The management of interstitial lung diseases: the importance of the rheumatologic expertise in multidisciplinary meetings

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Background: Multidisciplinary team (MDT) meetings are the current standard associated to a rheumatological diagnosis in patients with ILD, suggesting single clinical or laboratory abnormalities are not strongly associated with a diagnosis. In this study, we evaluated only preselected patients by ILD-MDT, but the results indirectly suggest that direct participation of rheumatologist to MDT is advisable to increase accuracy and reduce delay in diagnosis and treatment.

Methods: We included 125 ILD patients registered in a rheumatology database from 2012 to 2017. Only patients with a rheumatological diagnosis were included. A complete rheumatological evaluation, the patients had a mean age of 64.4±12.6 years and 21.1±39.6 months since the first identification of ILD on a CT scan. Twenty-five (71.8%) and 18 (56.3%) patients respectively complained exertional dyspnea and cough, 6 patients (18.8%) were on oxygen therapy and 13 (40.6%) had a FVC<80. The pattern on CT scan suggested a UIP, NSIP and OP respectively in 18 (56.3%), 6 (18.8%) and 2 (6.3%) patients. Ten patients (31.3%) were diagnosed with a defined rheumatological condition (4 with Sjogren Syndrome, 3 with Systemic Sclerosis, 1 with Rheumatoid Arthritis, 1 with Mixed Connective Tissue Disease and 1 with Granulomatosis with Polyangiitis); 7 (21.9%) were diagnosed with Interstitial Pneumonia with autoimmunity feature (IPAF). A rheumatological diagnosis was not statistically associated with any specific rheumatologic red flag, routine laboratory abnormalities or family history of systemic autoimmune disease. Three out of 13 capillaroscopies and 3 out of 9 salivary glands biopsies performed had diagnostic findings. The only immunologic abnormalities associated to a rheumatologic diagnosis were RF positivity (20.0% vs 54.5%, p = 0.024) and p-ANCA positivity (10.0% vs 40.9%, p = 0.042), both with low specificity (respectively 15.0% and 18.8%) and sensitivity (respectively 55.6% and 42.9.0%). After diagnosis, 11 patients (34.4%) started immunosuppressive therapy and 7 (21.9%) started biologic therapy.

Conclusion: Single clinical or laboratory abnormalities are not strongly associated to a rheumatological diagnosis in patients with ILD, suggesting that only a comprehensive rheumatological evaluation allows correct classification of the disease associated with ILD and is mandatory to make or exclude a diagnosis. In this study, we evaluated only preselected patients by ILD-MDT, but the results indirectly suggest that direct participation of rheumatologist to MDT is advisable to increase accuracy and reduce delay in diagnosis and treatment.

Disclosure of Interests: None declared
AB1137 QUANTIFYING KNEE JOINT EFFUSIONS WITH CLINICAL TESTS, MUSCULOSKELETAL ULTRASOUND AND SYNOVIAL FLUID ASPIRATION: A PROSPECTIVE COHORT STUDY

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Background: Aspiration of knee joint effusions is an integral diagnostic and therapeutic intervention in many rheumatologic diseases. Clinical examination has traditionally involved tests including the “patella tap” or “bulge test”. The accuracy of these tests for determining effusion presence and size is not well established. Musculoskeletal ultrasound (MUS) is considered better for identification and quantification of knee effusions. Objectives: To investigate the correlation between both clinical examination and MUS to aspirated knee effusion volume.

Methods: We performed a prospective cohort study of 37 osteoarthritis patients with symptomatic knee effusions. Clinical assessment with patella tap, bulge test and knee circumference measurement were carried out. MUS was used to measure effusion depth in the suprapatellar, lateral and medial parapatellar views. All knee effusion aspirations were performed by the same experienced clinician using a consistent, lateral approach. Linear regression analysis was used to assess correlations between clinical tests, MUS and aspiration volume.

Results: In patients with >3ml of fluid aspirated, patella tap and bulge test were positive in 67% and 80% respectively. The positive predictive value for bulge test was 80%. Where larger volumes were aspirated (i.e. >10ml), patella tap and bulge test were only positive in 52% and 65% respectively. There was a significant correlation between the measured circumference of the index and non-index knee and aspiration of fluid (coefficient=5.4, p=0.007). The relationship between fluid depth on MUS and aspirated volume showed a trend towards statistical significance, with a depth of 1mm equating to 1.57 ml of fluid (coefficient=1.57, p=0.06).

Conclusion: This pilot study demonstrates that a positive patella tap or bulge test is moderately predictive of knee effusion volume. However, this association is weaker when larger knee effusions are present. MUS showed promise at accurately predicting knee effusion volume. A larger study is underway to assess this relationship further.

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