

Preoperative chemo-radiotherapy in locally advanced esophageal carcinoma: Data from a multidisciplinary oncologic centre

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Introduction

Neoadjuvant chemo-radiotherapy (NA CRT) has shown benefit in overall survival (OS) in patients (pts) with locally advanced esophageal carcinoma. However, toxicity and postoperative morbidity are not negligible.

Methods

We retrospectively reviewed 61 patients with locally advanced esophagus carcinoma treated at Catalan Institute of Oncology and integrated centres who underwent NA CRT from 2009 to 2013. G3/4 toxicity and postoperative complications were recorded. OS and disease free survival (DFS) curves and medians were performed by using Kaplan Meier method. We analyzed prognostic factors by using multivariate Cox regression.

Results

61 pts were studied:

Patients characteristics	N = 61 (100%)
Age (median)	61 (34-75)
Males / Females	90% vs 10%
ECOG	
- ≤1	97%
- 2	3%
Barrett esophagus	20%
Histology:	
- Adenocarcinoma (ADC)	51%
- Squamous cell carcinoma (SCC)	49%
Location	
- Esophagus	82%
- Esophagogastric junction (Siewert I or II)	18%
Clinical stage	
- cT2N+	6 (10%)
- cT3-4a N0	3(5%)
- cT3-4a N+	50 (82%)

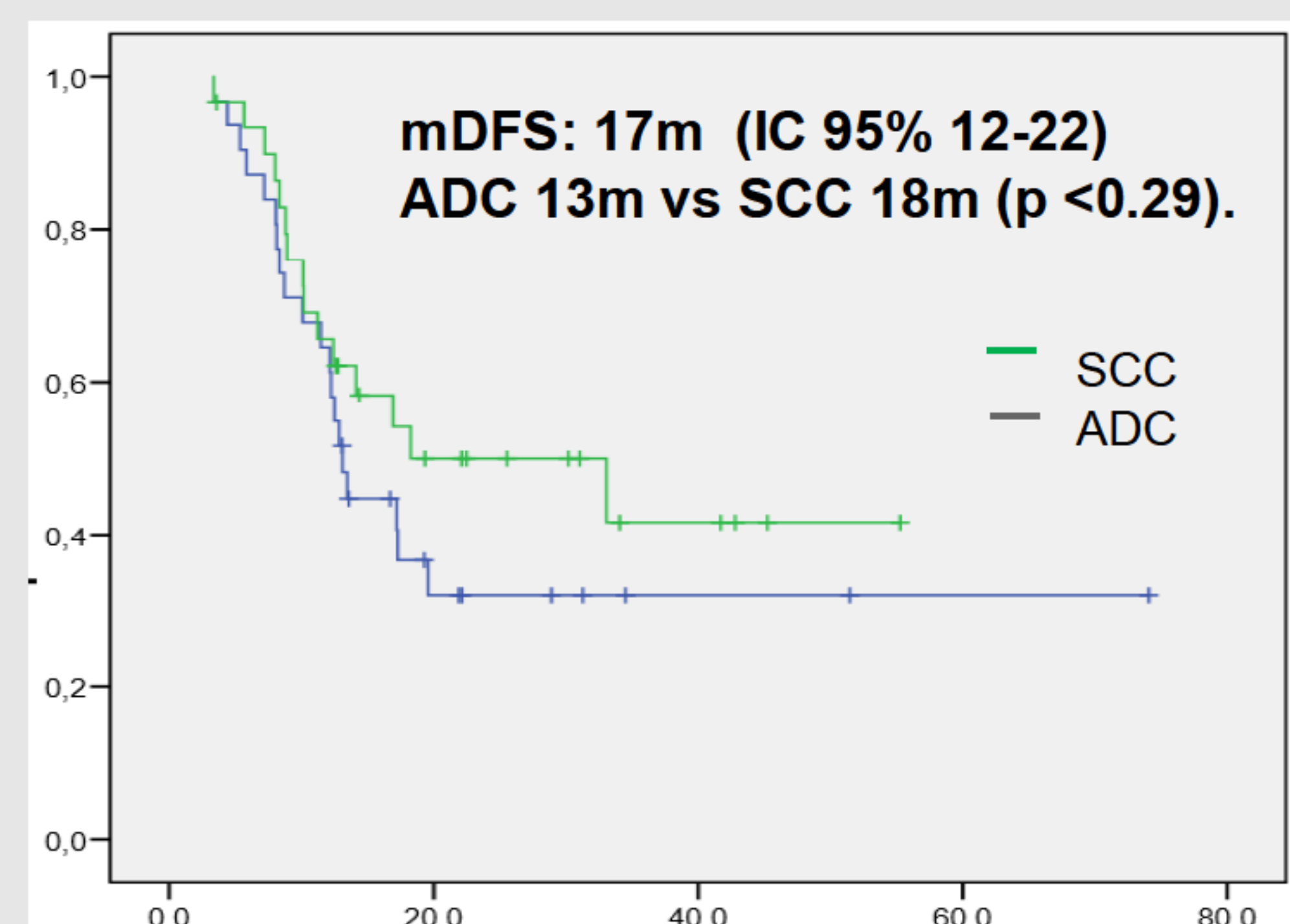
90% pts received 2 cycles of NA CT, being the most used regimen CDDP-5FU (87%). Total RT dose received was 45 Gy (75%) and 50,4 Gy (25%), depending on the centre protocol. G3/G4 toxicity occurred in 9% pts (5% nonhematologic, 4% hematologic). Treatment radiological response was assessed by PET: complete response: 16%, partial response: 56%, stable disease: 20%, progression: 8%. Deaths due to post-operative complications (within 30 days) occurred in 2 patients (4%).

Results from resected pts (N= 51): Overall recurrence rate (ORR) of pts who underwent surgery was 43% (54% and 32% of resected ADC and SCC, respectively). 25% pts had distant recurrence (DR), 8% locoregional recurrence (LR), and 10% synchronous DR and LR.

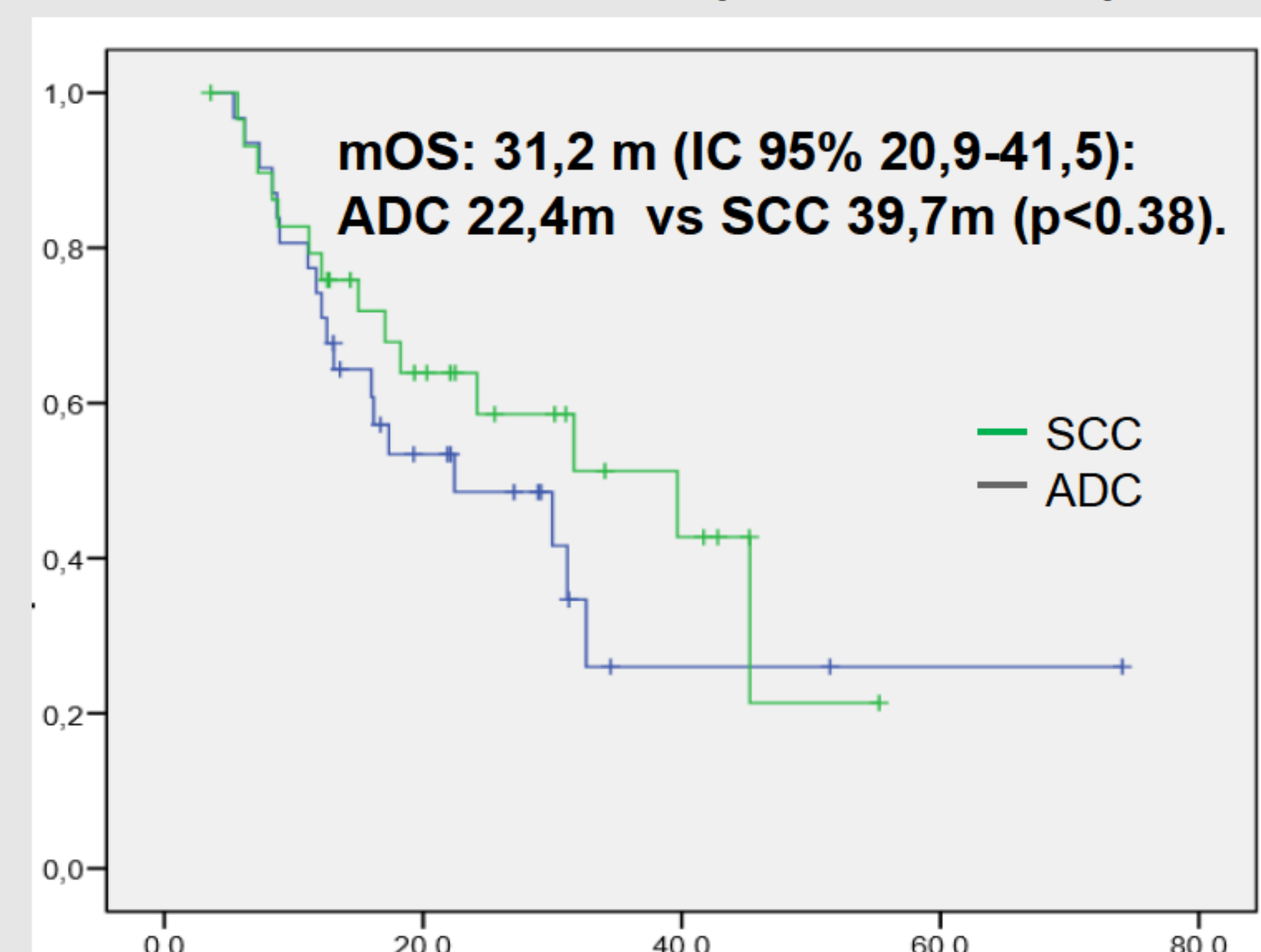
In the multivariate Cox regression, two independent factors influenced positively in OS: R0 (p< 0.001) and PS≤1 (p< 0.012).

Variables	N (resected pts) = 51 (100%)
R0	44 (86%)
- ADC	22
- SCC	22
ypTON0	10 (24%)
- ADC	3 (15% from all ADC)
- SCC	7 (30% from all SCC)
ypN+	17 (38%)

Disease free survival (ADC vs SCC)



Overall survival (ADC vs SCC)



Conclusions

NA CRT is a safe strategy for locally advanced esophagus carcinoma in selected pts who have been treated with a multidisciplinary approach. It improves tumor downstaging and R0 rate, which is related with better OS. ADC and SCC represent two distinct diseases with different response rate and prognosis. However, no significant differences were seen in our cohort probably due to small number of pts.

