

## THE PREVALENCE AND RISK FACTORS FOR FEEDING AND SWALLOWING DIFFICULTIES IN SPINAL MUSCULAR ATROPHY TYPE II AND III

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**Background and aims:** To identify the prevalence and risk factors of feeding and swallowing problems in patients with type II and III spinal muscular atrophy (SMA).

**Methods:** Cross-sectional data from 108 genetically confirmed patients with SMA (age range: 3-45 years old; 60 were type II and 48 were type III) were analyzed. The questionnaire survey included demographic data, current functional and respiratory status, feeding and swallowing difficulties, and consequences. The risk factors were analyzed via logistic regression.

**Results:** The three most common problems of feeding or swallowing difficulties in patients with type II and type III SMA were 21.3% in choking, 20.4% in difficulties in getting food to the mouth, and 20.4% in chewing difficulties. Significant differences between those patients without feeding or swallowing difficulties and those with feeding and swallowing difficulties were found for body weight Z score, SMA type, current functional status, current functional status, and poor head control. Worsening current functional status is an independent risk factor for feeding and swallowing difficulties. (Sitters vs walkers, odds ratio=7.593, 95% CI=1.215-47.456)

**Conclusions:** Awareness of the high prevalence and risk factors for feeding and swallowing difficulties in SMA type II and III, suggesting that an individualized treatment plan depending on current functional status.