recommended, either scans to seek metastases or iodine-131 for ablation. There was one death, 12 years after diagnosis with metastatic disease. 5 patients chose not to be followed by any of our physicians and sought follow up elsewhere.
Conclusion: This approach has allowed for more efficient pre and post-operative management, especially in the advance planning of radioiodine ablation. During the first half of this new program the average delay between deciding to offer radioiodine ablation and the actual treatment date was 3.5 months. During the second half this was reduced to 1.2 months, despite using no new resources. Patients have expressed a high degree of satisfaction with this team and its' recommendations, especially that controversies were explained to them. The resulting database is now being used to develop an outline of management based on our own outcomes and available recommendations in the literature.

1089 PUBLICATION

Unknown primary with metastatic neck node: A tertiary health institution experience

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Background: Unknown primary with secondary neck node (UPSN) accounts of 2–4% of all head and neck cancers. We conducted a retrospective analysis for our patients with UPSN. We also analysed the possible prognostic variables.
Material and methods: Between January 1997 and January 2003, a retrospective study of 135 cases of UPSN were done. The inclusion criteria were presence of metastatic neck node and primary not detected in the clinical examination or the investigative work up. The patients planned for radical RT (29 patients) were treated with a dose of 70 Gray/35fractions/7 weeks. Patients planned for pre op RT (5 patients) received a RT dose of 50 Gray/25fractions/5 weeks followed by modified radical neck dissection. For palliative RT, patients were given either 20 Gray/5fractions/1week or 8Gray as a single fraction (74 patients). 27 patients were advised symptomatic care only in view of gross disease. The following variables were tested for impact on locoregional disease free survival: Duration of complaints, histology, nodal size, sex, predisposing risk factor, duration of complaints, neck node side, level of the neck node involved and the number of neck nodes
Results: Ony 25.3% of the patients were suitable for any kind of radical treatment. The mean duration of initial symptoms was 6.23 months (1–48 months). The median follow up was 3 months (1–52 months). Nodal size was the only significant variable ($p = 0.001$). The overall local control rate in our study was 20% (27/135). The overall survival was 23.7% (32/135 patients).
Conclusion: Nodal size is a significant variable in the overall prognosis of UPSN. The overall prognosis of such patients in our analysis was poor due to the locally advanced disease in majority of patients at presentation.

1090 PUBLICATION

Low energy photon radiation boost combined with surgery and external beam radiotherapy (EBRT) in early oral cancer. Preliminary results on treatment tolerance

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Background: Photon Radiosurgery System (PRS) is an X-ray delivery system designed to provide a high dose of low energy photon radiation. Clinical application of PRS for boost delivery is easy and cheap because background radiation exposure is minimal and no special shielding of the patient, personnel or operating room is required. We report preliminary results on tolerance of intraoperative PRS application combined with EBRT in 7 patients treated for early oral cancer.
Material and Methods: Seven patients with early squamous cell cancer of mobile tongue (4) and floor of the mouth (3) were evaluated for intraoperative PRS application combined with EBRT in Center of Oncology MSC Memorial Institute in Gliwice, Poland between December 2003 and July 2004. During tumor resection microscopic margin of normal tissue were obtained in all patients and target volume (TV), including tumor bed with 0.5 cm margin, was determined. Intraoperative PRS application was performed. The appropriate applicator was manually positioned. Retractors or 1 mm-thick lead shield was used when needed. The diameter of applicator varied from 3 to 4 cm. Mean delivered dose was 6.35 Gy (range 5–7.5 Gy) and was prescribed at 0.5 cm distance from the applicator surface. For each dose adequate time of exposition was calculated. Mean exposition time was 15.5 min (range 12.4–18.5 min). EBRT was started after mean time of 44 days. In all cases 6 MV, 3D conformal irradiation was applied. Clinical Target Volume (CTV) consisted of tumor bed (CTV1) and lymph nodes at risk (CTV2). Radiotherapy was given conventionally up to elective dose level. Median time of EBRT was 32 days (range 6–39 days). Mucosal reaction of TV acc. to EORTC was assessed.
Results: Acute mucosal grade 3 reaction reveled in TV in all patients just after intraoperative PRS application. Significant additional increasing of mucosa reaction in TV has not appeared after EBRT. Lengthening of healing time to over 3 months (median time of 108 days) after EBRT with no consequential late effects has been observed in all patients. There were no local recurrences with local disease free survival median time of 312 days (range 187–365 days).
Conclusions: Intraoperative application of PRS is an easy method of boost delivery in oral cancer treatment. It seems to be well tolerated although extended mucosal recovery time is observed. Further study is needed to confirm these results.

1091 PUBLICATION

Combined Modality for Treatment of Buccal Cancer

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Introduction: To evaluate the combined modalities treatment result of buccal cancer and find the prognostic factors.
Patients and Method: There were 211 buccal cancer patients who received combined modalities treatment in Chang Gung Memorial Hospital – Linkou Medical Center under service of Taipei Chang Gung Oncology Group from January 1994 to December 2003. There were 203 (96.2%) patients were male and the median age was 46 ranging 23 to 79. The majority (84.5%) patients had habit of smoking, 69.1% had betal quad chewing and 58.4% had alcohol drinking. The stage distribution was stage I: 16 (7.6%) patients, II: 28 (13.3%) patients; III: 41 (19.4%) patients and IV: 126 (59.7%) patients. All the patients received radical surgery first then adjuvant radiotherapy was given due to stage III or IV disease or close margin (lt;5 mm) in resection margins. The median radiation dose was 60.8 Gy (ranging form 6 Gy to 72 Gy). The Cisplatin based concomitant chemoradiotherapy was given in neck lymph node with extracapsular spreading (ECS) patients after 1997.
Result: The 5 year disease specific survival (DSS) for stage I patients was 72%, stage II: 74%, stage III: 59% and stage IV: 52.1%. There were no survival difference in different T stage and regional extension factors such soft tissue extension, lymphatics and/or vessel permeation, nerve and/or bone invasion, however, N stage is significant in survival. The 5-year DSS for N0 was 64%, N1: 59% and N2 49% ($p = 0.02$). Patients with ECS had worse survival (64.2% vs. 38.9%; $p = 0.016$). The worst survival was in patients with N2 and ECS disease, the 5-year survival only 38% and other group is around 63% ($p = 0.009$).
Conclusion: Patients with ECS and more than 2 lymph node metastasis are the highest risk for metastasis need more aggressive treatment.

1092 PUBLICATION

Prognostic significance of clinical-pathological features in high-risk head and neck squamous cell carcinoma (HNSCC) patients (pts) treated with postoperative concurrent chemoradiation (CRT)

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Background: Postoperative CRT can improve the disease-free survival (DFS) in high-risk HNSCC pts, but selection criteria need to be better assessed considering the acute and late toxicities and the benefits.
Patients and methods: This is a retrospective study of 32 consecutive pts with HNSCC of oral cavity (14), hypopharynx (9), larynx (8) or oropharynx (1), treated by surgery with curative intent and postoperative CRT (66 Gy, 2 Gy/d, combined with cisplatin 100 mg/m^2 on days 1, 22, 43), accrued between Mar/02-Dec/04. Eligible pts were considered as high-risk when presented: T3/T4 tumors (27), positive/close surgical margins (6), pN+ (26), lymphatic and/or vascular invasion (LVI, 10), perineural involvement (NI, 20), or extracapsular spread of nodal disease (ECS, 3). According to N status, pts were classified as N0 (6), N1 (12), N2 (13) or N3 (1); 18 pts had 2 or more positive nodes. Tumor grade was 1 (8), 2 (20) or 3 (4).