salivary secretions that were unevenly distributed. At day 14, the success rate was statistically not inferior ($p < 0.0001$). After adjustment on extent of lesions and salivary secretions, a strong trend towards superiority was observed in favour of MBT ($p = 0.13$).

Clinical Response adjusted on:	MBT 50 mg	MOG 500 mg	Variation in %	P*
Lesions				
unique localised	28/49 (57.1%)	33/57 (57.9%)	−1.4%	0.94
multiple localised	44/75 (58.7%)	24/64 (37.5%)	56.6%	0.013
spread or confluent	7/17 (41.2%)	11/19 (57.9%)	−28.8%	0.32
Saliva				
normal	6/6, (100%)	2/5 (40%)	150%	0.034
partial	59/105 (56.2%)	60/116 (51.7%)	8.7%	0.50
absent	14/30 (46.7%)	6/19 (31.6%)	47.8%	0.30

*After adjustment on extent of lesions and saliva secretion.

Likewise, MBT was numerically superior to MOG on almost all secondary endpoints. Compliance with MBT was excellent, with >80% of patients completing treatment. Both drugs were safe.

Conclusions: MBT is significantly not inferior to MOG in the treatment of cancer patients with OPC. After adjusting for prognostic variables, a strong trend towards superiority was observed in favour of MBT, in particular in patients with multiple lesions. MBT is well accepted and tolerated by patients with critical oral conditions and therefore can be used as first line treatment in cancer patients with OPC as an alternative to systemic antifungal agents.

5516 POSTER

Thyroid cancer. No siempre senor buena genta

R. Allison. *Royal Brisbane Hospital, cancer care services, Brisbane, Australia*

Background: The incidence of thyroid cancer is increasing. For the majority treatment with surgery and radioactive Iodine results in high cure rates and a normal survival experience. A minority however die from their disease or suffer considerable morbidity. This paper discusses those who do badly and attempts to provide indications for the use of external beam radiotherapy.

Materials and Methods: Patients presenting to a single institution Thyroid Cancer Clinic from 1974 to 2004 were reviewed. 2307 patients were seen and 171 (7.4%) died of thyroid cancer. Good prognosis tumours included well differentiated papillary and follicular histology and T-Stage 1, 2 and 3.

Results: On multivariant analysis the factors predicting a poor disease specific survival are, Sex M:F hazard ratio 1.33 ($p = 0.05$), Age hazard ratio 1.06 ($p = 0$). With regard to T-Stage only T4 makes any significant difference with a hazard ratio of 1.88 ($p = 0.01$), N Stage hazard ratio is 1.61 ($p = 0.01$), M Stage M0 or M1 has a hazard ratio of 2.36 ($p = 0.0001$). Histology indicates that papillary, follicular and Hurtle have the same outcome with a hazard ratio of 1.30 ($p = 0.27$). However medullary tumours have a hazard ratio of 2.11 ($p = 0.01$) and anaplastic tumours have a hazard ratio of 7.12 ($p = 0$). The use of external beam radiation is associated with a poor prognosis but this is due to selection bias. Inoperability is associated with a poor prognosis.

Conclusions: External beam radiotherapy needs to be high dose in the order of 60 Gy and the late effects particularly in young people may be quite considerable and therefore management with radioactive Iodine and surgery is preferred even for those with extensive nodal disease. The groups benefiting from external beam radiation are those with poorly differentiated or anaplastic histology, widespread invasion of vital structures such as trachea and oesophagus, medullary cancers and patients with well differentiated histology who have failed to take up radioactive Iodine. There is an urgent need for systemic therapies for tumours which no longer take up I-131, medullary cancers and anaplastic cancers.

5517 POSTER

Regional control of melanoma neck node metastasis after (selective) neck dissection +/− adjuvant radiotherapy

O. Hamming-Vrieze[1], W.D. Heemsbergen[1], A.J.M. Balm[2], T. Hooft van Huysduynen[2], C.R.N. Rasch[1]. *[1]Netherlands Cancer Institute/Antoni van Leeuwenhoek Hospital, Radiotherapy, Amsterdam, The Netherlands; [2]Netherlands Cancer Institute/Antoni van Leeuwenhoek Hospital, Otolaryngology Head and Neck Surgery, Amsterdam, The Netherlands*

Purpose: To examine the effect of adjuvant radiotherapy and type of neck dissection on regional control in patients with melanoma neck node metastasis

Materials and Methods: A retrospective study was carried out in 64 patients treated between 1989 and 2004 for neck node metastasis from melanoma. Twenty-four patients were treated with surgery (S) only; of these patients fifthteen underwent a (modified) radical neck dissection [(M)RND] and nine a selective neck dissection (SND). Forty patients underwent surgery [28 (M)RND and 12 SND] and adjuvant radiotherapy (RT) of the whole ipsilateral neck Criteria for adjuvant radiotherapy were $\geqslant$2 positive nodes (before 1992: $\geqslant$3 positive nodes), extra capsular rupture (ECR), nodes larger than 3 cm or recurrence. Radiotherapy dose was 4−6 times 6 Gray, delivered once a week.

Results: Prognostic factors were worse in the S+RT group than in the S group ($\geqslant$2 positive nodes 85% versus 38%, ECR 35% versus 8%). With a median follow up of 2.1 years, regional recurrence inside the treated volume was not significantly different between the groups (S+RT: five year recurrence rate 25%; S: 35%). Five year loco-regional recurrence outside the treated volume was 15% in the S+RT group (3 contralateral neck, 2 local, no ipsilateral neck) and 44% in the S group (2 contralateral neck, 3 local and 3 ipsilateral neck outside the treated volume) ($p = 0.12$). Univariate analysis revealed that patients who underwent SND, instead of (M)RND, had a higher risk of loco-regional recurrence outside the treated volume. Ipsilateral recurrence outside the treated volume was found in 33% of patients who underwent SND without RT, in contrast tot 0% of patients who underwent SND followed by RT. All patients with an ipsilateral recurrence had a single positive node for which they underwent SND of a limited number of levels (2 $\times$ level I-III, 1 $\times$ level IV-V). Five year survival was 19% in the S+RT group and 40% in the S group ($p = 0.08$).

Conclusions: Selective neck dissection without radiotherapy leads to a substantial risk (33%) of ipsilateral recurrence outside the operated volume. Even in patients with low risk neck disease it is indicated to perform a (modified) radical neck dissection or selective neck dissection combined with radiotherapy to improve ipsilateral regional control.

5518 POSTER

Neo-adjuvant chemotherapy followed by radical chemo-radiation in treatment of advanced head and neck cancer

S. Bhide[1], M. Ahmed[1], Y. Barbachano[2], K. Harrington[1], C.M. Nutting[1]. *[1]Royal Marsden Hospital – NHS Trust, Head and neck oncology, London, United Kingdom; [2]Royal Marsden Hospital – NHS Trust, medical statistics, London, United Kingdom*

Background: A study designed to test the efficacy and toxicity of neo-adjuvant chemotherapy followed by radical chemo-radiation in treatment of advanced Head and Neck cancer.

Methods: Patients treated with 2 cycles of neo-adjuvant chemotherapy followed by definitive chemo-radiation for squamous cell carcinoma of the head and neck region, from 2001–2006 at the Royal Marsden Hospital, formed the basis of this study. Cisplatin (100 mg/m^2) on day 1 and 5-FU (100 mg/m^2) day 1−5 was the standard regimen used for neo-adjuvant treatment. Cisplatin (100 mg/m^2) on day 1 and day 29 was used for concomitant treatment. The radiation was delivered using conformal technique. The macroscopic and the microscopic disease were treated to a dose of 65 Grays (Gy) in 30 fractions (6 weeks) and 50 Gy in 25 fractions respectively. Data on patterns of relapse and acute (NCICTCv.3.0) were collected.

Results: 129 patients were included, median age was 58 (range 27−78). The site of tumour was: oropharynx 70 (54%), larynx/hypopharynx 54 (42%), and other 5 (4%). The median follow-up was 19 months (range 4−58). Local control, disease specific survival and overall survival at 2 years were 71%, 68% and 63%, respectively. The distant recurrence rate at 2 years was 9%.

10 patients required dose reduction during neo-adjuvant chemotherapy due to toxicity. The dose of 5-FU was reduced in 6 patients and that of cisplatin in 4 patients. The incidence of grade 3/4 toxicity was: neutropenia 5%, thrombocytopenia 1%, nausea and vomiting 3%.

One cycle of concurrent cisplatin was omitted in 23 patients due to toxicity. All patients completed the full dose of radiation. The incidence of grade 3/4 toxicity was: skin 20%, dyaspagia 65%, mucositis 60%, neutropenia 3%, anaemia 1%, nausea and vomiting 4%, nephrotoxicity 1%.

Conclusions: Neo-adjuvant chemotherapy followed by radical chemo-radiation is a safe and tolerable regimen in the treatment of advanced Head and Neck cancer. Distant recurrence rates are lower with equivalent local control and survival compared to chemo-radiation alone (historical controls).