Figure. Absolute numbers of peripheral lymphocyte subsets between healthy controls and patients were assessed by flow cytometry using oneplatform method. PM/DM infection group (n=34), PM/DM non- infection group(n=31)and healthy control group (n = 20).(*p<0.05, **p<0.01, ***p<0.001)

Disclosure of Interests: None declared
DOI: 10.1136/annrheumdis-2020-eular.5163

AB0631 THE CLINICAL CHARACTERISTICS OF SYSTEMIC SCLEROSIS WITH LUNG CANCER: DATA FROM SINGLE CENTER IN CHINA

H. Zhong¹, J. Zhou¹, S. Zhang¹, Y. Xu², Y. Hou¹, M. Li¹, D. Xu¹, M. Wang², X. Zeng¹. ¹Peking Union Medical College Hospital, Chinese Academy of Medical Sciences, Department of Rheumatology, Beijing, China; ²Peking Union Medical College Hospital, Chinese Academy of Medical Sciences, Department of Respiration, Beijing, China

Background: Malignant neoplasms is the second most common non-SSc associated cause of death in SSc patients, only second to infection. And among all the neoplasms, lung cancers are the most common, which is in the urgent need of attention from clinicians.

Objectives: To analyze the clinical features of patients of SSc with lung cancer.

Methods: Medical records of inpatients admitted in Peking Union Medical College Hospital from March 1992 to December 2018, were collected and analyzed, including the clinical manifestation, laboratory data, radiological images, pathology. SSc patients without lung cancer during the same period, matched by age and gender, were selected as the controls.

Results: Nineteen SSc patients with complete medical records were identified, with 17 (89.5%) females and 2 (10.5%) males. The mean age of SSc onset was 37.8±12.0) years old and of lung cancer diagnosis was (54.4±10.2) years old. One (5.3%) had a smoking history. Eight (42.1%) patients had family history of cancer, which was significantly higher than those without lung cancer (4 patients, 5.3%, P<0.001). The proportion of limited cutaneous SSc (lcSSc) were 63.2% among these patients, and 18 (94.7%) had interstitial lung disease (ILD), the difference between the two groups was not statistically significant (P = 0.259 and 0.051, respectively). All ILD was diagnosed before the onset of lung cancer, with a median interval of 9.2 (range 1.6-28.1) years. SSc patients with lung cancer had less myositis than control group (0% vs. 27.6%, P = 0.032), yet no significant differences were identified in Raynaud's syndrome, esophageal involvement, digital ulcers, pulmonary hypertension, telangiectasia and arthritis. All patients developed lung cancer after the diagnosis of SSc, with a median interval 10.5 (range 2.0-36.2) years. In most of them(18, 94.7%), lung cancer happened after at least 6 years of SSc onset. Newly happened cough (9 patients), worsening decrease in activity endurance (3), chest pain (2), hemoptysis (2), nodes in lung through regular CT scans (3) were the first presentations of lung cancer. Ten(62.5%) neoplasms developed in the lower lobes of the lung, while 3 was in the upper lobes, one in the lingual lobe, and one in the left pulmonary hilum, and 3 were unknown. The median survival of the case group were 31.4 years, while the

median survival of the control group was not reached. Eight patients tested EGFR gene mutation or ALK gene rearrangement, and only 2 were positive.

Conclusion: It is not uncommon that SSc could be concomitant with lung cancer, especially for those with long disease duration and family history of malignancy. Due to the subtle onset of lung cancer, clinicians should pay attention to it during clinical practice.

References:

- [1] Hu S et al. Arthritis Res Ther, 2018, 20:235.
- [2] Steen VD, Ann Rheum Dis, 2007, 66:940-944.
- [3] Tyndall AJ et al. Ann Rheum Dis, 2010, 69:1809-1815.
- [4] Compton CC et al. AJCC Cancer Staging Atlas [M]. 7th ed. New York:Springer, 2012:311-328.
- [5] Dettnerbeck FC et al. Chest, 2016, 1:193-203.
- [6] Kuo CF et al. J Rheumatol, 2012, 41:44-49.
- [7] Nishioka K et al. J Dermatol, 1996, 23:677-682.
- [8] Ling Z, et al. 2016, 10:238-241.
- [9] Heist RS et al. J Thorac Oncol, 2012, 7:1775-1780.
- [10] Kim HR et al. J Clin Oncol, 2013, 31:731-737.
- [11] Igusa T et al. Ann Rheum Dis, 2018, 77:1179-1186.
- [12] Hill CL et al. Lancet, 2001, 357:96-100.
- [13] Pontifex EK et al. Ann Rheum Dis, 2007, 66:551-553.
- [14] Thun MJ et al. N Engl J Med, 2013, 368:351-364.

Disclosure of Interests: Hui Zhong: None declared, Jiaxin Zhou: None declared, Shangzhu Zhang: None declared, Yan Xu: None declared, Yong Hou: None declared, Mengtao Li: None declared, Dong Xu: None declared, Mengzhao Wang: None declared, Xiaofeng Zeng Consultant of: MSD Pharmaceuticals
DOI: 10.1136/annrheumdis-2020-eular.3423

20. Spondyloarthritis - treatment

AB0632 EFFECTIVENESS OF ETANERCEPT BIOSIMILARS IN REACTIVE ARTHRITIS: RETROSPECTIVE CASE CONTROL

S. Ahmed¹, P. Padhan¹. ¹Kalinga Institute of Medical Sciences (KIMS), Bhubaneswar, India

Background: There is a paucity of evidence based therapies for reactive arthritis(ReA). Data is limited for anti-TNF drugs usage [Table 1] with even less data on biosimilars.

Table 1. Anti-TNF use in reactive arthritis

Place (year)	Anti-TNF	N	Outcomes	Remarks
Pennsylvania, USA (2005)	Etanercept	16	10 completed trial: 9 responders	Synovial histology improvement but not normalized
Strasbourg, France (2011)	Infliximab(5) Etanercept(4) Adalimumab(1)	10	Rapidly effective in 9 patients (90%) 5 had DFR	Relapses responded to re- initiation
Besançon, France (2016)	Etanercept (9) infliximab (3) Adalimumab(3)	15	5 had DFR	9 developed chronic SpA
Delhi, India (2019)	Infliximab(10), Adalimumab(3) Etanercept(1)	9	At median of 3.5 months: 4 had remission, 3 relapse, 1 adverse reaction	Biologics were not given regularly
Current study	Etanercept biosimilars	10	At median 7 months: 6 had DFR	All patients responded

DFR: drug free remission

Objectives: To find out the outcomes of etanercept biosimilars (ETN-b) use in ReA

Methods: A retrospective review of patients meeting the Braun criteria⁵ for probable ReA helped identify patients on ETN-b. Patients with less than 1 year follow-up and those who had received less than 5 doses of ETN were excluded. Biological naïve patients who had completed at least 1 year follow-up were included as controls. Baseline and current status was compared between these two groups.

Results: Of 94 identified ReA patients, 11(11.7%) had received ETN-b and 10 met the case definition. Five each had received one of two ETN-b. 30 were available as controls. All cases had been documented as refractory ReA. Amongst cases, 7 patients had resolution of ReA; 2 had relapsing courses and 1 persistent arthritis. Four were in remission off all drugs. Controls has similar proportions [Table 2]. There were no infections or adverse effects recorded during follow-up.