

cancer, the median survival was 4.1 years. The potential to improve survival coupled with the fact that most second primary lung cancers are asymptomatic at the time of diagnosis suggest that careful post-operative surveillance of patients with early stage non-small cell lung cancer is warranted.

In patients with synchronous cancers located in different lungs, a staged bilateral thoracotomy at an interval of 4 to 6 weeks is recommended. It seems logical to start at the side with the higher stage of the disease. When a complete resection was performed, the contralateral side can be explored and eventually resected.

Conclusion

The management of patients in whom a second primary lung cancer develops remains a challenging problem. However, there appears to be a benefit from surgical resection in well selected patients.

Prognosis after resection of a synchronous tumour is substantially lower compared to prognosis after resection of a metachronous lesion. An exception are satellite nodules in the same lobe which have a better prognosis after resection.

Because accurate differentiation of synchronous or metachronous tumours from intrapulmonary metastasis or recurrent lung cancer is not always clinically possible, patients with adequate pulmonary and physiologic reserve should undergo surgical resection of the second lesions after careful staging.

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M01-02

Surgery in Special Situations, Mon, Sept 3, 10:30 - 12:00

Treatment for the screen-detected lung cancer: characteristics and outcome

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Owing to the advent of refined chest CT images with higher resolution and CT screening programs, smaller lung cancers are being discovered in asymptomatic patients. Most of them are more often found on a low-dose CT images, and they tend to have characteristic appearance

on high-resolution CT scan as ground glass opacity (GGO), a focal intermediate/mild increase in the CT density. Of course, the screening program is still picking up the more solid tumors with/without lymph node involvement, the percentage of GGO or GGO-like lesions is obviously increased in low-dose CT screening era. These GGO tumors are pathologically characterized by the morphology of non-/minimally invasive form of well-differentiated adenocarcinoma termed as bronchioloalveolar carcinoma (BAC) of the non-mucinous type.

The superb prognosis of these GGO-BAC tumors is being recognized in the surgical community. Although the gold standard operation for peripheral lung cancer has been lobectomy with lymph node sampling/dissection, the revision is thought to be necessary, especially for these screen-detected GGO-BAC tumors. The possibility of limited resection such as segmentectomy/wedge resection seems to be realistic. Enough number of institutional reports describing the equivalent surgical outcome by limited resection have been accumulated. Therefore, the randomized phase III trial between lobectomy and limited resection is being planned both in US and Japan in a non-inferiority design setting. The results of these studies might be applied in the management of screen-detected, small-sized tumors in the near future.

M01-03

Surgery in Special Situations, Mon, Sept 3, 10:30 - 12:00

Trimodality therapy for stage III NSCLC

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Approximately 40,000 patients / year are diagnosed with Stage III NSCLC. The cure rate with surgery or radiation therapy alone is less than 10%. There is significant local failure with bimodality treatment. Treatments include concurrent chemoradiation or chemotherapy followed by surgery. Trimodality therapy is both attractive and feasible. We have results from several trials available including SWOG 8805 (stage IIIA & IIIB), INT 0160 (Pancoast) and radiation therapy limited to 45 Gy.

Current protocols studying the importance of mediastinal lymph node clearance are SWOG 8805; Brigham & Womens (Bueno et al., 2000); and CALGB 8935. The importance of pathologic complete response was studied by INT 0139. The University of Maryland study found high-dose radiation treatments to be attractive and feasible.

Residual disease is frequently present after chemoradiotherapy. This viable tumor may be the only disease present and resection may lead to cure. The incidence of local recurrence is significant. Actual experience confirms these assumptions. Dillman et al., in CALGB #8433 found median survival improved with chemotherapy. Using radiation therapy alone median survival was 9.7 months. Chemotherapy and radiation resulted in median survival of 13.8 months. With OS improved at 7 years, 6% with radiation alone and 13% with chemotherapy and radiation. (Furuse et al. *J Clin Oncol* 17:2692-99, 1999).

Trimodality was studied using PE x 2 cycles with XRT (45Gy) Followed by Surgical resection in 126 Pathologic IIIa (N2) =60%, and pathologic IIIB = 40%. 3 year survival for IIIa = 27% and IIIB was 24%. 5 year survival was 23% vs 21%. Pathologic complete response was 21% and microscopic foci were present only in 37%. A major path response was seen in 58%. Patients with lymph node involvement showed an improved survival. Grade 4 toxicity was evident in 13%; Mortality rate was 6%. The brain was the major site of relapse in 40%; the sole site in 10%. INT0139 was a phase III Comparison of Chemoradiotherapy vs Chemoradiotherapy followed by Surgery in IIIa (N2)