

European Respiratory Society Annual Congress 2013

Abstract Number: 3766

Publication Number: P2305

Abstract Group: 1.4. Interventional Pulmonology

Keyword 1: Bronchoscopy **Keyword 2:** No keyword **Keyword 3:** No keyword

Title: Histopathologic features of lung tissue in cryobiopsy specimens

Dr. Mihan 23097 Pourabdollah mihan_p@yahoo.com MD , Dr. Shahram 23098 Sabeti sabeti_shahram@yahoo.com MD , Dr. Arda 23099 Kiani ardakiani@yahoo.com MD , Dr. Mahdi 23100 Karimi dr.mahdikarimi@yahoo.com MD , Dr. Hamidreza 23101 Jabbari dr.hrjabbari@yahoo.com MD and Dr. Shirin 23116 Karimi shkarimi@yahoo.com MD . ¹ Pathology, NRITLD, Tehran, Islamic Republic of Iran ; ² Pathology, Loghman Hakim Hospital, Tehran, Islamic Republic of Iran ; ³ Interventional Bronchoscopy, NRITLD, Tehran, Islamic Republic of Iran ; ⁴ Interventional Bronchoscopy, NRITLD, Tehran, Islamic Republic of Iran ; ⁵ Interventional Bronchoscopy, NRITLD, Tehran, Islamic Republic of Iran and ⁶ Pathology, NRITLD, Tehran, Islamic Republic of Iran .

Body: Background:Conventional TransBronchial Lung Biopsies(TBLB)used for diagnosis of diffuse lung diseases usually lack adequacy due to small sample size and crush artifact.Flexible cryoprobe is useful in obtaining lung biopsy bronchoscopically(FCLB).Methods:41patients who were candidates forTBLBwas included in this study in Masih Daneshvari Hospital.BothTBLB and FCLBwere performed on each patient sequentially.Histopathologic assessment was done by 2 pathologists,blindly .2dimensions were measured by microscope and area calculated mathematically.Results:The mean specimen area was5(0.2–16)mm²in TBLBs compared to20(2–100)mm²,p =0.00inFCLBs.19of41(46.34%)TBLB and1of41(2.43%)FCLB specimens were inadequate. 10 FCLBs&1TBLBS of22 adequate ones were the only diagnostic specimens.11 of 22(50%)TBLBs &28of40(70%)FCLBs showed diagnostic findings including granuloma,Pneumocystis Jiroveci, Alveolar Proteinosis,Langerhans Cell Histiocytosis,Pulmonary Hemorrhage,carcinoma,IV abuse disease,aspiration ,and hypersensitivity pneumonitis.Bronchioles and acinar structures were included in 6/62 (9.67%) total adequate biopsies, all of them were FCLBs.TBLBs andFCLBs showed crush artifact(15/22=68.18%) and microscopic hemorrhage(8/40=20%)as the most common artifactual changes respectively.Intraalveolar ciliated columnar epithelial cells(7/40=17.5%)was the other artifact in FCLB group, not reported previously. Conclusions:In comparison with TBLBs, FCLBs give larger size lung tissue and as a special morphologic finding,contain acinus and bronchiolar structures.They also have special artifacts and pathologists should be familiar with the special histomorphologic features of these specimens.