

# DOSE REDUCTION, RELATIVE DOSE INTENSITY AND TREATMENT TOXICITY IN CERVICAL CANCER PATIENTS UNDER CISPLATIN AND RADIOTHERAPY TREATMENT

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## INTRODUCTION

◆ Studies show that obese patients tend to be submitted to empiric chemotherapy dose reduction, aiming to attenuate adverse effects of the treatment.

◆ Findings suggest that this practice is possibly related to worse clinical outcomes and there is no evidence of severe toxicity with full dose administration in this population.

## OBJECTIVES

To describe the relationship between body mass index (BMI) with capping dose, relative dose intensity (RDI) and treatment toxicity in cervical cancer patients.

## METHODS

◆ Cervical cancer patient, >18 years, admitted at Cancer Hospital II (INCA) between 2018 and 2019, without previous treatment, with proposal of cisplatin + radiotherapy.

◆ **Chemotherapy toxicity:** symptoms  $\geq$  grade 3 (CTAE v4.0).

◆ **Severe toxicity:** any adverse event resulting in interruption, delay or dose reduction (>15%).

◆ **Capped dose:** institutional protocol (70mg/week)

◆ **RDI:** (delivered dose/treatment duration)  $\div$  (prescribed dose/planned treatment duration).

## RESULTS

N=183	47 Years ( $\pm$ 12,6y)	89.6% Adults
87.4% Squamous cell carcinoma	43.7% Stage II	33.9% Preobese 27.9% Obese
42.6% Capped dose	59% Toxicity $\geq$ 3	24.6% Severe toxicity

Over 90% of the obese patients had capped dose.

Table 1. Association between toxicity, BMI and capped dose.

Toxicity $\geq$ 3	BMI	Capped dose		p-valor
		Yes N (%)	No N (%)	
YES	Underweight	0 (0)	9 (100)	p=0.000
	Normal weight	2 (5.7)	33 (94.3)	
	Preobese	16 (44.4)	20 (55.6)	
	Obese	25 (89.3)	3 (10.7)	
NO	Underweight	0 (0)	2 (100)	p=0.000
	Normal weight	3 (12.5)	21 (87.5)	
	Preobese	11 (42.3)	15 (57.7)	
	Obese	21 (91.3)	2 (8.7)	

Table 2. Association between BMI and RDI.

BMI	RDI		p-valor
	<85% N (%)	>85% N (%)	
Underweight	0 (0)	11 (6)	p=0.000
Normal weight	0 (0)	59 (32.2)	
Preobese	0 (0)	62 (33.9)	
Obese	11 (6)	40 (2.9)	

## CONCLUSION

◆ A high prevalence of excess weight was identified.

◆ The toxicity were similar between BMI ranges, regardless the capped dose.

◆ It is suggested further studies evaluating the evidence of empiric dose reduction in these patients aiming to avoid treatment toxicity.

◆ The impact of capped dose on cervical cancer prognosis should be investigated in the future.