**Background:** Esophageal involvement is common in dermatomyositis (DM), occurring in up to 54% of patients [1]. It can lead to severe complications, such as malnutrition and aspiration pneumonia. Therefore, esophageal assessment is of foremost importance to drive patient management. Recently, high-resolution impedance manometry (HRiM) has emerged as a promising technique to assess esophageal motility and has already been tested in systemic sclerosis [2].

**Objectives:** To evaluate esophageal motility by HRiM in DM and correlate the alterations to clinical and serological disease domains.

**Methods:** We analyzed HRiM findings in 15 consecutive DM patients enrolled in our clinic between December 2021 and December 2022. All patients received a rheumatological assessment, including screening questions for dysphagia, and underwent HRiM. All HRiM parameters (Integrated relaxation pressure (IRP), percentage of LES relaxation, distal contractile integral (DCI), distal latency (DL), upper esophageal sphincter (UES) pressure) were studied, coupled with impedance findings (esophageal clearing and bolus transit time). The report followed the Chicago Classification v.4.0 for esophageal motility disorders. The associations between HRiM findings and DM features were evaluated.

**Results:** DM patients were divided according to their serological status: 5 M2 (33%), 6 MDA5 (40%), 2 Ku (13%), 1 NXP2 (6.6%), 6 Ro52 (40%). Asymptomatic patients presenting at least one HRiM alteration were 4 (26.7%). Among HRiM parameters, 83.3% MDA5 patients and 50% Ro52 patients showed high UES pressure (Figure 1), in contrast to the other serological groups. Among impedance findings, incomplete bolus clearance was detected in MDA5 (67%) and in Ro52 patients (50%). Notably, the only NXP2 patient showed 100% of incomplete bolus clearance. Considering the Chicago classification v.4.0, only 16.7% of MDA5 patients had a normal esophageal motility, the rest presenting absent contractility (33.3%) and ineffective esophageal motility (IEM) (50%). Distal esophageal spasm was evidenced only in M2 patients (40%). All patients with concomitant manometric and impedance alterations were MDA5 positive. DM patients with high UES, IEM or impedance abnormalities presented higher rate of lung involvement and active Raynaud’s phenomenon (Table 1). No relation with ongoing treatment emerged.

**Conclusion:** We describe for the first time HRiM findings in DM. Anti-MDA5 patients appear to have a more severe esophageal involvement, even in absence of reported dysphagia, followed by anti-Ro52 patients. Interestingly, the same subsets show higher prevalence of lung involvement and Raynaud’s phenomenon, suggesting a possible pathogenetic link between esophageal, lung and cutaneous involvement. Asymptomatic patients may present occult esophageal motility disorders detected by HRiM. Further validation of our findings is required to definitely include HRiM in the workup of DM patients as a diagnostic, prognostic and monitoring tool.

**Acknowledgements:** NIL.

**Disclosure of Interests:** Chiara Rizzo: None declared, Lidia La Barbera: None declared, FEDERICA CAMPARDA: None declared, DENISE DONZELLA: None declared, Gabriele Barletta: None declared, Sebastiano Bonventre: None declared, Giuliana Gugino Speakers bureau: Pfizer, Novartis, Celgene, Abbvie, Lilly, Janssen, UCB.

**DOI:** 10.1136/annrheumdis-2023-eular.4970

---

**AB0886 PROGRESSIVE INTERSTITIAL LUNG DISEASE IN PATIENTS WITH SYSTEMIC SCLEROSIS-ASSOCIATED INTERSTITIAL LUNG DISEASE**

**Keywords:** Systemic sclerosis

G. Cuomo1, C. Di Vico1, D. Perretta1, C. Iandoli1, R. Ciaburri1, P. Adamo1. 2 Università degli Studi di Napoli, Precision of Medicine, Caserta, Italy

**Background:** A subset of patients with systemic sclerosis associated interstitial lung disease (SSc-ILD) develop progressive ILD, which is associated with higher mortality, but the prevalence of progressive ILD and the overall disease course and patterns of SSc-ILD are unknown. Current clinical practice emphasises treatment initiation. of SSc-ILD patients with progressive ILD.

**Objectives:** To identify progression patterns and risk factors predictive for progressive interstitial lung disease (ILD) in patients with systemic sclerosis-associated ILD (SSc-ILD)

**Methods:** Within our database, patients included since 2000 aged ≥18 years fulfilled the SSc classification criteria and had lung imaging data available and had measurements of forced vital capacity (FVC) at baseline and after 12±3 months. A decline in FVC of ≥10%, or a decline in FVC of 5% to 10% along with a decline in DLCO of 15%, is a proposed definition of progressive fibrosis.

**Results:** From our database of the 813 patients included 210 (25.8%) had evidence of SSc-ILD on imaging, 134 (63.8%) at basal and 76 (36.2%) at follow-up. The proportion of patients with progressive ILD was 35.7% (74/210). Among patients with progressive ILD, 15.6% (11/74) died within the first year. Characteristics at baseline were: mean age 61.9 (SD 10.4) years, mean FVC 74.7% of predicted, mean DLCO 68.7% of predicted. The median follow-up was 34.9 months (range 12-118). Logistic regression analysis identified the following independent factors predictive of progressive ILD: lower FVC (OR: 1.03, 95% CI: 1.01-1.05), lower DLCO (OR: 1.03, 95% CI: 1.01-1.05), lower FVC-DLCO ratio (OR: 1.03, 95% CI: 1.01-1.05), higher SSc seropositivity (OR: 3.20, 95% CI: 1.18-8.71), higher RF positivity (OR: 3.43, 95% CI: 1.05-11.48).

**Acknowledgements:** NIL.

**Disclosure of Interests:** None declared.

**DOI:** 10.1136/annrheumdis-2023-eular.4970