



SURGICAL MANAGEMENT OF PATIENTS DIAGNOSED WITH MALIGNANT PHYLLODES TUMOUR OF THE BREAST IN THE NATIONAL ONCOLOGY INSTITUTE: DR. JUAN TANCA MARENGO (SOLCA - GUAYAQUIL)

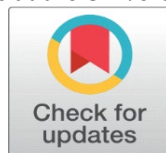
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ABSTRACT

The aim is to establish the real relationship of incidence of the Malignant phyllodes Tumor of Breast and its effective surgical approach in patients treated at the Oncological Institute of Guayaquil, the reference center of Ecuador.

Objective: To establish the surgical management of Malignant phyllodes Tumors of Breast in the Oncological Institute of Ecuador SOLCA.

Method: An analysis of the cases diagnosed and operated in the Oncological Institute of Guayaquil SOLCA in the period September 2009 to September 2019, based on a retrospective descriptive study to determine the surgical management of phyllodes tumors is performed.

Results: Within the study period (9 years), 24 patients with Malignant phyllodes Tumor of Breast who met the admission criteria were analyzed. Two groups were established: 75% (n = 18) who left "alive" from the hospital and 25% "deceased" (n = 6). An analysis of the mortality adjusted to the surgical procedure was performed, where it can be observed that the radical mastectomy showed a survival of 82%, while the simple mastectomy and the lumpectomy, procedures chosen as the first option for the treatment of the malignant phyllodes tumor, presented a Survival less than 40%.

Conclusions: The phyllodes malignant breast tumor has a low incidence among malignant breast tumors. It seems that radical mastectomy of the breast is the best option for patients with this type of cancer, and adjuvance does not improve patient survival.

Keywords: Malignant Phyllodes Tumor, Surgical Technique, Mastectomy, Lumpectomy, Lymph Node Sampling, Breast Biopsy



1. INTRODUCTION

Phyllodes Tumour of the Breast, was named for the first time by Johannes Müller in 1838, has some synonyms such as adenomatous myxoma, pseudosarcoma adenoma, cystosarcoma phyllodes among others. The World Health Organization decided to use the term "Phyllodes Tumour" to name this disease formally in 2003. The incidence of benign breast tumours is 35-64%, while malignant breast tumours

comprise 25% of cases. [Juan et al. \(2007\)](#), [Firdaus et al. \(2017\)](#), [Francisco et al. \(2009\)](#), [Wang et al. \(2018\)](#).

Phyllodes tumour of the breast corresponds to 0.5% to 1.0% of all breast tumours and 2.5% of all fibroepithelial tumours. Population-based estimates indicate that the incidence of malignant phyllodes tumour is 2.1 cases per million women, with more frequency in white, Latino, and Asian women. Primary phyllodes tumour of the breast is a tumour that is made up of stroma and tissue of epithelial origin, which is why it is classified as part of biphasic breast tumours. [Jiménez-López et al. \(2013\)](#), [Tan et al. \(2012\)](#), [Kamitani et al. \(2014\)](#), [Santos et al. \(2007\)](#).

Within the surgical treatment of malignant phyllodes tumour of the breast, the decision to perform a simple total mastectomy versus a lumpectomy is not well defined, due to the natural behaviour of this tumour. The phyllodes tumour of the breast can have an invasive growth at the local level, some parameters are taken regarding this, such as the size of the tumour being less than 3 cm, that its total resection can be carried out and jointly that it can have at least a margin greater than 1 cm at the edges of the surgical piece, which has palpable axillary nodes with high suspicion of malignancy, are the parameters that influence the decision-making of the surgical treatment to be performed. [Santos et al. \(2007\)](#), [Diego et al. \(2016\)](#), [Sun et al. \(2019\)](#), [Pornchai et al. \(2019\)](#), [Adesoye et al. \(2016\)](#).

The evolution of these patients is determined by the timely treatment of these lesions, among the types of biopsy used is the FNA diagnosis that reaches 9% of cases found, there are also alternatives such as an excisional biopsy in which the problem is to remove the tumour leaving compromised margins, misinterpreting it as a fibroadenoma due to its size and appearance on breast ultrasound, unfortunately there can be different types of phyllodes tumour in the same surgical piece, which is why when having a surgical piece with compromised edges, there is an increase in their morbidity and mortality. [Parfitt et al. \(2004\)](#), [Nomura et al. \(2006\)](#), [Karihtala et al. \(2016\)](#), [Spitaleri et al. \(2013\)](#), [Testori et al. \(2015\)](#).

2. MATERIAL AND METHOD

Descriptive, retrospective, In the present study the population is made up of the patients of the Oncology Institute of Guayaquil SOLCA in the period from September 2009 to September 2019, who were diagnosed with Malignant phyllodes Tumour that corresponded to 20 cases, being our sample these patients.

3. RESULTS

Within the study period (9 years), 5,655 patients were obtained who presented Malignant Breast Tumour, among whom 24 patients were diagnosed with Malignant Phyllodes Breast Tumour, who met the admission criteria, resulting in an incidence of 0,45%. Two groups were established: patients who were discharged "alive" from the hospital 75% (n= 18) and those who were discharged "deceased" 25% (n= 6)

Table 1

Table 1 Distribution of Age, Comorbidities and Menarche (n= 24)						
	Deceased n= 6	Standard deviation	%	Alive n=18	Standard deviation	%
Age years (average)	52	16.9		51.9	9.1	

Comorbidity (Patients)	2	33.3%	11	61.1%
Menarche (years)	11	1.6	12.8	1.3

Own Elaboration [Rueda \(2019\)](#)

The average age of the patients with Malignant Breast Tumour in the two groups "Alive" and "Deceased" was around 52 years with no statistical differences, and in terms of menarche there were no significant differences in the 2 groups ("Alive" 11 years vs "deceased" 12.8 years). There were greater comorbidities in the group of "Living" 61.1% vs. "Deceased" 33.3%.

Table 2

Tumour Size (Patients)	Deceased N=6	Percentage	Alive N=18	Percentage
< 5 cm	1	16.6%	1	5.5%
5 a 10 cm	1	16.6%	10	55.5%
> 10 cm	4	66.6%	7	38.8%

Own Elaboration [Rueda \(2019\)](#)

It was observed that in the group of deceased patients there was a higher mortality rate in patients with a tumour size greater than 10 cm with 66.6% (n=4) and in the group of "alive" patients the highest survival was in patients with tumour from 5 to 10 cm with 55.5% (n=10).

Table 3

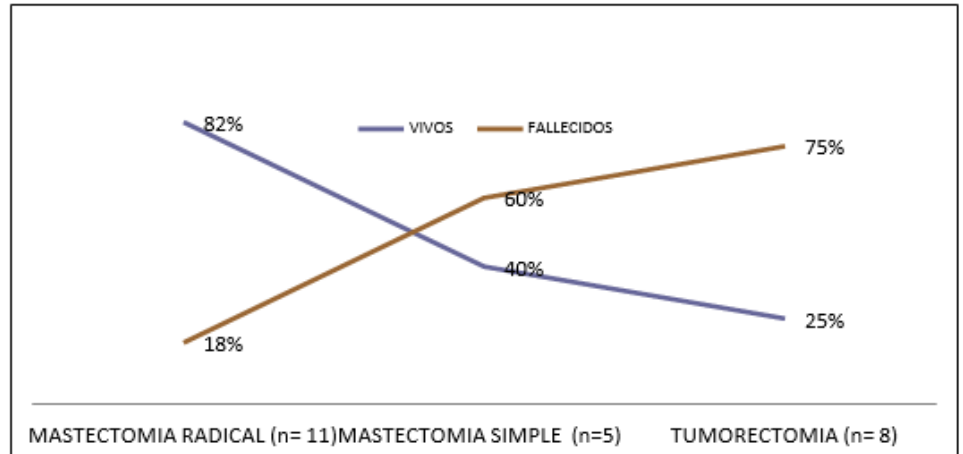
Surgical Procedure	Living	Deceased
Modified Radical Mastectomy (N= 11)	82%	18%
Simple Total Mastectomy (N=5)	40%	60%
Lumpectomy (N= 8)	25%	75%

Own Elaboration [Rueda \(2019\)](#)

The patients underwent a type of surgical procedure, which was performed by the professionals of the Institute, it was not performed by a single professional, an institutional protocol was not followed.

This table identifies that the highest survival rate was in patients who underwent Modified Radical Mastectomy with 82%, while the highest mortality was lumpectomy with 75%.

Graph 1



Graph 1 Mortality Adjusted to The Surgical Procedure
Own Elaboration [Rueda \(2019\)](#)

An analysis of the mortality adjusted to the surgical procedure was carried out, where it can be observed that the modified radical mastectomy presented a survival of 82%, while the total simple mastectomy and the lumpectomy, procedures chosen as the first option for the treatment of Malignant phyllodes Tumor, had a survival of less than 40%.

Table 4

Table 4 Patients Reoperated Due to Presenting Edge Involvement by Malignant Phyllodes Tumour of The Breast

Patients	Living		Deceased	
	Count	Percentage	Count	Percentage
Compromised Edges	6	33.30%	5	83.30%
Reoperated	5	83%	1	20%

Own Elaboration [Rueda \(2019\)](#)

In the Study, after the patients were operated on, the Pathological Anatomy Department reported the surgical piece with free edges due to the phyllodes tumour of the breast or as a surgical piece with edges compromised by the phyllodes tumour of the breast, in this table the patients are taken reoperated due to presenting borders compromised by the Malignant Phyllodes Tumour of the Breast.

It was observed in the sample of living patients with margins compromised by the phyllodes tumour of the breast (n=6), 5 patients were reoperated (83%) who obtained a higher survival than the deceased patients with 1 reoperated patient (20%) and 5 patients who were given adjuvant.

Table 5

Table 5 Surgically Intervened Patients Who Received Adjuvance

Patients (N=24)	Deceased (N=6)	Percentage	Alive (N=18)	Percentage
Adjuvanted	4	66.6%	8	44.4%

Own Elaboration [Rueda \(2019\)](#)

It can be seen that the patients who received adjuvant therapy (radiotherapy or chemotherapy), in deceased patients it was given in 4 patients with a percentage of 66.6% and in 8 living patients with a percentage of 44.4% respectively. The adjuvant therapy that was performed the most was radiotherapy; in deceased patients it was given in 4 patients with a percentage of 66.6% and in living patients it was in 6 patients with a percentage of 33.3%. It seems that adjuvant treatment occurred more in deceased patients, not obtaining an apparent benefit in the survival of patients with Malignant Phyllodes Tumour of the Breast.

4. DISCUSSION AND RECOMMENDATIONS

Malignant phyllodes tumour of the breast has a low incidence among malignant breast tumours. It seems that radical breast mastectomy is the best option for patients with this type of cancer, and adjuvant surgery does not improve patient survival. Lumpectomy was the surgical procedure that caused the most mortality.

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