



NUTRITIONAL COUNSELING IN AMYOTROPHIC LATERAL SCLEROSIS: A PROJECT OF TELEHEALTH INTERVENTION

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Background and aims

Nutritional status is a major prognostic factor in Amyotrophic Lateral Sclerosis (ALS), and an intensive nutritional monitoring/support can help avoid severe weight loss over the disease course. We tested the impact of a Chatbot webapp aimed at improving communications between physicians and patients (and/or caregivers) for dietary monitoring.

Methods

We developed a chatbot that provides patients a tool to record their meals through an intuitive and carefully designed conversational interface. Patients reported dietary intake twice a week and received an adequate nutritional recommendation monthly. Functional and nutritional parameters were monitored and compared with a retrospective control group followed up by standard counseling.

Results

We enrolled 26 patients. Regarding feasibility, 96% of participants completed the three-month follow-up, and 77% ended the six-month one. Regarding the change in body-weight, we observed a stabilization over the telehealth ($F=1.874$, p -value 0.310 for changes) compared to the control group ($F=1.710$, p -value: 0.024 for changes).

Conclusions

This study provides class III evidence as a frequent dietary monitoring within a structured telehealth intervention turned out to stabilize body weight in ALS setting (significant as intra-rate analysis, positive trend as inter-rate analysis), allowing an early nutritional strategy adjustment. This approach for nutritional support seems to be feasible and reproducible also in other contexts, such as in cancer patients undergoing chemotherapy and/or radiotherapy, and moreover with a particular relevance in the context of the actual COVID19 pandemic.

