Abstract

**Purpose:** To describe the incidence, nature and clinical course of swallowing impairment in JDM.

**Methods:** A retrospective case note review was conducted for all children with new onset JDM between January 2009 and January 2014. Demographic data was collected, alongside descriptive data from bedside and video-fluoroscopy swallow assessments. Functional Oral Intake Scale (FOIS) scores were applied retrospectively. Childhood Myositis Assessment Scale (CMAS) scores were collected to represent general muscle strength. Spearman's rho correlation coefficient calculations were made to correlate CMAS with initial bedside assessment FOIS scores. Bedside FOIS scores were correlated with video-fluoroscopy FOIS scores where assessments were conducted within 7 days of each other.

**Results:** Ninety five children presented with a new diagnosis of JDM. Forty nine children were referred to SLT during in-patient admission. Of those, 51% of this cohort (25 children) presented with swallowing difficulties (FOIS<6) on SLT bedside assessment. Twenty children underwent video-fluoroscopy. A typical picture of swallow dysfunction was identified. There was no correlation between muscle strength scores and severity of dysphagia. There was significant correlation (p<0.05) between bedside assessment and video-fluoroscopy FOIS scores. Mean length of time for swallow improvement was 24 days.

**Conclusions:** Dysphagia is common in children with JDM. Muscle strength scores cannot be used to predict swallow impairment, highlighting need for SLT dysphagia assessment. Clinicians should be aware of the commonly identified features of swallowing seen in this population. Results can support counselling of children and families regarding the anticipated clinical course of dysphagia in JDM.