

INTRODUCTION

- The Mann Assessment of Swallowing Ability-Cancer (**MASA-C**) is a valid clinical dysphagia evaluation tool that provides both a **total score** and a **profile of swallowing related strengths/limitations** for head and neck cancer (HNC) patients.
- A **clinical profile of swallowing related changes** following chemoradiotherapy (CRT) might be useful in **dysphagia treatment planning and outcome monitoring**. However, few studies have compared clinically measured change related to swallowing in a cohort of CRT treated HNC patients.
- This study compared **change in MASA-C total scores** and **clinical profiles** from **pre-CRT** to **post-CRT** to follow up at **3 months CRT**. In addition, functional swallowing ability was monitored across these three time points.

METHODS

Patients

- 35 patients receiving CRT for HNC were included in the study. **Table 1** presents basic demographic details

Clinical assessments of swallowing

- MASA-C:** This examination consists of **24 items**. The total maximum score is 200 points. A **cut off score of 185** determines the presence of dysphagia in HNC populations. Lower scores reflect more severe swallowing deficits. We evaluated: 1- **MASA-C total scores at each time point** and 2- **change in the clinical assessment rating** of each of the **24 individual items** (clinical profile) between time points.

- The Functional Oral Intake Scale (FOIS):** FOIS is a valid and reliable tool used to document safe and adequate oral intake. A **7-point** ordinal scale describes the functional oral intake of patients. **Values below 6** are considered to reflect functional swallowing limitations. Lower values representing more restricted oral intake.

CONCLUSIONS

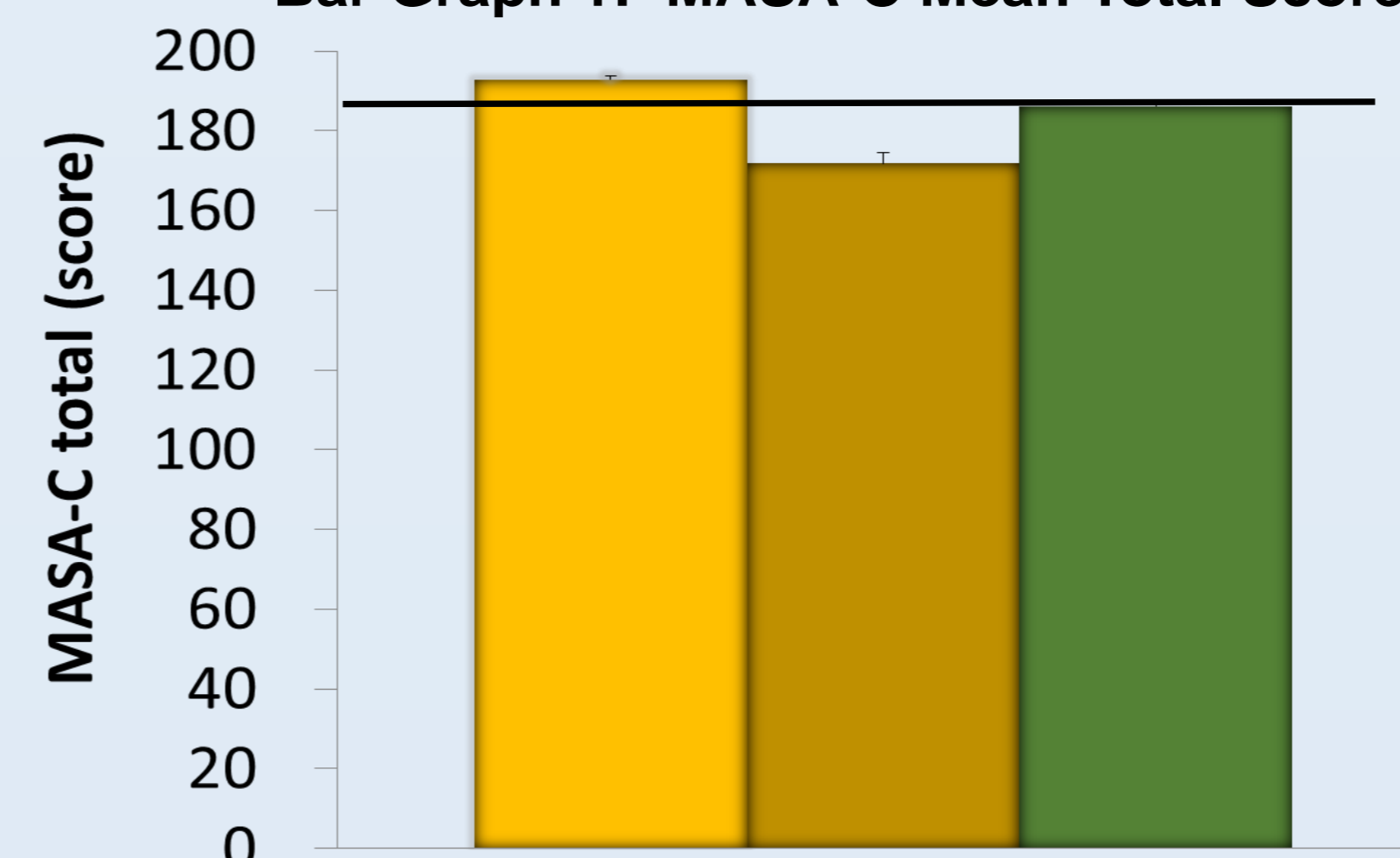
- Total Scores** (MASA-C and FOIS) indicate a pattern of **significant deficit following CRT (6 weeks) with incomplete recovery by 3 months** (Bar Graphs 1 and 2)
- Clinical Profiling** indicates **deterioration** in multiple swallow related functions. Greatest **post CRT reductions** were noted in **taste, smell, oral mucosa, saliva, diet, weight loss** and **pharyngeal response**. (Line Graph 1: items noted by ●)
- Recovery at 3 months** was noted in multiple items most notably **diet, oral mucosa, and tongue movement**. (●) Line Graph 2.
- Residual deficits at 3 months** were clinically noted primarily in **taste, saliva, weight loss, and pharyngeal response**. (●) Line Graph 3.
- Clinical profiling of swallow related functions via the MASA-C identifies deterioration and recovery of functions along with residual deficits. Such information may aid treatment planning.**

RESULTS

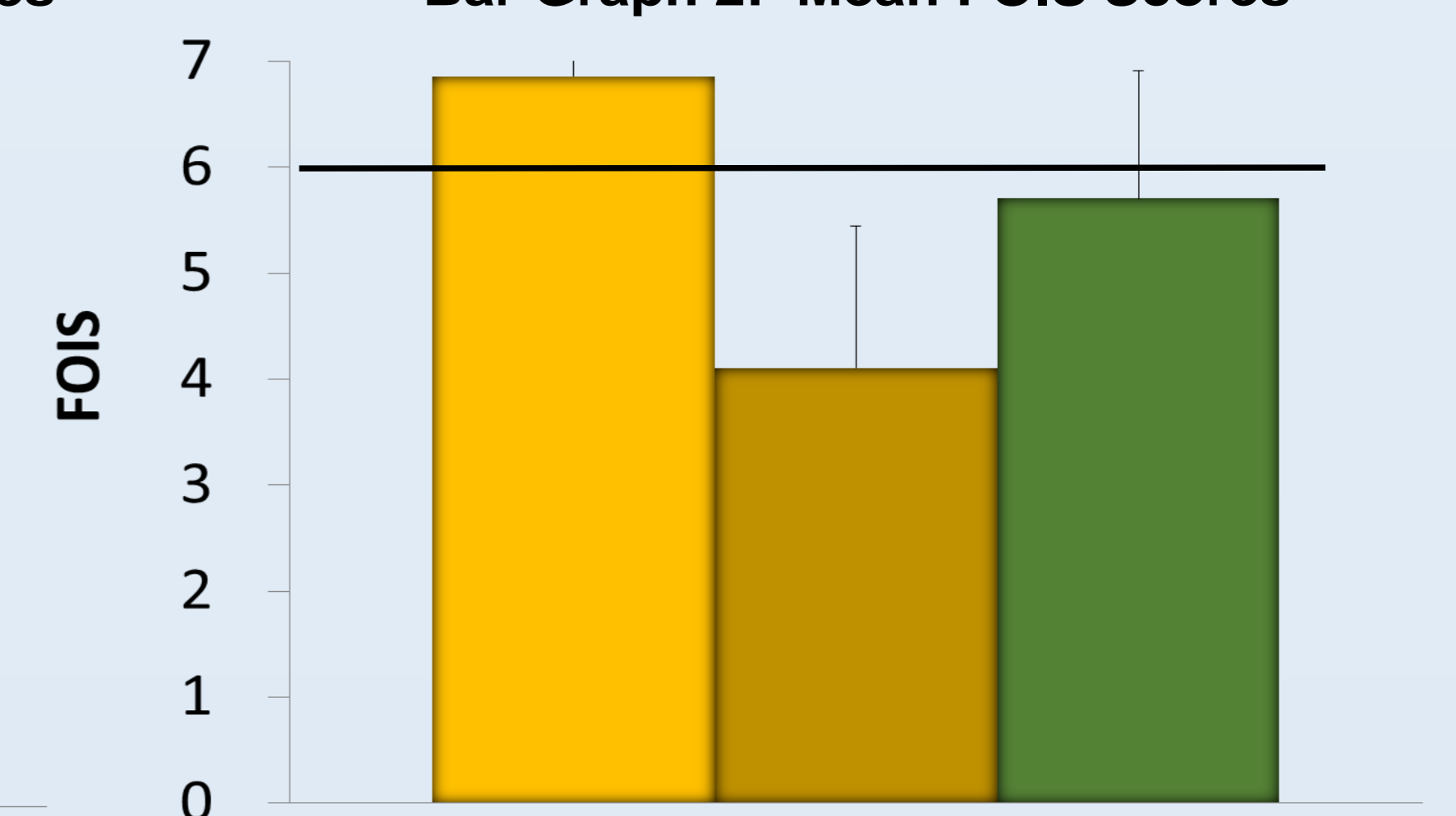
Table 1: Patient demographics

Demographics	CRT patients n=35
Age, years, mean(S.D)	63.11 (8.30)
Male/female	30 / 5
Total dose of Gy, mean(S.D), range	70.97 (3.92), 60 ~ 74
Tumor stage mode	T2, T3

Bar Graph 1: MASA-C Mean Total Scores



Bar Graph 2: Mean FOIS Scores



Change of clinical profile

