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methods in orbital oncologic pathology can significantly increase the informative ability of diagnostic stage and allow to perform necessary manipulations. The endoscopic access to the orbit is possible and most safe through the maxillary sinus.

8582 POSTER

# Experience of Using Radiofrequency Ablation to Empower Endolaryngeal Resection

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Introduction: Laryngeal cancer ranks first among malignant tumours of the head and neck, accounting for 2.6% in the total incidence of malignant tumours of man. About 1/3 patients (32.4%) had stage I and II disease, 49.6% – III stage, 15.5% – IV stage (on the data of the Russian Federation). Currently, the potential of modern video endoscope technology allow organ intact treatment in the early stages of the disease. However, it is worth noting that there is a need to improve the efficacy of such operations for tumours with an index of T2 and above. Method of radiofrequency ablation can potentially empower endolaryngeal resection.

**Objective:** To improve results of organ intact treatment of larynx at I-II stage of laryngeal cancer.

Materials and Methods: During the period since 2008 we have completed over 20 transactions in the amount of video endoscope endolaryngeal resection. Treatment was conducted in patients with I (25%) and II (45%) stage laryngeal cancer, as well as laryngeal papillomatosis (20%) and sarcoma (10%). In 7 (35%) cases resection was supplemented by the use of radiofrequency ablation at the bottom of the removed tumour. Observation periods ranged from 1 to 48 months.

**Results and Discussion:** During the follow-up, 2 (10%) patients had recurrent disease, requiring laryngectomy, and in the group with radiofrequency ablation recurrences were not identified.

**Conclusion:** The technique of radiofrequency ablation can complement existing surgical technique and may improve outcomes in patients, especially in locally advanced processes.

8583 POSTER

#### Technology Voice Prosthesis After Laryngectomy for Cancer

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**Introduction:** In the Organizational Structure of malignant tumours of laryngeal cancer is 2.8%. The high level of mortality in this disease is caused by the refusal of laryngectomy patients, t.k.eta operation causes patients with severe trauma and renders it incapable of communicating with others. In recent years, widely spread method of rehabilitation of vocal function after laryngectomy with tracheoesophageal bypass with prosthesis voice prostheses (TPSHP)

voice prostheses (TPSHP).
The currently used methods TPSHP quite complex. Our aim was to create a method of rehabilitation of vocal function reliably without requiring complex tools, easily repeatable and have a good, stable results.

Materials and Methods: We applied the method TPSHP in 207 patients. Description of the method: the necessary tools: a) a metallic conductor with a diameter of 2 mm, length 20–22 mm end is bent at an angle of 120 0 having at one end globular thickening, but on the other hand, which allows him to hold in position. b) rubber tube is 5 mm in diameter which is placed a conductor, to avoid injury of the esophagus, and c) a voice prosthesis, d) a scalpel.

Conductor is placed in a rubber tube and injected into the mouth, pushing down his throat and esophagus to the level of tracheostoma. Shift the rubber tube top, bare end of the conductor. Curved part of the conductor directed anteriorly and to pull it back wall of the trachea and the anterior wall of the esophagus. Scalpel incision 5 mm perform these walls. In the formed responsible outputting the lumen tracheal end of the conductor. To him over nodular thickening of the silk tie. One end is left in the tracheostomy, and the second (the conductor) pull out. Then cut the conductor and in its place tie voice prosthesis. Stretching out beyond the end of the thread in the tracheostomy, the prosthesis being dragged into the esophagus and establish a tracheoesophageal shunt.

Results and Discussion: As a result, the application of this method simplifies the procedure of introducing the prosthesis, reduced trauma, there is no need to use a protector rear wall of the esophagus does not require special drills, easily trained to this method.

Conclusion: Using this technique succeeded in restoring a good voice after removal of the larynx in 96% of patients.

8584 POSTER

### Intraoperative Photodynamical Navigation in Thyroid Cancer Diagnostics

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Introduction: In the Organizational Structure of malignant tumours of thyroid gland is 0.5-1% for male, female - 1-4.6%. The basic method of treatment of thyroid cancer is surgery. The special place among complications of surgical treatment of a cancer of a thyroid gland on gravity of implication and complexity of preventive maintenance occupies a postoperative hypoparathyrosis which develops at excision or damage of parathyroid glands during a surgical intervention on a thyroid gland. Depression of level of a parathormone in blood serum thus leads to disturbance calcium-phosphoric of an exchange, carrying out of nervous impulse, reduction of muscles and a fibrillation, durability and structure of sceletal system. Therefore damage of parathyroid glands during operation on a thyroid gland can lead to serious implications of a hypoparathyrosis. Methods applied now in intraoperative visualization and conservations of parathyroid glands insufficiently effective. The purpose given work - to develop a technique of preventive maintenance of parathyroid insufficiency at sick of the thyroid gland cancer, not demanding the difficult instruments, not giving the complications, easily repeated and yielding good, stable

Materials and Methods: We apply a method of intraoperative conservations of parathyroid glands at 57 patients. The method description: necessary instruments: the Preparation of Alasens (a hydrochloride of 5-aminolevulinic acid) at the rate of 30 mg/kg. Sources of optical radiation of firm "Charles Shtorts" – Germany, with a wavelength in a range from 385 to 460 nanometers.

Before operative measure performance (as primary, and reoperation) at patients parathormone and calcium level is investigated. Further in day of operation 2.5–3 hours prior to an intubation the preparation alasens (at the rate of 30 mg/kg) perorally is accepted.

Intraoperative fluorescent navigation of parathyroid glands is carried out. At detection of fluorescent sites urgent cytologic research (acknowledgement of that a site – a parathyroid gland tissue) is carried out. Preparation excision is made. In the absence of oncologic contraindications allocation and a transposition (if necessary – autografting) parathyroid glands is performed.

For an estimation of efficiency of conservation of parathyroid glands control of level of a parathormone for 7, 27 and 57 days after operation and calcium for 1, 3, 7 days after operation and further each 10 days is carried out.

Results and Discussion: As a result of application of the described method the probability of development of parathyroid insufficiency decreases, accuracy of visualization and conservation of parathyroid glands raises, application of the radioactive isotopes isn't required, the given technique is easily reproduced.

**Conclusion:** At application of the given technique it was possible to save the function of parathyroid glands after excision/resection of a thyroid gland at a significant amount of patients.

8585 POSTER

Efficacy of Cetuximab Alone or in Combination With Docetaxel as Second-line Treatment in Patients With Recurrent or Metastatic (R/M) Squamous Cell Carcinoma of the Head and Neck (SCCHN)

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**Background:** Cetuximab in combination with platinum and 5FU has become a standard in first-line treatment of patients (pts) with R/M SCCHN. Data has shown that single-agent cetuximab may confer clinical benefits for patients with platinum-refractory metastatic disease. The objective of this retrospective study was to evaluate the disease control rate and progression-free survival (PFS) of pts with SCCHN treated in our institution with cetuximab alone or combined with docetaxel in second or third line chemotherapy.

Methods: Patients with R/M SCCHN histologically proven and treated in second or third- line with cetuximab alone or combined with docetaxel between 2006 and 2010 were retrospectively reviewed. Response rates were evaluated according to RECIST criteria. Median PFS was estimated by the Kaplan-Meier method.

**Results:** Twenty six pts could be evaluated: 81% male, median age 55 years (32–75), 18.5% metastatic. Oral cavity, oropharynx and hypopharynx was respectively found as the primary site in 48%, 26% and 18.5% of pts. 70% of the pts received the cetuximab as second-line therapy and 30% as third- line treatment. Treatment was respectively based on cetuximab

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 $500\, \rm mg/m^2$  every 2 weeks, weekly cetuximab (400 mg/m² on day 1 then  $250\, \rm mg/m^2$  weekly), and combination with weekly cetuximab and docetaxel (35 mg/m² on day 1, 8 and 15 every 28 days) in 44%, 40% and 15% of pts.

ORR was 15%. Partial response, stable disease and progression rates were respectively PR=15%, SD=30% and PD=55%. A toxic death occurred in one case related to an anaphylactic shock.

The median PFS was 9 weeks for all patients. The median PFS of patients treated with weekly cetuximab and cetuximab every 2 weeks was respectively: 12 weeks and 8 weeks. Median PFS of pts treated with cetuximab and taxotere combination was 6 weeks.

**Conclusion:** This monocentric retrospective study confirmed that cetuximab alone may confer clinical benefit as second-line or third-line treatment for pts with R/M SCCHN, with a 45% disease control rate, but median PFS remained shorter than three months.

8586 POSTER

# Impact of Induction Chemotherapy on Local Control for Locally Advanced Nasopharyngeal Cancer

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**Background:** Concurrent chemoradiotherapy (CRT), with or without adjuvant chemotherapy, is a current standard of care for locally advanced nasopharyngeal carcinoma (NPC). However, prognosis of patients (pts) with stage IV or N2-N3 remains poor. Recently, induction chemotherapy (IC) followed by CRT demonstrated promising results in a randomized phase II trial (Hui EP et.al, JCO 2009). We retrospectively conducted a nonrandomized comparison between CRT alone and IC followed by CRT in NPC pts with stage IVA-IVB or N2-N3.

Method: Between Apr.1996 and Sep.2009, 54 consecutive pts were selected for this study: 32 were treated with CRT alone and 21 with IC followed by CRT. IC consisted of 1-hour infusion of docetaxel at 60 to 70 mg/m<sup>2</sup>, 2-hour infusions of cisplatin at 60 to 70 mg/m<sup>2</sup>/day on day 1 and of S-1 twice daily on days 1-14 at 60-80 mg/m<sup>2</sup>/day, repeated every 3 or 4 weeks with a maximum of 3 cycles allowed (Tahara M et.al, Ann Oncol 2011). After completion of IC, pts received 66-70 Gy of radiotherapy concurrent with cisplatin. CRT alone consisted of 66-70 Gy of radiotherapy with platinum-based chemotherapy with or without adjuvant chemotherapy. Results: No differences in sex, PS and median age in both groups were observed, but patients in the IC group had a more advanced stage (stage IVA-IVB: 76% vs. 63%, N2-3: 90% vs. 78%). During IC, the most common grade 3 or 4 hematological toxicities were neutropenia (76%) and febrile neutropenia (10%) while the most common grade 2 or 3 nonhematological toxicities were anorexia (42%), nausea (42%) and diarrhea (19%). During CRT, hematological and non-hematological toxicities were not increased in the IC group. After completion of IC, complete response was observed in one pt and partial response in 20 pts according to RECIST criteria. Median followed-up period was 29 months in the IC group and 42 months in the CRT group. 2-year progression free survival and overall survival were respectively 76% and 95% in the IC group and 71% and 83% in the CRT group. Recurrences of primary site were observed in one pt (5%) in the IC group and 8 pts (25%) in the CRT group.

**Conclusion:** IC was well tolerated and did not compromise sequent CRT. IC followed by CRT demonstrated better local control compared with CRT and further investigation is warranted.

8587 POSTER

A Phase II Analysis of Paclitaxel and Capecitabine in the Treatment of Recurrent or Disseminated, Squamous Cell Carcinoma of the Head and Neck Region – Results From an Extended Phase 2 Study

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**Background:** This study presents the results of an extended phase II study originally published in 2007 (HEAD & NECK jan. 2007), regarding the antitumour activity and toxicity of a non-platinum containing regime with paclitaxel and capecitabine for the treatment of recurrent or disseminated squamous cell carcinoma of the head and neck region. 50 patients were included in the original study and as the results were promising with respect to response (42%), overall survival (8 month's) and toxicity (very low), we

decided to accrue another 100 patients in order to provide a more robust estimate of response and survival with this regime.

Materials and Methods: A total 183 patients with recurrent or disseminated squamous cell carcinoma were included in the study. There were 37 women and 146 men. Mean age was 56 years. Performance (WHO) was as follows: WHO 0: 31, WHO 1: 107 and WHO 2: 45 patients. The treatment consisted of paclitaxel 175 mg/m², once every third week and capecitabine 825 mg/m² p.o. b.i.d for 2 weeks.

Results: The overall response rate (CR and PR) according to the WHO criteria's was: 32.6%. (CR: 6%; PR: 26.6%; NC: 36.4%; PD: 20.7% NE: 8.2% and Not Known: 2.1%.) The mean survival time was 254 days or 8.5 month's for the entire population, but for patients in performance 0 and 1 only the mean survival time was 313 days or 10.4 month's. Toxicity was very moderate. Only 9% of 1131 delivered treatments had to be given in reduced dose. Apart from hairloss (50% had total hairloss) toxicity was low and grade 3 and 4 toxicity were uncommon. Two toxic deaths were registered though.

**Conclusions:** The response rate and overall survival for this low toxic regime are promising and comparable to the much recommended regime with Cisplatinum, 5Fu and Cetuximab (Vermorken regime).

88 POSTER

Pilot Study of Target Therapy With EGFR Antibody (Nimotuzumab) in Patients With Unresectable Head and Neck Cancer

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**Background:** Nimotuzumab, a humanized anti-EGFR monoclonal anti-body, has demonstrated well tolerate anti-cancer efficacy. Therefore, we designed this study to explore the efficacy of the combination of biological target therapy (utilize Nimotuzumab) and chemotherapy with unresectable neck and head carcinomas.

**Material and Methods:** 71 patients (54 men and 17 women, age 30–83 years, mean 60) were enrolled in this study. All patients had locally advanced oral-maxillofacial and head and neck tumours (no indication for surgery or radiotherapy) confirmed by histology and radiology, with indication for biochemotherapy. The chemotherapy regimen given was cisplatin 75 mg/m² day 1, paclitaxel 75 mg/m² day 1, fluorouracil 750 mg/m² days 1–5, and Nimotuzumab 200 mg/m² weekly.

Results: Patients completed 2-4 cycles of chemotherapy (mean 2.2). Nimotuzumab was given 2-8 times (mean 4.3). The prognosis was as follows: complete response in 4 patients, partial response in 39, stable disease in 18, and progressive disease in 3. 7 patients could not be evaluated. The total effective rate, calculated as complete plus partial responses, was 61%. 29 patients had surgery after biochemotherapy. No serious adverse reactions were noted during the course of the treatment, only one case of slight erythra infection.

**Conclusions:** Nimotuzumab was equally effective in the increase of chemosensitivity and good tolerability profiles.

8589 POSTER

## COX-2 Inhibitor and Gefitinib in Recurrent And/or Metastatic Head & Neck Cancer

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Background: Metastatic and/or Recurrent Head & Neck Cancer patients following definitive therapy in the form of multi modality therapy, has dismal prognosis and options are extremely limited with only the combination of Cetuximab and Cisplatinum improving quality of life and overall survival. Epidermal growth factor (EGFR) plays a role in tumorigenesis, stimulating cell proliferation, inhibiting apoptosis and promoting angiogenesis and metastasis. EGFR is over expressed in majority of Head & Neck cancer patients and is associated with poor prognosis and outcome.

Cylooxygenase-2 (COX-2) is also over expressed in Head & Neck cancer with poor outcome. Interaction of EGFR and COX-2 suggest that EGFR activates COX-2 in Head & Neck cancer.

Materials and Methods: Single institute study was done to find out safety and efficacy of combining Gefitinib and COX-2 inhibitor Eterocoxib. The study was done in 2 phases. Phase 1 was for dose finding and Phase 2 – a randomized pilot study comparing Gefitinib + Eterocoxib vs Methotrexate