

## Medical or Research Professionals/Clinicians

*Topic area: Clinical topics by disease*

*Specific topic: 19. Scleroderma, myositis and related syndromes - clinical aspects and treatment*

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### **IMPROVEMENT OF REFRACTORY DYSPHAGIA IN PATIENTS WITH IDIOPATHIC INFLAMMATORY MYOPATHIES RECEIVING IMMUNOGLOBULIN INTRAVENOUS THERAPY**

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**My abstract has been or will be presented at a scientific meeting during a 12 months period prior to EULAR 2015:**

No

**Is the first author applying for a travel bursary or an award for undergraduate medical students?:** No

**Background:** Polymyositis (PM) and Dermatomyositis (DM) are systemic inflammatory diseases affecting skeletal muscles and other organs, particularly hypopharynx and the upper tract of the esophagus, resulting in motility dysfunction. The current treatment for PM and DM consists of steroids and immunosuppressants, but esophageal involvement is often refractory to standard therapies.

**Objectives:** To assess the efficacy and safety of intravenous immunoglobulins (Ig-iv) as therapy of refractory dysphagia in patients affected by idiopathic inflammatory myopathies (IIM) who have received conventional treatments for at least three months.

**Methods:** We enrolled 11 patients (9 women), 4 with DM, 7 with PM according to Bohan and Peter criteria. At baseline, all patients had received prednisone (5-10 mg/day) associated to Methotrexate (15 mg/week) or Azathioprine (100 mg/day) for at least three months, without improvement of dysphagia. All patients received Ig-iv at a standard dose (2 g/kg/day only for a day). In all patients at baseline and after each infusion VES 1h, PCR, LDH, CK levels were measured and Manual Muscle Strength Test (MMT12 e MMT-tight) was made. Dysphagia assessment included: Eating Assessment Tool (EAT; positive for score  $\geq 3$ ), Three-oz Swallow Test (3oST) and fibrolaryngoscopy (FEES –pharyngeal muscle propulsion, stasis of liquid and solid bolus). For the statistical analysis we used Wilcoxon Rank test, Fisher Exact Test, Chi-square (software SPSS Statistic Base).

**Results:** At baseline there was evidence of correlation between MMT-12 and MMT-tight ( $p= 0,005$ ); CK and LDH levels were increased and EAT score was  $\geq 3$  in all patients. After the Ig-iv therapy we observed a statistically significant decrease in LDH levels ( $p= 0,024$ ), particularly between T0 and T1 ( $p < 0,05$ ); there was also a downward trend in CPK levels ( $p= 0,098$ ). Furthermore, we observed a statistically significant change of both MMT-12 ( $p= 0,017$ ) and MMT-tight ( $p= 0,027$ ). In addition we found a decrease of EAT score ( $p= 0,186$ ), an improvement of pharyngeal muscle propulsion and a partial resolution of liquid stasis.

**Conclusions:** According to literature, our findings indicate that Ig-iv therapy improves muscle weakness. Furthermore, a meaningful improvement of dysphagia also occurred, suggesting that Ig-iv may be considered an effective and safe treatment for refractory dysphagia in IIM patients. Further studies of larger cohort of patients are needed to confirm our results and evaluate the outcomes across time.

**References:**

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**Disclosure of Interest:** None declared