

Original Research Paper

Medical Science

# ADJUVANT CHEMOTHERAPY IN GASTRIC CANCER QUITO-ECUADOR

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	<b>VE:</b> To determine the overall survival time in patients treated with adjuvant chemoradiotherapy. <b>DS:</b> Retrospective study of patients with a diagnosis of gastric adenocarcinoma or		

gastroesophageal junction who received adjuvant chemoradiotherapy treatment during the years 2011 to 2015. **RESULTS:** We analized 197 subjects of which 115 were men (58.4%) and 82 women (41.6%) were included in the analysis; between the ages of 18 and 89 years old, distributed in clinical stages IB to IIIC, showing a general average survival of 51.5 months with a Log Rank of 2.98; 95% CI (45.7-57.4) with a general survival of up to 90 months.

CONCLUSION: The study showed a greater overall survival than the data reported in the Intergroup 0116 and ARTIST study.

**KEYWORDS** : Gastric cancer, chemotherapy, adjuvant, Quito, Ecuador

## INTRODUCTION

The curative treatment of gastric cancer has been described as surgery, however it has been possible to appreciate since Macdonald's work that gastrectomy alone does not constitute a definitive curative treatment. (1)

The high frequency of relapse of this disease has led to consider the benefits of adjuvant treatment, which is why it is an accepted treatment scheme, however more current studies have opted for neoadjuvant treatment as a better option seeking to increase the overall survival of patients with Locally advanced gastric.

## MATERIALS AND METHODS

Data from electronic medical records were collected from 01/27/2011 to 11/10/2015 of those patients with confirmed diagnosis of gastric cancer clinical stage IB to IIIC over 18 years old who received surgical treatment and subsequently adjuvant chemoradiotherapy with Fluorouracil according to the study INT 0116, in a Oncology Hospital of Quito.

Patients older than 18 years with a confirmed diagnosis of gastric adenocarcinoma or clinical stage gastroesophageal junction adenocarcinoma IB to IIIC were included in those who performed type D2 gastrectomy.

The fluorouracil leucovorin regimen was administered according to the protocol INT 0116 (fluorouracil 425mg /m2 of body surface per day and leucovorin 20mg / m2 of body surface per day, for 5 days) followed by chemoradiotherapy 28 days after starting the first cycle of treatment with (fluorouracil 400mg / m2 of body surface area per day and leucovorin 20mg / m2 of body surface area per day, the first 4 days of radiotherapy and the last 3 days of radiotherapy), one month after the end of radiotherapy was administered Additional cycles of (fluorouracil 425mg / m2 of body surface per day, for 5 days) with an interval of 28-30 days between these last two cycles.

A descriptive analysis was carried out with the collected variables and a statistical analysis with the SPSS and EXCEL program, the survival by means of Kaplan Meyer curves until 08/30/2018 where the censored survival is demonstrated in those patients living up to this date.

### RESULTS

A sample of 197 individuals was obtained, of which 115 were men (58.4%) and 82 women (41.6%); with ages between 18 and 89 years, distributed in clinical stages IB to IIIC according to the AJCC seventh edition, also the histopathological type was determined by the Lauren classification as shown in Table 1.

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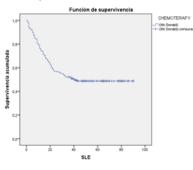
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Variable		n	%
SEX	Man	115	58,4
	Woman	82	41,6
	TOTAL	197	100
Āge	>60 years	118	59,9
	<60 years	79	40,1
	-	197	100
Stage	IB	18	9,1
	IIA	32	16,2
	IIB	29	14,7
	IIIA	24	12,2
	IIIB	53	26,9
	IIIC	41	20,8
		197	100
Ethnic group	Latino	119	60.4
	Indigenous	32	16.2
	Latino l	43	21,8
	Latino 2	2	1
	Afrodescende		0,5
	nts	197	100
	Total		
PATHOLOGY	Diffuse	66	33,5
	intestinal	130	66
	Scamous	1	0,5
DIFFUSE	Latino	41	62,1
ADENOCARCI	Indigenous	13	19,7
NOMA	Latino l	12	18,2
	Latino 2	0	0
	Afrodescende	0	0
	nts	66	100
	Total		
INTESTINAL	Latino	77	59,2
ADENOCARCI	Indigenous	19	14,6
NOMA	Latino l	31	23,8
	Latino 2	2	1,5
	Afrodescende		0,8
	nts	130	100
	Total		

Latino 1 = Latino America with indigenous parents Latino <math>2 = Latino America with Caucasian parents

Regarding the chemotherapy scheme, it is determined that 83.8% were treated with adjuvant chemoradiotherapy scheme proposed by Intergroup 0116, the rest was treated with FOLFOX 4, FOLFOXIRI, CAPEOX, PACLITAXEL / CARBOPLATINO (1 patient), DCF, Cisplatin / 5fluorouracil + Trastuzumab and handling palliative support management. In as much the reports of general average survival in our institution using adjuvant chemoradiotherapy corresponds to 51.5 months with a Log Rank of 2.98; 95% IC (45.7 - 57.4) the maximum censored time until 08/30/2018 is 90 months and we expect to update data in the coming years, data shown in Figure 1.

FIGURE 1.- Survival analysis with adjuvant chemora diothe rapy treatment in gastric cancer EC IB-IIIC



Average General Survival 51.5 months, Long Rank 2.98; 95% CI (45.7 - 57.4)

#### DISCUSSION

More than 15 years have passed since the study by Macdonald et al; on which the adjuvant chemotherapy radio treatment is based describing an average survival of 36 months over those who only received surgery and observation, with all discussions regarding the surgical technique, surgical fields that have been discussed for a long time in the fact that the main limitation for the global acceptance of the INT-0116 regimen as an adjuvant treatment modality in gastric cancer has been the limited lymph node dissection (D0 or D1) performed in 90% of the patients included in the test. Although the superiority of D2 lymph node dissection in reducing locoregional relapse has not been consistently demonstrated compared to D1 dissection (14-18). In the present study in the context of Gastrectomy D2, we can see that the average survival reaches 51.5 months. It is important to mention that there are patients who find a total overall survival of 90 months and that from this subgroup subsequent analyzes should be performed.

Despite these results, we must also discuss the ARTIST study described by Lee J et al, as well as the ARTIST II study, in which it was proposed to elucidate whether after chemotherapy D2 gastrectomy was sufficient or required chemoradiotherapy, with the conclusion that concurrent chemoradiotherapy did not reduce the recurrence rate compared to chemotherapy alone, however, to the subgroup of patients with metastatic nodules after gastrectomy, reporting that for the adjuvant chemoradiotherapy group the estimated rates of disease-free period at 3 years were 78.2%, while in our institution at a time of 7 years we reached an approximate survival of 50%. (19-21) For Fabio Grosso et al, who analyzes the adjuvant treatment of Gastric Adenocarcinoma in Colombia demonstrates that a 2year follow-up of patients treated with the Intergroup 0116 scheme in 96.8% of patients has disease-free survival at this time. of 77.4%, that if we extrapolate our data to 2 years our survival is lower reaching almost 50%, since from this date an important plateau is marked, for which in later studies it would be important to analyze this phenomenon.

#### INTEREST CONFLICT

# None

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