy (1.8 - 2 Gy/fr) to PTV IR; 56.1 Gy (1.7 Gy/fr) to PTV LR. IMRT with Simultaneous Integrated Boost (SIB) technique was used (41patients were treated with Tomotherapy and 36 with VARIAN 21EX). The OP and the CP were contoured; PTV SVI OP and SV2 CP were defined as overlapping volumes of PTVs and glands. Priority was given to OP when OP was partially included. The dose limit (Dmean) was <= 25 Gy to the whole contralateral gland (if not close to GTV N) and < 24 Gy to the volume of CP not included in the PTV (external CP). Salivary gland toxicity was assessed weekly, during RT, and at 3,6,9,12,18,24 months after RT and was graduated using the RTOG toxicity scale.

Results: The dose delivered to the PTVs was 67.9 Gy (range 66-70) 2.02 Gy/fr (1.9 -2.2) to PTV HR, 62.3 Gy (range 58-66) 1.86 Gy/fr (1.7-2) to PTV IR, 55.9 Gy (range 51-60) 1.68 Gy/fr (1.65-2) to PTV LR. The mean dose was 41.56 Gy (range 17.8 -66.8) to OP and 24.9 Gy (range 4.7-39.7) to CP; the external CP received 21.7 Gy mean dose. 36 (46.1%) patients experienced mouth dryness, thickened saliva and altered taste (31 G1 and 5 G2) during RT. At a median follow up of 24 months 6-15) after RT. Only 13/36 patients with acute salivary problems experienced late xerostomia.

Conclusion: In our experience 25 Gy mean dose to the whole contra-lateral parotid, with <24 Gy mean dose to the external CP, even with sacrifice of the OP, allowed our patients to maintain an adequate salivation. 24% of cases experienced G1 and G2 xerostomia. No G3 toxicity was observed.

EP-1103
Review of thyroid ablation rates with RAI based on I131 uptake in differentiated thyroid carcinoma

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Purpose or Objective: Recent studies show that low activity (1.1GBq) of RAI is as effective as high activity (3.7GBq) in treating those with low-intermediate-risk differentiated thyroid cancer (DTC). The purpose of our study was to retrospectively review post-operative I131 uptake and ablation rates in those with DTC.

Material and Methods: Data was obtained from St. Luke’s Radiation Oncology Network (SLRON) patient registry. Selection criteria included histologically proven DTC; post-thyroidectomy; pre and post RAI ablation scan and RAI ablation in SLRON. There were 68 cases of DTC treated with RAI identified between 2005-2007 that were suitable for analysis and met criteria and follow up of ≥5 years

Results: Of the cases analysed 73% were female and 27% male with a mean age of 44 years. The predominant histological subtype was papillary (73%), followed by follicular (22%). Most had early stage disease; Stage I (65%), Stage II (22%), Stage III (13%), 39 cases were pN0 and 29 had pH1 disease. Regarding surgery performed 39 patients had a complete excision CE, 22 had residual disease and there was no information for 7 cases. Thirty seven (37) cases had microscopically positive margins, 26 were negative and it was unknown in 5. Pre RAI ablation, Post op. RAI (I131) uptake in these patients was an average of 3.6 % in pH1 disease and 5.1% in those with pH0 disease. The max uptake was 28%. The extent of the surgery tended to influence the trend of uptake. There was a trend to a higher mean uptake in those who didn’t have a CE with an uptake of 0.1-17%, and mean of 6.3%. Patients that had a CE had an uptake of 0-28%, and mean of 3.9%. In the SLRON there was no standard protocol for RAI dosage at the time the patients were treated. The mean and range of doses of RAI administered was looked at based on pre-ablation uptake scans. Group 1 had a pre-ablation uptake of <4% and group 2 ≥4%. For group 1 the mean dose was 3.9GBq with a range 2.2-7.4GBq, and group 2 had a mean of 3.7GBq with a range of 2.8-7.4GBq. Post-ablative RI131 scans showed an average of 0.07% uptake with the majority of patients (33) having <0.1% uptake. At the time of analysis 23 patients remained disease free, 10 had metastases (M1) and 2 had died from metastatic disease.

Conclusion: In those that received RAI ablation, high ablation rates ≥90% were shown despite variability in post-op. I131 uptake and dose of RAI administered. There didn’t appear to be an association between those with recurrent or metastatic disease and their pre-ablation uptake rates, it was more associated with original stage.

EP-1104
Role of perfusion CT in evaluation of tumour response after radiochemotherapy in H&N cancer

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Purpose or Objective: Recent studies show that low activity (1.1GBq) of RAI is as effective as high activity (3.7GBq) in treating those with low-intermediate-risk differentiated thyroid cancer (DTC). The purpose of our study was to retrospectively review post-operative I131 uptake and ablation rates in those with DTC.

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