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Quality of care, Real-word evidence, Qualitative research methods

Establishing A Multidisciplinary Clinic To Improve The Quality Of Care For Patients With Interstitial Lung Disease.

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Background:

Patients with interstitial lung disease related to rheumatic disease (ILD-RD) often need to see multiple specialties to establish the diagnosis and for management. Such care is better provided in a multidisciplinary clinic (MDC) and setting up such a MDC involves significant cost, time and buy in from stakeholders. In our center, we approached starting a MDC as a multiple phased project. Phase 1: confirm improved patient outcomes when multiple specialties are involved in providing care to these patients. Phase 2: application for an internal grant for a prospective pilot clinic and phase 3: the establishment of a permanent MDC. We report the results of our phase 1 analysis.

Objectives:

The primary aim of this study was to determine if involvement of our pulmonary and cardiology colleagues in the care of patients with ILD-RD seen in the rheumatology clinic results in improvement in the evaluation and treatment of these patients.

Methods:

This is a retrospective, single center, hospital-affiliated outpatient study. All patients seen in the rheumatology clinic with a diagnosis of ILD-RD between January 1 2018 and December 31 2019 were eligible for enrollment. A list of patients was generated by the technology service group using relevant international classification of diseases codes. These records were reviewed and those meeting the inclusion and exclusion criteria were enrolled.

A review of the 1574 charts generated confirmed 41 patients with ILD-RD. Demographic data, as well as disease related data including serological testing, disease manifestation and treatment choices was obtained. Continuous variables were analyzed using T-test or Mann-Whitney U test. Categorical variables were analyzed using Chi-square Tests or Fisher's exact tests. Statistical analysis was performed using SAS9.4, and p value <0.05 was considered statistically significant.

Results:

Patients seen by more than one specialty were more likely to have had a more extensive evaluation for ILD and its complications. The cause of the ILD-RD did not have an impact on the tests performed or the number of specialist seen.

There was a significantly more glucocorticoids monotherapy use in scleroderma related ILD, but disease-modifying antirheumatic drugs were more commonly used in non-scleroderma ILD patients.

Table 1: Demographics			
	Non-scleroderma ILD (N = 27)	Scleroderma ILD (N = 14)	p-value
Age at diagnosis	72.8 (10.2)	70.5 (13.7)	0.55
Female	70.4% (19/27)	71.4% (10/24)	0.99
Race			0.69
Caucasian	77.8% (21)	85.7% (12)	
African American	22.2% (6)	14.3% (14)	
PAH	17.4% (4/23)	23.1% (3/13)	0.69
PFT	87.5% (21/24)	92.9% (13/14)	0.99
CT Chest	100% (24/24)	100% (14/14)	
Right HCC	30.4% (7/23)	21.4% (3/14)	0.71
Number of specialists			0.31
1	8.3% (2)	14.3% (2)	
2	37.5% (9)	57.1% (8)	
3	4.2% (13)	28.6% (4)	
Medication			<0.01
None	0% (0)	14.3% (2)	
GC	7.4% (2)	42.9% (6)	
GC + DMARDs	88.9% (24)	42.9% (6)	
DMARDs	3.7% (1)	0% (0)	

Conclusion:

Our data suggests that a MDC for RD-ILD results in a more thorough investigation and treatment, and this will likely lead to improvements in patient outcomes. Based on these findings, our rheumatology group is seeking internal funding for a pilot clinic evaluating prospectively the benefits of an ILD MDC.

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