12<sup>th</sup> World Conference on Lung Cancer

83.3%, respectively, and those for the advanced stage mesothelioma were 41.7% and 0%, respectively (p<0.0023).

**Conclusions:** Histopathologically, there were few cases with stage I mesothelioma. Invasion was observed even in extremely early stage MPMs in our series. Once MPM develops, mesothelioma cells may exfoliate easily into the pleural effusion or extend in lymphatic vessels and disseminate diffusely onto the parietal and visceral pleura, thereafter proliferating as in situ neoplasm before invasive nodules are formed. Although MPM may first develop at some point of parietal pleura, it soon invades into both parietal and visceral pleura, disseminates, proliferates and invades adjacent tissue rapidly. Because MPM with stage IA is rarely recognized, it is not practical to categorize stage I into stage IA or IB.

#### P1-128 Mesothelioma and Other Thoracic Malignancy Posters, Mon, Sept 3

## Recent Clinical Experience with Multimodality Therapy in Thymic Carcinoma

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**Objective:** Thymic carcinomas typically carry a poor prognosis and are quite rare. As such, their management has not been standardized. We reviewed our recent experience with multimodality treatment for thymic carcinoma for outcomes.

**Methods:** Retrospective review of a single institution surgical database. Data included patient demographics, pre-operative staging and treatment, peri-operative events, pathologic findings, and postoperative outcomes.

**Results:** During the 10 year period from 1996-2006, 115 thymic tumors were primarily resected, including 17 patients who had WHO 2004 Classification thymic carcinoma. Patient characteristics are listed in the table below. At a mean follow-up of 28.4 months (range 2.1-141.7, median 10.9), 59% (10/17) are disease-free, 2 have died of disease, 4 are alive with disease. Ten patients were able to undergo complete resections (59%). There was one operative mortality. There were no adverse events of CTCAE Grade III or higher. There have been no recurrences in those patients who had complete resections. Median survival has not yet been reached. 5-year survival is 80%.

**Conclusion:** Multimodality therapy in an attempt to attain complete resections for thymic carcinoma can result in good long-term survival.

Age (Years)	
Median	63
Range	25-73
Sex	
Male	12
Female	5
Preoperative Chemotherapy	12/17
Carboplatin/Docetaxel	5
Cyclophosphamide/Doxorubicin/Cisplatin	4
Cisplatin/Etoposide	2
Other	1
Additional Resected Structures	
Superior Vena Cava / Innominate Vein	5
Pneumonectomy	1
Postoperative Radiation	9/17
Median Dose (cGy)	5040
Range	3060-6300
Length of Stay (Days)	
Mean	5
Range	3-8
Histology	
Squamous	11
Lymphoepithelioma-like	3
Undifferentiated	1
Mucoepidermoid	1
Adenocarcinoma	1
Masaoka Stage	
	1
II	4
	9
IV	3

#### P1-129 Mesothelioma and Other Thoracic Malignancy Posters, Mon, Sept 3

# The accuracy of pathological diagnosis of mesothelioma cases in Japan

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**Background:** The malignant mesothelioma is increasing in Japan, due to the import and use of asbestos past 6 decades. However, its accurate frequency of mesothelioma is unknown due to different diagnostic methods and criteria. The aim of this study is to clarify the accuracy of pathological diagnosis of mesothelioma in Japan.

**Materials and Methods:** Among 878 mesothelioma death cases extracted by "Vital Statistics of Japan 2003", the pathological materials (histological and cytological specimens, paraffin blocks etc.) were submitted from 204 cases. After these pathological materials were reviewed and the immunohistochemical analyses were conducted, the diagnosis of mesothelioma was determined by the discussion with the clinical and radiological informations. The diagnostic categories of each case are as follows; undetermined, category 1 (definitely not), category 2 (unlikely), category 3 (possibly), category 4 (probably) and category 5 (Definite).

**Results and Discussion:** 1) The ratio of each diagnostic category is as follows; "undetermined", 12 cases (6%), category 1, 22 cases (11%), category 2, 5 cases (2%), category 3, 17 cases (8%), category 4, 33 cases (16%), category 5, 115 cases (57%). 2) Category 1 or 2 cases included 8 lung cancers, 6 pleuritis, 1 malignant lymphoma, and 1 solitary fibrous tumor in male, 1 lung cancer, 6 adenocarcinomas involving peritoneum, 1 malignant lymphoma, 1 rhabdomyosarcoma and 2 pleuritis in female. 3) The frequency of higher category cases in "pleural origin" cases tended to be higher than that in "peritoneal origin" cases. 4) The ratio of category 5 was 59% in male cases, and 43% in female cases. 5) The ratio of sarcomatoid type was 33% in category 4, and 16% in category 5. These results indicated that approximately 15% cases died of "mesothelioma" in Japan contained diagnostically suspicious cases. Peritoneal cases, female cases and sarcomatoid type cases seems to be especially difficult to diagnose accurately.

### P1-130 Mesothelioma and Other Thoracic Malignancy Posters, Mon, Sept 3

### Multimodality therapy for patients with invasive thymoma disseminated into the pleural cavity: the role of extrapleural pneumonectomy.

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**Background:** The treatment strategy for thymoma with pleural dissemination remains controversial. Although multimodality therapy may improve their survival, it has not been concluded what regimen of chemotherapy is optimal or what type of operation should be done. We reviewed our experience with a multidisciplinary approach and evaluated the usefulness of extrapleural pneumonectomy (EPP) in the treatment of disseminated thymoma.

**Patients and Methods:** From 1988 to 2003, eleven patients, including two recurrent patients, were treated for invasive thymoma with pleural dissemination.

Our multimodality therapy consisted of chemotherapy, surgery, and/or radiotherapy. The chemotherapy regimen consisted of cisplatin (20 mg/m<sup>2</sup>/day continuous infusion on days 1 through 4), doxorubicin (40 mg/m<sup>2</sup> intravenously on day 1), and methylprednisolone (1,000 mg/day intravenously on days 1 through 4 and 500 mg/day intravenously on days 5 and 6) (CAMP). Thymomectomy with resection of the visible dissemination (usual operation) was principally performed and EPP was carried out only for chemoresistant thymoma or for recurrent dissemination after usual operation. Radiation therapy was administered to the mediastinal or residual tumor areas at the total dose of more than 50 Gy.

**Result:** The response rate of CAMP regimen was 100%.Usual operation was accomplished in 4 patients, EPP in 3 patients. There was no operative death. The 5-year and 10-year overall survivals of all patients were both 72.7 %. Disease free 5-year and 10-year survivals were 25.0 % for usual operation cases and 66.7 % for EPP cases.

**Conclusions:** We concider that this multidisciplinary treatment is a justifiable initial treatment for patients with disseminated thymoma. Furthermore, for achieving cure or maintaining good quality of life, EPP could be one of the surgical treatment of choice for thymoma patient with pleural dissemination, especially for chemoresistant or recurrent disseminated thymoma.

#### P1-131 Mesothelioma and Other Thoracic Malignancy Posters, Mon, Sept 3

#### A patient with recurrent giant mediastinal liposarcoma

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Mediastinal liposarcomas are mesenchymal tumours arising from adipose tissue. They are very rare and the most frequent compartment is posterior mediastinum. They have a great tendency to local invasion. Most of the cases are symptomatic and these symptoms are due to local effects. Although they can reach to big sizes, distant metastasis rates are low for liposarcomas. In half of the patients, local relapses are developing after resection. A mediastinal liposarcoma case is aimed to be presented in this study since it is very rare.

A 42 year-old male patient with cough and dyspnea complaints had mediastinal giant mass excision history by 2 right thoracotomy and one left thoracotomy 12 years ago. In radiological examination, a giant mass of lipoid density, which is extending from thoracic inlet to diaphragm level, filling in posterior mediastinum, pressing environmental structures has been determined. This patient did not have pathology concerning with other organ systems and he was applied right thoracotomy in our clinic. Giant mass lesion (approximately 30 cm diameter) covering right hemithorax and mediastinum was completely resected. There was not any postoperative complication and it was reported as "well-differentiated liposarcoma" pathologically. After 3 years from surgical operation, a mass in mediastinum surrounding oesophagus was determined in thorax CT. He was applied right thoracotomy and mass, with sizes 7X6X6 cm, was completely resected. It was diagnosed as liposarcoma by pathology report. This patient was taken into follow up program in our clinical.

We suggest that complete surgical excision is the primary therapy, and when impossible subtotal resection with adjuvant chemotherapy or radiotherapy for mediastinal liposarcoma should be performed.

#### P1-132 Mesothelioma and Other Thoracic Malignancy Posters, Mon, Sept 3

# Phase II study of erlotinib plus bevacizumab in patients with previously treated malignant pleural mesothelioma

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