

emission amount and evacuation site of various chest tubes. Next, a clinical trial was performed. This study included patients who underwent anatomical pulmonary resection and mediastinal lymph node dissection for lung malignant tumor between September 2017 and April 2018. One chest tube (2 4Fr.TC or 2 4Fr.CD) was positioned apically and posteriorly after surgery. We reviewed the postoperative pain, the amount of chest tube drainage and the presence of subcutaneous emphysema. Pain intensity was evaluated by using The Prince Henry Hospital pain scale (PHPS), and satisfaction scores were evaluated by numeric rating scores (NRS). **Result:** The decompression time of TC was the shortest and its time of CD was shorter than BD (BD>CD>TC). The fluid emission amount increased in proportion to the cross-section area of a drain (CD>TC>BD). All cases found no severe pain in this clinical study. There were no significant differences of pain scale between the TC group and the CD group (PHPS; p=0.83, NSR; p=0.78). No significant difference was observed in total drainage and duration of drainage both the groups. Subcutaneous emphysema occurred in 4 of 8 TC patients and 4 of 20 CD patients, indicating no significant difference between the two groups (p=0.172). There were no complications in any patient. All patients recovered and were discharged home. Moreover, all the cases in which Coaxial Drains were used obtained good wound healing at the drain insertion site. **Conclusion:** When air leakage occurs, air evacuation with the only BD or TC tends to be insufficient, irrespective of suction conditions. Coaxial Drains have both air inner lumen and liquid duct channels for drainage capability. Therefore, we think Coaxial Drains provide proper drainage of both air and fluid after pulmonary resection. **Keywords:** Coaxial Drain, lung cancer surgery

P3.16-48

Is Preoperative SUV(Max) of Primary Tumor a Predictor of Relapse for Operable Non-Small Cell Lung Cancer?



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Background: Positron emission tomography-computed tomography (PET / CT) is currently recommended to rule out metastatic disease in non-small cell lung cancer (NSCLC), even in early stage patients. In this study, our aim is to evaluate the effect of maximum value of standardized uptake values (SUVmax) of primary tumor in PET/CT before surgery on relapse in operable NSCLC. **Method:** Data from 191 operable stage I-III NSCLC patients who had preoperative PET/CT was retrospectively analyzed between 2006-2018. Demographic and clinicopathologic findings were analyzed. Patients were staged according to TNM 8th edition. ROC curve analysis was performed to determine the ideal cut-off value of preoperative SUV max to predict relapse. The findings were analyzed using SPSS. **Result:** At the time of diagnosis, median age was 62 years (39-82) and 84% of patients were male. Eighty-nine percent of our patients were smokers and smoking rate in males was 98%. Most common pathologic subtype was adenocarcinoma (Table 1). Mean follow-up duration was 35 months (1-128 months). Fourty-seven percent recurred and median progression free survival time (PFS) was 45 months (29-60 months). Median overall survival (OS) was 80 months. The ideal cut-off value of preoperative SUVmax that predicted relapse was 10.75 in the ROC analysis [AUC: 0,58 (0,50-0,66) p<0,05 with a sensitivity of 65%, and specificity of 57%]. Median PFS was 89 months in patients with preoperative SUVmax ≤ 10.75, and 34 months in patients with SUVmax > 10.75 (HR= 1.69; 95% CI 1.09-2.61; P =0.01). **Conclusion:** Approximately 30% of NSCLC patients are diagnosed at early stage. Although surgery

Table 1. Demographic and clinicopathological findings

Gender	Male	160 (%84)
	Female	31 (%16)
Smoking	Yes	171(%89)
	No	20 (%11)
Stage	Stage 1 (n=51)	Stage 1A1-A3 33 (%17)
		Stage 1B 18 (%10)
	Stage 2 (n=78)	Stage 2A 17 (%8)
		Stage 2B 61 (%32)
	Stage 3 (n=62)	Stage 3A 53(%28)
		Stage 3B 9 (%5)
Pathology Subtype	Adenocarcinoma	98 (%51)
	Squamous cell carcinoma	81 (%42)
	Others	12 (%7)
Adjuvant treatment (n=123)	Stage 1	5 (%4)
	Stage 2	65(%53)
	Stage 3	53 (%43)
Recurrences	Yes	90 (%47)
	No	101 (%53)
Recurrence patterns	Local	15 (16 %)
	Systemic	75 (84 %)
Status	Alive	131 (%69)
	Ex	60 (%31)

is curative treatment in early stage, recurrences are common. Pre-operative SUV(max) of primary tumor in PET/CT might be a predictor of postoperative relapse for operated NSCLC. **Keywords:** PET/CT, SUVmax of primary tumor, Early stage lung cancer

P3.17-01

PD-L1 Expression, EGFR Mutations and ALK Expression in Non-Small Cell Lung Cancer (NSCLC) Patients from Brazil



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Background: Despite the importance of the mutational profile to outcomes in non-small cell lung cancer (NSCLC), there is limited data describing the prevalence of molecular alterations such as ALK translocations, EGFR mutational status and programmed death-ligant 1 (PD-L1) expression in tumors from Brazil. The aim of this study was to investigate the mutational profile of lung adenocarcinoma of specimens from Brazil and correlation between high PD-L1 expression in NSCLCs with known driver oncogenes ALK and EGFR **Method:** We retrospectively evaluated PD-L1 expression in 132 surgically resected primary lung adenocarcinoma including 57 with EGFR status mutation and 121 with ALK expression. PD-L1 and ALK expression were evaluated by immunohistochemical analysis with the SP263 and D5F3 assays, respectively. EGFR mutation status was assessed by sequencing. **Result:** Of the 132 samples analyzed, 2 (1.5%) had a PD-L1 tumor proportion score (TPS) of 1%–4%, 31 (23,5%) had a PD-L1 TPS of 5%–49% and 20 (15.2%) ≥50%. ALK expression was detected in 18 (14.9%) of the 121 tumor samples and 3 (16.7%) of them had a PD-L1 TPS of ≥50%. Forty-two (73.7%) patients had wild-type EGFR, and 15 (26.3%) had mutant EGFR being exon 21 L858R and exon 19 deletion the most frequent mutation. Of the 15 tumors with EGFR mutations, 11 (73.3%) did not express PD-L1 and 4 (26.7%) had a PD-L1 TPS of 1%–49% **Conclusion:** Considering that a subset of patients with ALK expression had a PD-L1 TPS of ≥50%, further studies will be required to examine the efficacy of PD-1/PD-L1 inhibitors in such patients. **Keywords:** lung adenocarcinoma, PD-L1, EGFR