

Careggi UNIVERSITÀ DEGLI STUDI



ACUPUNCTURE FOR (CHEMO)RADIOTHERAPY-RELATED DYSPHAGIA IN PATIENTS WITH HEAD AND NECK SQUAMOUS CELL CARCINOMA (HNSCC): A RANDOMIZED PHASE 2 STUDY

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BACKGROUND

- For HNSCC patients dysphagia (DYS) during (chemo)radiotherapy (CRT) can lead to severe malnutrition
- A multicenter randomized, phase II trial (NCT05143268) evaluated the impact of acupuncture (ACP) in the mitigation of patient-reported DYS in patients undergoing curatively-intended CRT for HNSCC

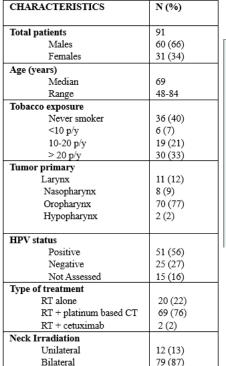
MATERIALS AND METHODS

- Randomization 1:1 to experimental (A) or standard (B) arm (study design in Figure 1)
- Primary endpoint: severity of acute DYS 2 weeks after CRT according to MDADI composite score
- Assuming a mean MDADI composite score
 of 58, based on the results of the DeESCALaTE randomized phase 3 trial, the
 use of ACP was hypothesized to yield a
 >10 point difference compared with arm B.
 Assuming a standard deviation (SD) of 18
 in both arms, with α=0.05 and 0.80 power,
 a total of 90 patients were required
 (accounting for 10% drop-out)

INCLUSION CRITERIA Histologically confirmed, locally advanced HNSCC WEEKS -2 -1 1 2 3 4 5 6 7 +1 +2 Curatively-intended non surgical ACUPUNCTURE ONCE WEEKLY Stage I-III for oropharyngeal RADIOTHERAPY TO cancer (OPC) HPV+, stage II-IVB for non-OPC HPV- carcinoma -2 -1 1 2 3 4 5 6 7 +1 +2 WEEKS (TNM/AJCC 8th edition) $Age \ge 18 \text{ y}$ ECOG PS 0-1

Stratification according to: - Unilateral vs bilateral neck irradiation - Concurrent vs no systemic therapy

Figure 1. Study design



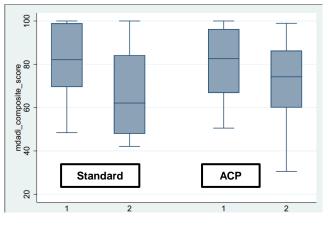


Figure 2. No difference was observed 2 weeks after CRT between the two arms. 1, pre-treatment (-2weeks) mean MDADI score; 2 timepoint +2weeks after CRT mean MDADI composite score, p=0.446

Table 1. Patients and treatment characteristics

RESULTS

PATIENT POPULATION

From 06/21 to 11/23, 91 patients (Arm A, 44; arm B, 47) enrolled from 6 centres (**Table 1**)

PRIMARY ENDPOINT

No difference was observed 2 weeks after CRT between the two arms (mean MDADI composite score of 72.1, SD 17.2, and 67.4, SD 20.7, in arms A and B, respectively; p=0.446) (**Figure 2**)

SECONDARY OUTCOMES

- A higher proportion of MDADI global score of 4-5 was observed in arm A (56.4%) compared with arm B (29.7%; p=0.023).
- Over time, patient-reported change in severity of QLQ-HN43 domains such as dry mouth, social eating and swallowing favoured arm A vs arm B (p=0.091, 0.002 and 0.052, respectively).

CONCLUSIONS

The results of our study suggest that ACP is feasible and may safely contribute to mitigate patient-reported swallowing dysfunction during CRT.

Further studies are needed to confirm the clinical relevance and generalizability of our findings.

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