

**Conclusions:** The greatest advantage of CT gantry tilt scan is that through the advanced image quality, we could reduce the metal artifact and clearly distinguish tumour from the normal tissue.

Also, through obtaining the accurate CT number, the error in calculation could be minimized.

Therefore, through this experiment, we could confirm that accurate treatment plan is possible for the head and neck patients with dental structures by using CT gantry tilt scan.

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POSTER

#### The Response Evaluation Using CT/MRI for Nasal Cavity and Paranasal Sinuses Malignancies Treated With Radiotherapy or Proton Beam Therapy

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**Purpose:** Recently, definitive radiotherapy (RT) and proton beam therapy (PBT) are often performed for the malignancies of nasal cavity or paranasal sinuses. In other cancers which can be treated with curative intent, salvage treatment including surgery is often taken into account if we designate these as non-complete response (non-CR) after RT or PBT. However, there are some long survivors with morphologically residual tumours in malignancies of nasal cavity and paranasal sinuses, and optimal timing for evaluation has not been sufficiently investigated.

Then, we review our clinical database and investigate the relevance of the response evaluation by CT/MRI for malignancies of nasal cavity and paranasal sinuses.

**Materials and Methods:** Patients fulfilling the following criteria were reviewed: 1) with nasal or paranasal malignancies treated by radiotherapy or proton beam therapy between January 1998 and December 2008, 2) received CT and/or MRI at least twice after the treatment (within 6 months and around 12 months). We employed the Response Evaluation Criteria in Solid Tumours (RECIST) ver. 1.1 as reference for evaluation of target lesions. Patients who had achieved CR at 6 months after treatment were defined as CR patients, while remaining patients as non CR patients. Overall survival and Disease free survival were analyzed using the Kaplan-Meier product limits and compared with the log-rank test.

**Results:** Sixty five patients were reviewed. Median age was 59 (range: 21-83) years, and 39 were male and 26 were female. Tumour pathological type varied, and of all, olfactory neuroblastoma (ONB; n=20, 30%) and squamous cell carcinoma (SCC; n=15, 23%) were the major types. Most of the patients had T4 or Kadish C disease (n=51, 78%). The rates of complete response at 6 months after treatment were 15% and the total 2-year local control rate was 75.4%. With a median follow up 49.6 months, 3-year overall survival was 73.4%. In CR patients, the 2-year local control and 3-year overall survival rates were 88.9% and 77.8% respectively, while 73.2% and 72.6% in nonCR patients. There is no significant difference between two groups in overall survival (p=0.65).

**Conclusions:** No correlation between within 6 months imaging evaluation and outcome was seen for patients with non-surgical therapy for malignancies of nasal cavity or paranasal sinuses. Further investigations regarding response evaluation using PET-CT or other modalities are mandatory.

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POSTER

#### Low Dose Weekly Paclitaxel Versus Cisplatin Concurrent With Radiation in Advanced Head and Neck Cancer

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**Purpose:** To compare the tolerability and efficacy of low dose weekly Paclitaxel versus cisplatin concurrent with radiation in locally advanced head and neck cancer.

**Material and Methods:** One hundred patients of locally advanced head and neck cancer were enrolled in the study from November 2009 to June 2010. All patients were randomised into two groups, study group A and control group B. Study group patients received injection Paclitaxel 30 mg/m<sup>2</sup> iv 1 hour infusion weekly for 6 weeks whereas control group patients received injection cisplatin 30 mg/m<sup>2</sup> iv 2 hour infusion weekly for 6 weeks. All patients were treated with concurrent radiation to a dose of 64-70 Gy, 2 Gy/fraction, 5 fractions a week by cobalt teletherapy machine. Total treatment time was 6-7 weeks.

**Results:** Follow up data for 6 months was analysed and observed complete response rates of study and control group was 86% and 44%

respectively. There was a highly significant difference in treatment response between the study and control groups [ $\chi^2 = 19.76$ , df=2, p value <0.001]. Local toxicities including mucositis, dysphagia and skin reactions were comparable between the two groups. At 6 months of follow up, 98% of patients in the study group and 44% in the control group were alive and disease free.

**Conclusion:** Low dose weekly infusion of Paclitaxel concurrent with radiation in locally advanced head and neck cancer is a promising and well tolerated regimen. Further studies of long term follow up are required to evaluate if this benefit will translate into prolonged survival.

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POSTER

#### The Routine Use of Harmonic Scalpel in Total Thyroidectomy is Associated With a Low Re-Bleed and Low Hypocalcaemic Rate

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**Aim:** Despite the published evidence of shorter operating time, less bleeding and good cosmesis, the use of harmonic scalpel remains controversial in thyroid surgery. Hypocalcaemia (transient or permanent) following total thyroidectomy has been reported to be as high as 24%. In our practise, the harmonic scalpel is used to seal both the STA and the branches of the ITA without additional ligation. The purpose of this study was to evaluate the feasibility, safety and outcome of this surgical tool in total thyroidectomy.

**Methods:** Data of all patients who underwent primary total or completion thyroidectomy between January 2009 and May 2010 were reviewed. Age, sex including co-morbidities, previous operations and laboratory investigations were recorded in a proforma and analysed.

**Results:** Study comprised of 89 consecutive patients without exclusions. 73 (82%) total and 16 (18%) completion thyroidectomies were performed using the harmonic scalpel. There were 80 (90%) female and 09 (10%) male with a median (\*) age of 46\* (range 28-81). Operative time was 105\* (50-220) minutes. Final histology showed 44(49%) had multinodular goitre, 25 (28%) thyroid cancer, 16 (18%) autoimmune disorders (grave's, hashimoto's) and 4 (5%) had other benign conditions. None of the patients developed a post-operative neck haematoma requiring return to theatre and nor developed wound infections. Post operative hypocalcaemia was found in 3(3.5%) patients which was corrected with IV & oral replacement or oral replacement only. Inpatient stay was 2\* (range 1-6) days and 49 (55%) only had an overnight stay. Follow up was 12\* (range 6-22) months. The transient hypocalcaemia in the three patients resolved within 8 weeks.

**Conclusion:** This study presents evidence that there is a very low incidence of return to theatre for bleeding with the routine use of the harmonic scalpel. It is also associated with a low level of both post-operative and permanent hypocalcaemia.

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POSTER

#### Diagnostic and Treatment With Endoscopy in Secondary Ophthalmology of Orbit

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**Material and Methods:** Within a combined or complex treatment 100 patients with diagnosed neoplasm of orbit underwent endovideo assisted intervention in the volume of orbital exenteration in 14 cases, orbital facial resection – in 40 cases, cranial orbital facial resection – in 46 cases.

**Results and Discussion:** A clinical characteristic of cranial orbital facial tumours depending on their topographic localization is determined in 4 groups. In all groups of localization an ophthalmic symptomatology is significantly pronounced, an otorhinolaryngologic and a neurologic symptomatology is more pronounced in larger lesions. The analysis of exophthalmos symptom showed its more typical values up to 5 mm in patients with tumours of cranial orbital facial localization. The analysis of diplopia symptom demonstrated a presence of various types of diplopia in patients with tumours of cranial orbital facial localization with a predominance of the 2<sup>nd</sup> type of peripheral diplopia (47%).

An access through the maxillary sinus with gel injection is informative with limitation in superior segments, it is possible in out-patient conditions, there is a possibility to use additional instruments. An access through the median nasal passage and the ethmoidal labyrinth is dangerous because of a profuse hemorrhage possibility in postoperative period and available endoscopes cannot provide a free manipulation in the nasal cavity.

**Conclusions:** In all groups of localization an ophthalmic symptomatology is significantly pronounced, an otorhinolaryngologic and a neurologic symptomatology is more pronounced in larger lesions. Endoscopic