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Surgical Resection for Oral Tongue Cancer Pulmonary Metastases, a Good Choice?

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Background: The lung is the most common distant metastasis site from oral tongue cancer (OTC). However, there have been no reports on surgical resection results for pulmonary OTC metastases. The aim of this study was to evaluate surgical resection for OTC pulmonary metastases efficacy.

Methods: Between 1977 and 2003, 23 OTC patients who developed 1 to 3 pulmonary metastases underwent metastasectomy. The clinicopathologic features and long-term outcomes were examined.

Results: The 14 men and 9 women had a median age at the time of pulmonary metastasectomy of 56 (range; 28-72 years). All 23 patients had advanced squamous cell OTC with regional lymph node involvement or subsequent regional lymph node metastasis. The median tumor-free interval after the initial OTC treatment was 17 months (range: 1-165 months). Five patients had pneumonectomy, three bilobectomy, 13 lobectomy, and two wedge resection. Two patients underwent a second pulmonary metastasectomy. One patient continues to survive, without recurrence at 229 months right now. Twenty-two patients developed systemic metastases. The interval to systemic metastasis recurrence after pulmonary resection ranged from 1 to 17 months (median, 3.5 months) and 21 died of OTC at 9.5 months median (range: 1-26 months) after metastasectomy. One patient was alive with disease at 24 months after metastasectomy but was lost to follow-up.

Conclusions: Most patients who had OTC pulmonary metastasectomy died of the disease within two years. Even for patients with a solitary metastasis, surgical resection for OTC pulmonary metastases is not a recommended treatment option.

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Soluble Mesothelin related Proteins in Patients with Malignant Pleural Mesothelioma in Comparison to Asbestos Diseases and Lung Cancer

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Background: Soluble mesothelin related proteins (SMRP) have been reported as being potential markers for the detection, staging and monitoring of treatment of malignant pleural mesothelioma (MPM). In order to evaluate the diagnostic accuracy, i.e. sensitivity and specificity of a new ELISA test, we investigated SMRP serum concentrations in patients with MPM, primary lung cancer and benign asbestos diseases, with a particular focus on differential diagnosis.

Methods: The study population consisted of 100 newly diagnosed MPM patients. They were compared to 75 patients with severe forms of asbestosis and 139 patients suffering from untreated primary lung cancer. In addition, 29 MPM patient with tumor relapse or progression after initial therapy were included. SMRP serum concentrations were measured by using the newly developed ELISA kit MesomarkTM (Fujirebio Diagnostics, Malvern, USA distributed by CIS bio GmbH, Berlin, Germany). Statistical analyses (Mann-Whitney U-Test, ROC analysis) were performed with SPSS 14.0 (Chicago, Illinois, USA).

Results: SMRP concentrations were found to be significantly higher in patients suffering from MPM in comparison to benign asbestos diseases ($p < 0.001$) or primary lung cancer ($p < 0.001$). The median values (range) were 1.4 (0.2-31.0) nM, 0.9 (0.1-3.3) nM and 0.8 (0-6.0) nM respectively. The highest SMRP concentrations were found in patients with the epithelial subtype of MPM. However, this was not significantly different from the serum concentrations of the sarcomatoid and the biphasic subtypes. SMRP tended to increase with the tumour stages of MPM.

At a cutoff value of 1.6 nM SMRP reached a sensitivity of 42% with a specificity of 95% for benign asbestos diseases. Youden index revealed an optimal cutoff value of 1.35 nM resulting in a sensitivity of 53% and a specificity of 88%. However, SMRP were also increased in 12.9% (cut-off 1.6 nM) or 19.9% (cutoff 1.35nM) of lung cancer patients. Receiver operator characteristics (ROC) curves resulted in an area under curve (AUC) of 0.72 (95%CI:0.66-0.79) for the discrimination between MPM and non-MPM patients (lung cancer and asbestosis). In the 29 MPM patients with relapse/progression after an initial therapy, SMRP levels were found to be significantly higher (Median: 4.2 (0.2-51.0) nM; $p < 0.001$) compared to the 100 MPM patients without prior treatment.

Conclusion: SMRP serum concentration might be an useful measure in the diagnostic characterisation of MPM and for the differentiation between MPM, benign asbestosis and lung cancer patients. In addition, our results indicate that SMRP might be useful in treatment monitoring and follow-up.

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Predictors of "long term" survival following surgical treatment of malignant pleural effusion

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Objective: To investigate prognostic factors following surgical palliation of malignant pleural effusion (MPE).

Method: We reviewed 280 consecutive patients [109 male, median age 60 years (range 26 - 89)] undergoing 312 surgical procedures for palliation of MPE over 72 months. The commonest malignancies were breast (29%), malignant pleural mesothelioma (MPM) (25%), lung (12%), ovary (9%) and adenocarcinoma of unknown primary (5%). There