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PEDIATRIC CANCER: CHARACTERIZATION OF INCIDENCE USING MULTIVARIATE AND SPATIAL TECHNIQUES. SOLCA GUAYAQUIL 2018-2022

CÁNCER PEDIÁTRICO: CARACTERIZACIÓN DE LA INCIDENCIA MEDIANTE TÉCNICAS MULTIVARIANTES Y ESPACIALES. SOLCA GUAYAQUIL 2018-2022

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Background: Cancer is one of the leading causes of death in children and adolescents in the world; its incidence increases over time. Being the objective to characterize the incidence of pediatric cancer in SOLCA Guayaquil in the period 2018 - 2022 through the application of multivariate and spatial techniques.

Methods: Observational, ecological study; the universe were patients between 0 to 19 years diagnosed with cancer in SOLCA Guayaquil during 2018 to 2022. Data were used from the hospital registry, taking the variables: year of incidence, sex, age, tumor type, morphology, province and canton of residence. The types of cancer were grouped according to the International Classification of Childhood Cancer (ICCC), where multivariate HJ-Biplot techniques and MultBiplot software were applied; Table for georeferencing. Handling confidentiality and ethical principles.

Results: SOLCA Guayaquil diagnosed 1,433 new cases of cancer in children under 19 years of age during 2018 to 2022, a 67% increase in that period. 57% were children. Seventy-six percent come from provinces within SOLCA Guayaquil's area of influence, 62% from Guayas, followed by Los Ríos 8%; of the total from Guayas, 67% reside in Guayaquil, followed by Durán 7%, among others (Figure 1). Leukemias are more frequent with 42%, followed by lymphomas 16%; The HJ-Biplot identified three clusters relating pediatric cancers, sex and age group, with leukemias being more frequent in children aged 5 to 9 years, lymphomas in children aged 10 to 14 years, and retinoblastomas.

Conclusions: Pediatric cancer increased its incidence in SOLCA Guayaquil, with more leukemias in children aged 5 to 9 years, in the provinces of Guayas and Los Rios, so it is important to apply multivariate techniques for a holistic epidemiological analysis of pediatric cancer that contributes to diagnostic, prevention and control measures in this population group.

Figure 1: Spatial distribution of pediatric cancer incidence.

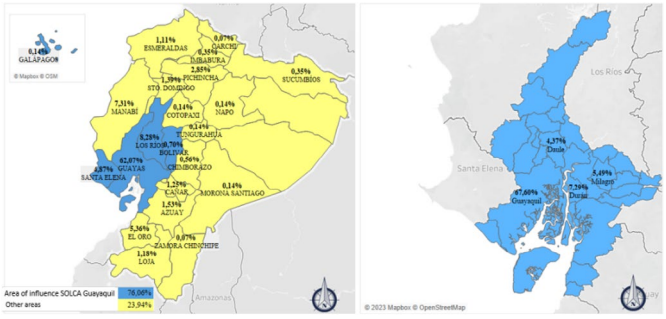
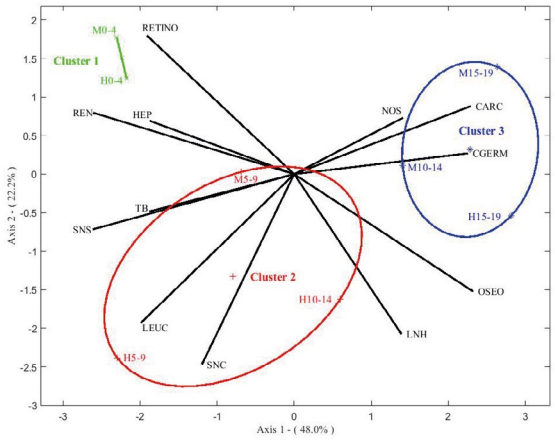
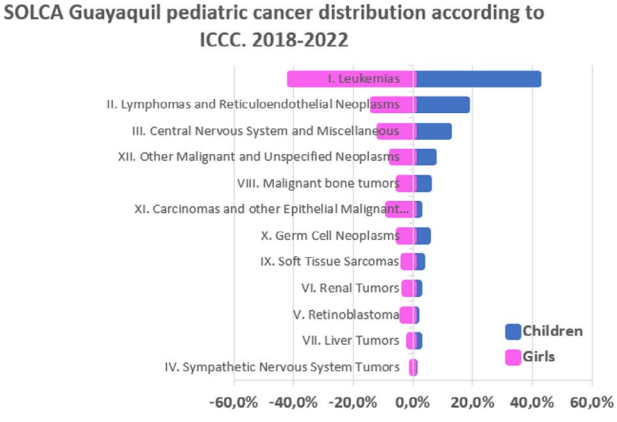


Figure 2. Incidence of pediatric cancer according to sex and age group.





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CROSS-CULTURAL ADAPTATION OF THE SUPPORTIVE CARE NEEDS SURVEY SURVEY - SHORT FORM 34 (SCNS-SF34) IN COLOMBIA

ADAPTACIÓN TRANSCULTURAL DE LA ENCUESTA SUPPORTIVE CARE NEEDS SURVEY - SHORT FORM 34 (SCNS-SF34) EN COLOMBIA

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Keywords: Transcultural adaptation; Neoplasia; Needs assessment; Nursing care.

Background. Cancer is an important public health problem in Colombia, so identifying needs is a relevant process that allows nurses to guide health care and improve the quality of service delivery. For this purpose, the Supportive Care Needs Survey - Short Form 34 (SCNS-SF34) could be used. Its cultural adaptation and validation have been carried out in several languages. However, there are no studies in Colombia to determine the characteristics of the cross-cultural adaptation process in oncology patients.

Methodology. Methodological study; the guidelines for the cross-cultural adaptation process proposed by Beaton et al. were followed, including a pilot test with 40 participants from an Oncology Center in Bogota, Colombia.

Results. The survey adapted to Colombian Spanish applied to patients with any diagnosis of cancer, who were receiving treatment both in and out of hospital, with a basic educational level of reading and writing, presented an overall comprehensibility level of 96.8%, and therefore did not require adjustments.

Conclusions. The Survey on Care Assistance Needs-Short Form 34 (SCNS-SF34) is the version adapted to the Spanish language of Colombia. It is necessary to review the content and construct validity before using the survey.

Note: Adapted survey, see appendix of the survey in the following link https://drive.google.com/file/d/1vG6ovukzqy74PlzM_VzYTt0INJ0q8LLT/view?usp=sharing

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SURVIVAL IN CERVICAL CANCER IIB-IVA SUBJECTED TO POST-CHEMO-RADIOTHERAPY SURGERY 2010-2014

SOBREVIDA EN CÁNCER DE CÉRVIX IIB-IVA SOMETIDOS A CIRUGIA POST QUIMIO-RADIOTERAPIA 2010-2014

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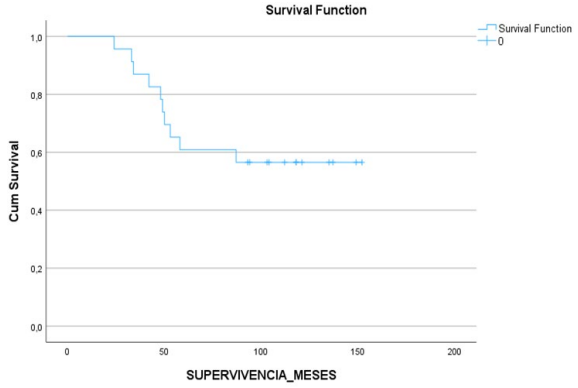
Background: Cervical cancer (CC) is one of the leading causes of cancer death in the world. The aim of this study is to know the overall survival (OS), survival by age group and histological type in patients with locally advanced cervical cancer who underwent salvage surgery after chemo-radiotherapy (QT+RT).

Methods: A retrospective observational cohort study of patients with locally advanced CC with stages IIB-IVA who received QT+RT treatment from January 2010 to December 2014 with follow-up until August 2023 in SOLCA-Guayaquil was performed. The statistical program SPSSv29 was used to analyze survival curves with the Kaplan-Meier estimator and Log-Rank test.

Results: Of a total of 1909 patients, 1581 were excluded because they did not meet eligibility criteria. The media survival result obtained was 107 months (m) (graph 1). Survival by histological type: 11 patients presented squamous carcinoma and 12 adenocarcinoma, the mean survival for squamous carcinoma being 111 months and for adenocarcinoma 94 months; however, in the Log-Rank statistical test (p:0.672) it is not significant, so it is estimated that survival is similar in the two histological types (graph 2). Regarding the calculation of survival by age in months (every 10 years) in the first group of 30 - 39 years is 98.1 m, of 40-49 years 118.8 m, 50-59 years 98.6 m, 60 or more years 56 m. Statistical significance in the Log-Rank statistical test (p:0.317) being non-significant survival.(see table 1).

Conclusions: Of the 23 patients with the mean age of 48 years with follow-up of 168 months are alive 13 (56%). There was no significant difference in survival by histologic type and age group.

Graph 1.



Graph 2.

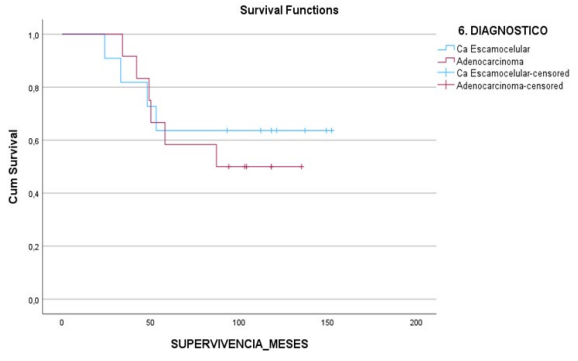


Table 1: Means and Medians for Survival Time

	Mean[a]				Median			
			95% Confidence Interval				95% Confidence Interval	
Grupos de Edad	Estimate	Std. Error	Lower Bound	Upper Bound	Estimate	Std. Error	Lower Bound	Upper Bound
30 a 39 años	98,167	16,850	65,141	131,192	87,000	.	.	.
40 a 49 años	118,857	19,954	79,746	157,968	.	.	.	.
50 a 59 años	98,667	12,929	73,327	124,007	.	.	.	.
60 o más años	56,000	14,418	27,741	84,259	34,000	10,000	14,400	53,600
Overall	106,696	11,004	85,128	128,263	.	.	.	.

a. Estimation is limited to the largest survival time if it is censored.

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THE DIAGNOSTIC AND THERAPEUTIC CHALLENGE OF PHYLLODES TUMOR OF THE BREAST: A CANCER CENTER STUDY

EL DESAFÍO DIAGNÓSTICO Y TERAPÉUTICO DEL TUMOR FILODES DE LA MAMA: ESTUDIO EN CENTRO ONCOLÓGICO

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Background: Filodes tumor is an infrequent neoplasm with fibroepithelial characteristics that represent less than 1% of the total of all breast cancers (1). It has three histological grades: benign, borderline and malignant (2). In case of clinical suspicion it is necessary to perform an excisional biopsy or resection of the tumor with wide surgical margins of at least 1 cm to avoid recurrences (3). Their histological similarities with fibroadenomas, especially in core needle biopsy, in addition to their unpredictable biological behavior make their diagnosis and treatment controversial (1,4,5). The purpose of this study is to analyze the diagnostic technique of breast phyllodes tumors, as well as the associated adjuvant and surgical management.

Methods: The study, retrospective, observational, descriptive-analytical type, explored 9000 clinical records from January 2015 to October 2022 in a specialized oncology center in Ecuador, looking for patients with Phyllodes Tumor. Three ICD10 codes were used: D24X (benign tumor of the breast), D486 (tumor of uncertain or unknown behavior of the breast), C509 (malignant tumor of the breast, unspecified part). In 101 patients included, with diagnosis confirmed by surgical specimen biopsy (those without surgical treatment were excluded), the following variables were evaluated: age, tumor size, histologic grade, history of fibroadenoma, adjuvant therapy and breast surgery. Eighty-two patients operated at least 3 years ago were used to analyze local recurrence and 32 patients with tumor-free margins were used to evaluate resection margins. Fisher's exact test was applied to compare categorical variables, with a 95% confidence interval and a significance threshold of $p<0.05$.

Results: In the study of 101 patients with phyllodes tumor, the average age was 42 years and the average tumor size was 11 cm. Sixty-two percent were found to be benign, 23% borderline and 15% malignant. In addition, 46% had a previous diagnosis of fibroadenoma. Treatments included excisional biopsies in 44%, conservative surgeries in 31% and mastectomies in 25%. Six percent received radiotherapy, mainly in malignant cases, with one borderline exception. Local recurrences were 13% (11 patients) in a follow-up of at least three years (82 patients), with a mean of 22 months disease-free. Fifty-five percent of recurrences occurred in benign tumors, 18% in borderline and 27% in malignant. In 32 patients with tumor-free surgical margins, 5 experienced recurrence, all with margins less than 1 cm

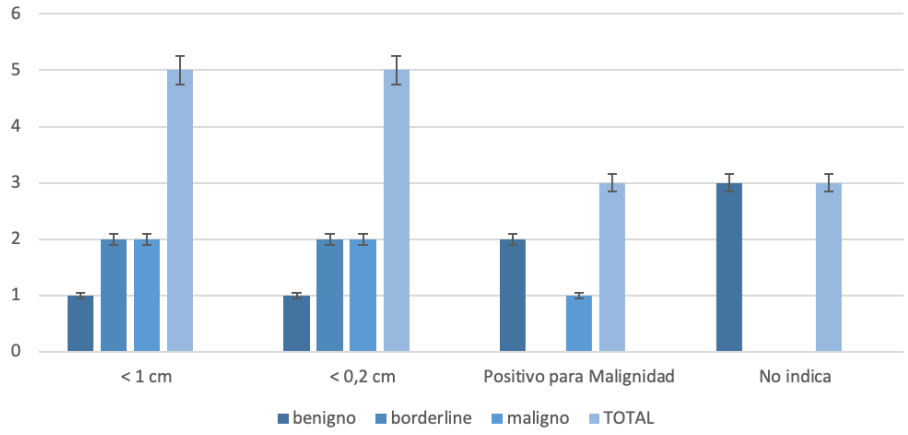
Figure 1.

A: Clinical presentation of large phyllodes tumor; **B:** Surgical specimen (27 cm) of phyllodes tumor after mastectomy; **C:** Mammography of benign phyllodes tumor. Cephalo-caudal projection of right breast. Radiopaque asymmetric asymmetric liposustituted radiopaque radiological pattern with poorly demarcated multi lobulated contours, no areas of destructuring, parenchymal or clustered microcalcifications. BI-RADS 4; **D:** Histologic plaque. There is evidence of increased cellularity, stromal overgrowth (Image 20X). Sample compatible with borderline phyllodes tumor.

Table 1.- Clinical, diagnostic and surgical characteristics.

	Benigno		Borderline		Maligno		Total (n)	%
	(n)	(%)	(n)	(%)	(n)	(%)		
Características Clínicas								
Edad < 40 años	30	77	8	20	1	3	39	39
Edad > 40 años	33	53	15	24	14	23	62	61
Tamaño <5cm	34	85	6	15	0	0	40	40
Tamaño >5cm	29	47	17	28	15	25	61	60
Grado Histológico	63	62	23	23	15	15	101	100
Características Diagnósticas								
Diagnostico presuntivo inicial fibroadenoma	28	61	15	33	3	6	46	46
Diagnostico presuntivo inicial Tumor Filodes	35	63	8	15	12	22	55	54
Características Terapéuticas Quirúrgicas								
Biopsia Excisional	40	93	3	7	0	0	43	42
Cuadrantectomía	20	59	13	38	1	3	34	34
Mastectomía	3	13	7	29	14	58	24	24
Ausencia de Recurrencia Local en Relación con Márgenes Quirúrgicos								
Márgenes libres	14	44	8	25	10	31	32	45
En contacto	14	74	5	26	0	0	19	27
No indica	18	90	2	10	0	0	20	28
Total	46	65	15	21	10	14	71	100

Graph 1: Presence of local recurrence at a minimum follow-up of 3 years.



(distances less than 0.2 cm). The risk estimate for this cohort of recurrence was 0.6875 (95% CI 0.494-0.957), with a p value of 0.043.

Conclusions: The diagnosis and treatment of phyllodes tumor pose challenges due to its similarities to fibroadenomas and its unpredictable biological behavior. Previous diagnoses of fibroadenoma, present in about half of the cases, complicate its identification. Despite their mostly benign tendency, their large size requires extensive surgery. The need for adjuvant therapies is limited, highlighting the importance of personalized approaches. The significant association between surgical margins smaller than 0.2 cm and local recurrence demonstrates the importance of adequate margins. Despite these findings, further prospective studies are required to validate these results and guide future therapeutic decisions.

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ESTIMATION OF ENERGY EXPENDITURE BY INDIRECT CALORIMETRY COMPARED WITH PREDICTIVE EQUATIONS IN CRITICAL ONCOLOGY PATIENTS

ESTIMACIÓN DEL GASTO ENERGÉTICO POR CALORIMETRÍA INDIRECTA COMPARADA CON ECUACIONES PREDICTIVAS EN PACIENTES CRITICO-ONCOLÓGICOS

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Background: It is estimated that 22% of hospitalized patients present malnutrition and it is more prevalent in oncologic patients, in Uci Solca Guayaquil it is present in about 30% of patients. Optimal nutritional therapy requires an energy supply as close as possible to the real energy expenditure and indirect calorimetry is the standard technique to measure it.

Methods: A retrospective retrospective cross-sectional descriptive observational study was carried out in 19 critical oncologic patients admitted to the intensive care unit SOLCA Guayaquil where the formulas for prediction of resting energy expenditure (REE) and determination by indirect calorimetry (IC) were applied. Calorimetric measurement was performed using COSMED ® Q-NRG+ equipment. It was used in ventilated and non-ventilated patients according to the equipment protocols.

Results: The mean estimated energy consumption by measured IC was 1661.58 ± 392.79 kcal, while inferred by Harris Benedict formula was 1406.88 ± 318.36 kcal and by rule of thumb 2028.47 ± 535.63 kcal.

Conclusions: Recent data confirm a poor or overestimated correlation between energy expenditure measured by indirect calorimetry and energy expenditure predicted by equations, emphasizing the need for indirect calorimetry to be the standard of care.

Figure 1: Caloric requirements per IC, thumb method, Harris Benedict

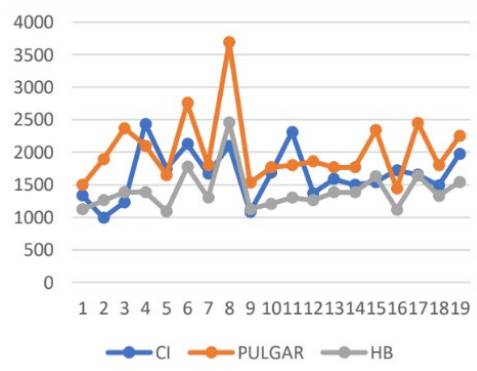

Table 1: Average caloric intake by indirect calorimetry, Harris Benedict and Rule of Thumb

Evaluación calorimétrica	Media (kcal totales)
Calorimetría indirecta	1661,58 ± 392,79
Harris Benedict	1406,88 ± 318,36
Regla del pulgar	2028,47 ± 535,63

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CLINICAL AND EPIDEMIOLOGICAL CHARACTERIZATION OF CERVICAL CANCER AT SOLCA - GUAYAQUIL

CARACTERIZACIÓN CLÍNICA Y EPIDEMIOLÓGICA DEL CÁNCER DE CÉRVIX EN SOLCA - GUAYAQUIL

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Background: Cervical cancer (CC) is the fourth most frequent cancer (ca) and the fourth cause of death from ca in women worldwide. In Ecuador, it is the second most frequent ca and the fourth cause of death from ca. The present study aims to know the clinical and epidemiological characteristics according to age, histopathology and clinical stage of patients with CC between 2010-2014.

Methods: It is an observational, descriptive, retrospective and longitudinal study. The SPSSv21 statistical program was used. Descriptive statistics, frequency and percentage were used for the interpretation of qualitative variables; and measures of central tendency, dispersion and distribution were used for quantitative variables.

Results: 1909 clinical histories of patients with CC were reviewed during the study period, 211 were excluded for not meeting eligibility criteria, counting 1698 to be evaluated. Regarding the stages (I-II-III-IV) the most frequent was stage II (A-B) 54.2%, of these, squamous cell carcinoma (44.6%) and adenocarcinoma (9.6%). The 32.2% corresponded to resectable cancers (IA-IIA) and 67.8% to unresectable cancers. The mean age was 55 years(a), median 54a and mode 45a.

Conclusions: In the present study, the most frequent age range was 40-49a (23.7%), the most frequent histopathologic type was squamous cell carcinoma (82%) and the most frequent clinical stage was IIB (36%).

Figure 1: Percentage of patients with cervical cancer by age group.

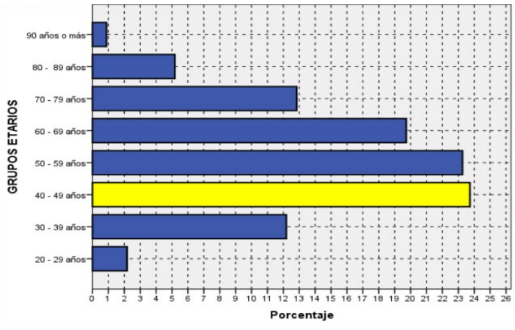

Table 1: Initial clinical stage according to histopathological diagnosis of patients with cervical cancer.

			ESTADIO INICIAL										Total
			I-A	I-B	I-C	II-A	II-B	III-A	III-B	III-C	IV-A	IV-B	
DIAGNOSTICO	Ca Escamocelular	Recuento	46	215	12	146	611	134	147	27	40	15	1393
		% del total	2,7%	12,7%	0,7%	8,6%	36,0%	7,9%	8,7%	1,6%	2,4%	0,9%	82,0%
	Adenocarcinoma	Recuento	10	62	1	53	110	21	26	7	6	6	302
		% del total	0,6%	3,7%	0,1%	3,1%	6,5%	1,2%	1,5%	0,4%	0,4%	0,4%	17,8%
	Otros	Recuento	2	0	0	0	1	0	0	0	0	0	3
		% del total	0,1%	0,0%	0,0%	0,0%	0,1%	0,0%	0,0%	0,0%	0,0%	0,0%	0,2%
Total		Recuento	58	277	13	199	722	155	173	34	46	21	1698
		% del total	3,4%	16,3%	0,8%	11,7%	42,5%	9,1%	10,2%	2,0%	2,7%	1,2%	100,0%

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USE OF BOTULINUM TOXIN IN PATIENTS WITH BREAST CANCER AND POST SURGERY PAIN SYNDROME

USO DE TOXINA BOTULÍNICA EN PACIENTES CON CANCER DE MAMA Y SINDROME DOLOROSO POSTOPERATORIO

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Corresponding author: Dra. Sandra Angélica Chalen Zambrano; sandra.a.chalen@solca.med.ec, sanangelic@yahoo.com

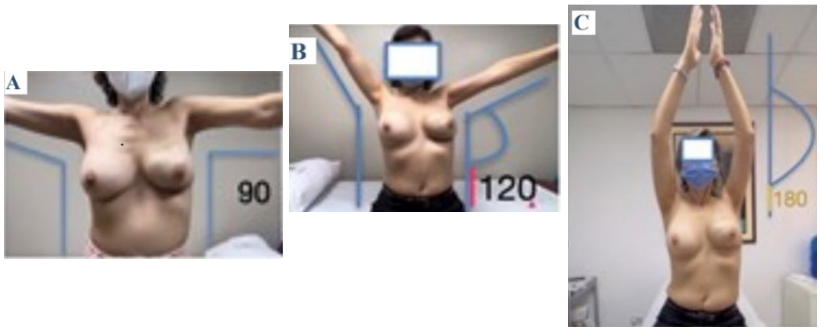
Background: Nowadays it is known how to treat breast cancer. However, postoperative recovery in many cases is different from patient to patient due to patient-specific factors, the surgical technique used and the adjuvant treatments that the patient must necessarily receive. Radiotherapy perpetuates and increases the inflammatory period and translates into pain due to muscle contracture causing functional impotence in the ipsilateral limb; this is known as Post Breast Surgery Pain Syndrome. We propose the application of Botulinum Toxin, because its effect counteracts the contracture in specific points, and at low doses increases the proliferation of endothelial cells promoting neovascularity.

Methods: Experimental, prospective, cross-sectional study from 1/05/21 to 30/04/22 included patients with breast cancer already operated and with moderate or severe painful syndrome, with functional limitation or signs of irreversible skin damage. Patients who did not present at least 2 of the symptoms of the syndrome or who did not accept the procedure were excluded. Botulinum toxin A, 50 IU intramuscular was used in trigger points and in subdermis in patients with skin damage. Measuring range of pain, degree of arm mobility and muscle contracture at 15 days, 1 and 3 months.

Results: Universe of 22 post-surgical breast cancer patients aged between 31 and 62 years, 14 of whom received radiotherapy as adjuvant treatment, all with moderate or severe symptoms: functional limitation and pain. After the application of the toxin, in 10 patients the limitation, pain and contracture disappeared, obtaining an arc of rotation of 180°, while 11 patients went on to mild symptoms with an arc of rotation of 120°.

Conclusions: Postoperative pain syndrome affects the quality of life of patients in remission. Botulinum toxin has more uses than just esthetic. Its efficacy has been proven by various groups in other pathologies and in this PPS it should continue to be investigated, although good results have already been obtained.

Figure 1.



A: Left pectoral TB pre-application; **B:** 1 month post application TB improvement with abduction at 120 degrees; **C:** Patient 3 months after TB application

Graph and Table 1: Signs and Symptoms After Botulinum Toxin Application

Signos y síntomas Post Aplicación de Toxina Botulínica	AUSENCIA	LEVE	MODERADO	SEVERO
Limitación Funcional	10	11	1	
Dolor	10	5	7	
Contractura Capsular	8	4	8	2
Contractura Muscular	10	5	7	

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TUMORS OF THE CENTRAL NERVOUS SYSTEM: CHARACTERIZATION OF MORTALITY IN PEDIATRIC POPULATION. ECUADOR. 2018-2022

TUMORES DEL SISTEMA NERVIOSO CENTRAL: CARACTERIZACIÓN DE LA MORTALIDAD EN POBLACIÓN PEDIÁTRICA. ECUADOR. 2018-2022

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Background: From a public health point of view, pediatric cancer arises when considering in terms of years of life potentially lost, since each time it is cured, it represents a greater survival and a longer life expectancy, among which are malignant tumors of the central nervous system (CNS), being common at early ages and constituting the first cause of death in children; there are few studies that show the reality in the Ecuadorian population. Being its objective to characterize epidemiologically the CNS malignant tumors of the pediatric population in Ecuador, period 2018-2022.

Methods: An observational, descriptive study was conducted; its universe and sample were the deceased with a diagnosis of CNS malignant tumor in Ecuador, between 2018 and 2022. The information was taken from the National Institute of Statistics and Census of Ecuador, INEC, according to the online open data bank of deaths, taking the data of sex, age, type of tumor and by year, considering the pediatric age from 0 to 19 years, where descriptive statistics were applied. Its management was based on ethical and legal principles.

Results: Of the 295 deaths due to CNS malignant tumors, 34.9% occurred mostly in the province of Guayas, followed by Pichincha 27.8% and Manabí 6.7%. Azuay, 6.3%, among others (Figure 1). According to topographic location, the most frequent was brain tumor with 83%, followed by tumor of the eye and its annexes with 13%; according to sex, 58% were men and 42% were women; the age group most affected was 0 - 4 years in males with 18% and females in the 5 - 9 years age group with 13% (Table 1).

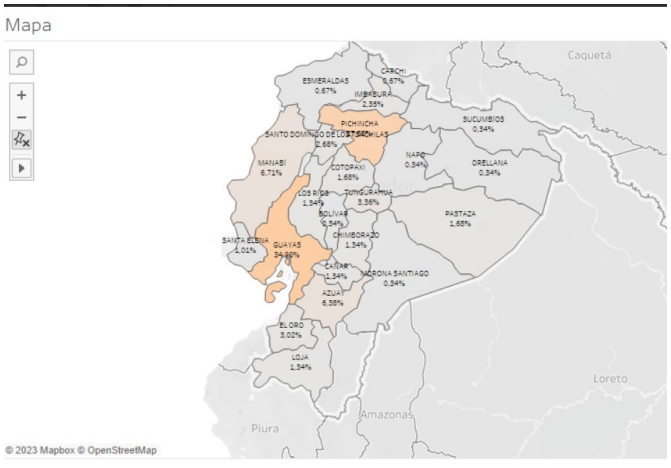

Table 1.

Topografia		Tumor maligno del ojo y sus anexos		Tumor maligno de las meninges		Tumor maligno del encéfalo		Tumor maligno de la médula espinal, nervios craneales y de otras partes del SNC		Total fallecidos	
Sex	Grupo etario	No.	%	No.	%	No.	%	No.	%	No.	%
Hombre	G 0-4	15	41%	0	0%	37	15%	2	22%	54	18%
	G 5-9	3	8%	0	0%	46	19%	1	11%	50	17%
	G 10-14	2	5%	0	0%	36	15%	1	11%	39	13%
	G 15-19	0	0%	1	33%	27	11%	0	0%	28	9%
	SubTotal	**20**	**54%**	**1**	**33%**	**146**	**59%**	**4**	**44%**	**171**	**58%**
Mujer	G 0-4	14	38%	0	0%	19	8%	1	11%	34	12%
	G 5-9	2	5%	1	33%	34	14%	2	22%	39	13%
	G 10-14	1	3%	1	33%	26	11%	1	11%	29	10%
	G 15-19	0	0%	0	0%	21	9%	1	11%	22	7%
	SubTotal	**17**	**46%**	**2**	**67%**	**100**	**41%**	**5**	**56%**	**124**	**42%**
	Total	**37**	**100%**	**3**	**100%**	**246**	**100%**	**9**	**100%**	**295**	**100%**
	% topografia	**13%**		**1%**		**83%**		**3%**			

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MALIGNANT TUMORS: CHARACTERIZATION OF INCIDENCE IN ADULTS AT SOLCA GUAYAQUIL. 2018-2022

TUMORES MALIGNOS: CARACTERIZACIÓN DE LA INCIDENCIA EN ADULTOS SOLCA GUAYAQUIL. 2018-2022

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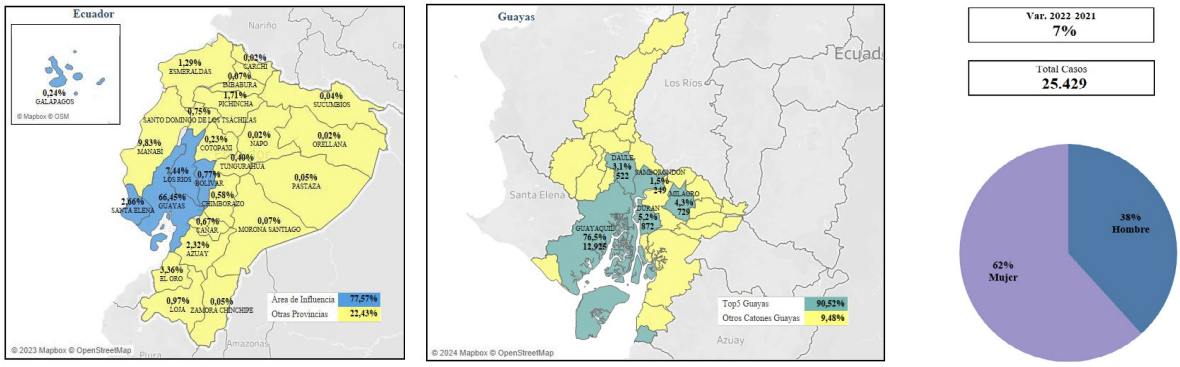
Background: In recent decades, the incidence of malignant tumors in the adult population has increased significantly worldwide, becoming one of the main causes of morbidity and mortality. Scientific and technological advances have allowed a better understanding of their biology and causes; they derive from multiple factors, such as genetic, environmental and lifestyle factors. Consequently, the objective is to epidemiologically characterize malignant tumors in adults of SOLCA Guayaquil patients in the period 2018-2022.

Methods: The observational study analyzes the total incidence cases of malignant tumors in ages older than 19 years of SOLCA Guayaquil patients, between the years 2018 and 2022. Demographic variables are used: sex, age group, province and canton of residence. A descriptive and multivariate statistical analysis was performed with HJ-Biplot.

Results: 25,429 cases of malignant tumors were diagnosed in SOLCA Guayaquil during the study period, with a 7% increase compared to the last two years. The most frequent topographic group was breast (17.6%), followed by digestive organs (15%) and female genitalia (12.6%), among others. The area of influence of SOLCA Guayaquil is shown (77.57%), with Guayas 66.45%, Los Rios 7.44%, Santa Elena 2.66%, Bolivar 0.77% and Galapagos 0.24% (Figure 1); according to sex, 62% were more in women; The age groups most affected are 60-79 years in men with 51% and women 50-69 years with 46%; in addition, there is a relationship of homogeneous groups of cancers in women and heterogeneous in both sexes in different age groups and according to their incidence (Figure 2).

Conclusions: In the five-year period studied, the most representative groups of malignant tumors in adults were breast and digestive organs, with more women in the age groups 50 - 69 years; identifying three clusters with homogeneous behavior patterns associated with the groups of malignant tumors, sex and age group, which allows directing the efforts of timely response against this problem.

Map 1: Percentage distribution of malignant tumors in adults (Solva Guayaquil). Period 2018-2022



	G 20-29	G 30-39	G 40-49	G 50-59	G 60-69	G 70-79	G 80 +	Grand total
Male	485	677	873	1.518	2.574	2.424	1.180	9.731
	5%	7%	9%	16%	26%	25%	12%	100%
Female	650	1.758	2.984	3.722	3.467	2.191	926	15.698
	4%	11%	19%	24%	22%	14%	6%	100%
Grand total	1.135	2.435	3.857	5.240	6.041	4.615	2.106	25.429
	4%	10%	15%	21%	24%	18%	8%	100%

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NON-MASS LESIONS: ULTRASONOGRAPHIC FINDINGS AND MOLECULAR CLASSIFICATION

LESIONES NO MASA: HALLAZGOS ULTRASONOGRÁFICOS Y CLASIFICACIÓN MOLECULAR

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Background: Non-mass lesions are characterized by hypoechogenicity and poorly defined borders. They can be benign or malignant, with an incidence of 5%. Ultrasound findings are distortion of the architecture, acoustic shadowing and calcifications. The most common histological subtypes are HER2 + and Luminal in infiltrative carcinomas, being important for the treatment of breast cancer.

Methods: Study conducted in the first semester of 2023, with patients who had non-mass lesions in breast ultrasound. Echo-guided biopsies were performed, obtaining an average of 6 samples. Pathological analysis categorized the samples as benign or malignant, using immunohistochemistry in malignant cases. Data processed in Excel and SPSS.

Results: With 547 breast biopsies in 6 months, 53 nonmass lesions were detected, being 9 % of the total. 28 were infiltrating carcinoma, 2 in situ cancer, 1 mucinous carcinoma and 22 benign. The ultrasound findings associated with malignancy were: vascularization 14, acoustic shadow 9, calcifications 8, edema 8 and distortion 4. The molecular subtypes of the malignancies were analyzed, highlighting Luminal B with 13, HER2+ 6, triple negative 4, Luminal B HER2+ 3 and Luminal A 2. No significant statistical correlation (p 0.15) was found between these variables.

Conclusions: The usefulness of ultrasound in the diagnosis of breast cancer is highlighted by detecting it in 58.4%, therefore, non-mass lesions should be biopsied. The main finding in malignant lesions was vascularization, while benign lesions did not have frequent calcifications. Relationships between ultrasound findings and molecular subtypes were observed. The study has limitations, such as its oncologic setting, but it highlights the importance of knowledge of non-mass lesions in the treatment and prognosis of breast cancer.

Figure 1: Analysis of studies in molecular subtypes

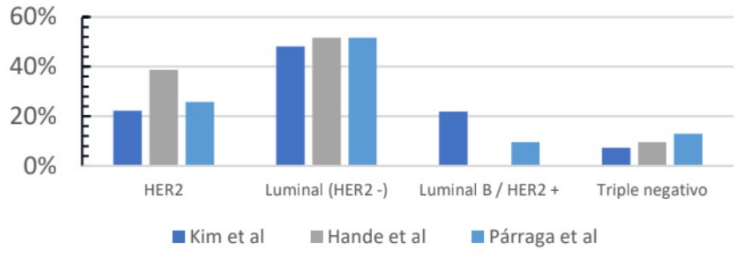

Table 1: Association of ultrasonographic findings and molecular subtypes

Hallazgos ultrasonográficos	HER2+	LUMINAL A	LUMINAL B	LUMINAL B HER2+	TRIPLE NEGATIVO	∑
Vascularización	1	2	9	1	1	14
Sombra acústica	6		1	1	1	9
Edema	2		2	1	3	8
Distorsión	1		2		1	4
Calcificaciones	2	1	3	2		8
∑ *(p 0.15)*	**12**	**3**	**17**	**5**	**6**	**43**

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INCIDENCE AND MORTALITY OF CARDIAC DYSFUNCTION IN ONCOLOGY PATIENTS IN SEPTIC SHOCK

INCIDENCIA Y MORTALIDAD DE LA DISFUNCIÓN CARDÍACA EN PACIENTES ONCOLÓGICOS CON CHOQUE SÉPTICO

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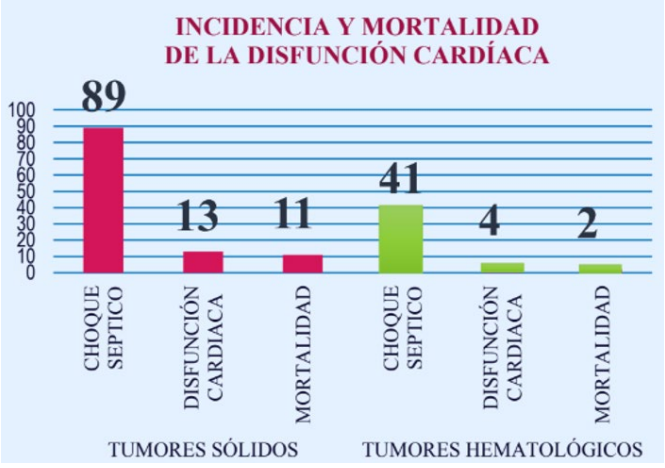
Background: Septic shock is a serious complication that persists as a significant cause of morbidity and mortality in intensive care units globally. Patients with solid and hematological tumors, due to their inherent immunosuppression and the complexity of the combination of cancer and septic shock, represent a high-risk group in whom cardiac dysfunction is part of the complications, the same entity that has not been sufficiently studied in oncologic patients.

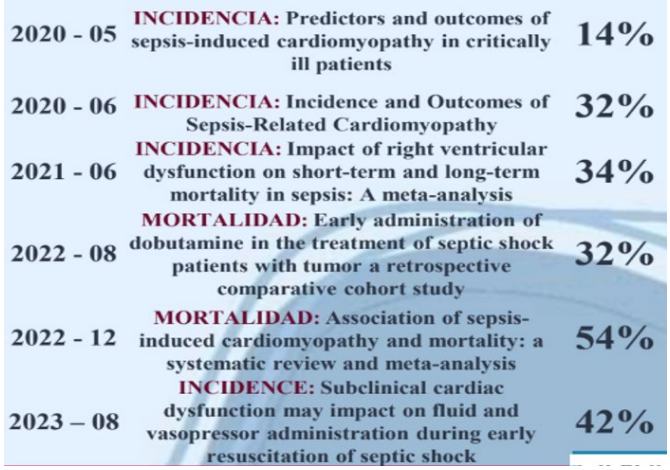
Methods: A retrospective, single-center, longitudinal study was conducted in the oncological intensive care area of the SOLCA Guayaquil Hospital from April 2022 to June 2023 with a population of 130 patients diagnosed with septic shock. Data were collected from medical records and inotropic requirement was used as a determinant of cardiac dysfunction. Subsequently, incidence and mortality in patients with solid versus hematologic tumors were evaluated.

Results: With the data obtained, 13.8% of the general population with an admission diagnosis of septic shock had cardiac dysfunction; of these, 14.6% and 9.7% were patients with solid and hematological tumors, respectively, with mortality in solid tumors of 84% and in hematological tumors of 50%.

Conclusions: This study demonstrates that the incidence of cardiac dysfunction in septic shock is similar to the general population, highlighting that for both types of tumors mortality is high when dysfunction is present, which motivates further research, trying to specify risk factors, prevention and support.

Graph 1: Comparison of incidence of cardiac dysfunction and mortality in solid vs hematological tumors.





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CLINICAL AND IMMUNOHISTOPATHOLOGICAL CHARACTERISTICS OF BREAST CANCER IN WOMEN BELOW THE AGE OF 40

ASPECTOS CLÍNICOS E INMUNOHISTOPATOLÓGICOS DEL CÁNCER DE MAMA EN PACIENTES MENORES DE 40 AÑOS

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Background: Breast cancer can occur at any age. Seven percent of breast cancer cases occur in people under 40 years of age, and in women this condition accounts for 40% of all cancers (1,2). The most recent SEER Cancer Statistics Review indicates that at 40 this increases to 1.55% (1 in 65 women) (4). Breast cancer occurring at younger ages represents a challenge in terms of prevention, early detection, diagnosis and treatment (5) This study seeks to provide a guideline to the medical community about breast cancer cases in Ecuador in this age group.

Methods: A retrospective, observational, cross-sectional, descriptive, descriptive study explored 500 medical records in a period of time from January 2020 to January 2022 in the specialized oncology center in Ecuador (SOLCA). The ICD10 code C509 (malignant tumor of the breast, unspecified part) was used. Patients under 40 years of age at the time of diagnosis were included. Cases without pathology findings were excluded.

Results: Demographic and clinical aspects were studied in 100 patients within the age range, 80% were older and 20% younger than 30 years. The average number of children in patients with breast cancer was 2 children (57%) and the use of hormonal contraceptives was 42%. Immunohistopathological aspects were analyzed in 132 patients. Ninety-one percent were classified as infiltrating ductal carcinoma, 5% as ductal carcinoma in situ, 1% as infiltrating lobular carcinoma and the remaining 1% as mixed invasive carcinoma.

Conclusions: Infiltrating ductal carcinoma is the histological type of breast cancer that predominates in women under 40 years of age; half of the cases would have a therapeutic option available for adjuvant therapy as they are progestin receptor positive. The number of children and the use of contraceptives should be taken into account as predisposing factors for breast cancer.

1% lobular carcinoma in situ, 1% infiltrating lobular carcinoma and the remaining 1% mixed invasive carcinoma.

Figure 1: Proportion of Patients by Medical History

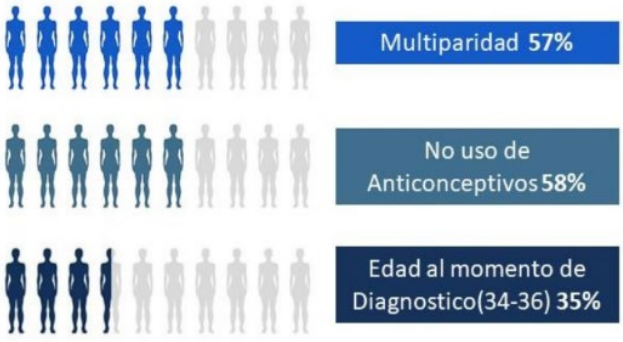

Table 1: Clinical and immunohistopathological features

Características	Número	Porcentaje
Edad (años)		
Mayor a 30	80	80%
Menor a 30	20	20%
Uso previo de anticonceptivos		
Sí	42	42%
No	58	58%
Más de 2 hijos		
Sí	57	57%
No	43	43%
Inmunohistopatología		
Carcinoma ductal infiltrante	120	90.23%
Otro tipo histológico	12	9.77%
Receptores de estrógenos positivos	63	47.72%
Receptores de progestágenos positivos	67	50.75%
HER2 NEU positivo	39	29.55%
Triples positivos	20	15.15%
Triples negativos	36	27.27%
Luminal A	15	11.36%
Luminal B	117	88.64%

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PSEUDOMYXOMA PERITONEI: CLINICAL IMPLICATIONS OF IMAGING FINDINGS

PSEUDOMIXOMA PERITONEAL: IMPLICACIONES CLÍNICAS DE LOS HALLAZGOS IMAGENOLÓGICOS

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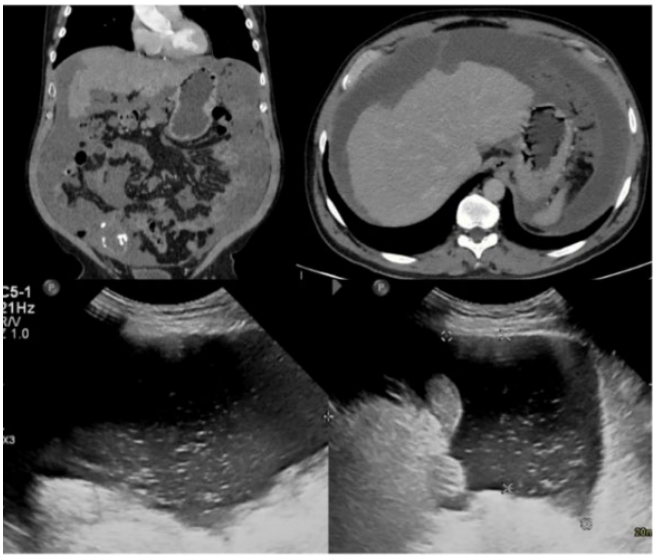
Background: Pseudomyxoma peritonei (PMP) is a rare benign disease characterized by the presence of multiple mucinous implants in the peritoneal cavity. Of unknown etiology, it is considered to be related to endometriosis or obstruction of Meissner's ducts. More frequent in women of reproductive age. Benign in nature; usually, it may cause complications such as intestinal obstruction or peritonitis. Treatment is usually surgical, with removal of the tumor lesions.

Methods: Observational, descriptive, retrospective study of patients diagnosed with PMP. Medical records and radiology reports were reviewed for presence of tumor/cystic lesions, thick septa, complications or disease recurrence.

- Inclusion criteria: -Diagnosis of PMP confirmed by histopathology. - Age ≥ 18 years.
- Exclusion criteria: Diagnosis of other malignant peritoneal disease.

Results: Eighteen patients were included in the study. Of these, 10 had tumor/cystic lesions, 1 with thick septa or mobile echoes. One group had a postoperative complication risk of 11.1% ($p < 0.05$). In addition, there was a 100% non-recurrence rate in the study population, with a mortality rate of 94.4% over a 3-year period.

Conclusions: Patients with PMP present tumor/cystic lesion more frequently. Thick septa, in addition to being at risk of postoperative complications. The presence of thick septa or cystic masses is a finding that should be carefully considered, as it may indicate a risk of disease progression. It is important that patients with these findings receive follow-up after surgery by a multidisciplinary team, due to the high mortality rate in a short period of time during the study (3 years).



		N	%
Sexo	F	11	61,1%
	M	7	38,9%
Diagnóstico Patología	NO	11	61,1%
	SI	7	38,9%
Cirugía previa	NO	10	55,6%
	SI	8	44,4%
Lesión tumoral / quística	NO	8	44,4%
	SI	10	55,6%
Septos gruesos / Ecos	NO	17	94,4%
móviles	SI	1	5,6%
Complicaciones	NO	16	88,9%
postoperatorias	SI	2	11,1%
Recurrencia	NO	18	100,0%
Mortalidad en 3 años	FALLECIDO	16	88,9%
	VIVO	2	11,1%

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SURVIVAL IN PATIENTS WITH CERVICAL CANCER SUBJECTED TO CHEMOTHERAPY-RADIOTHERAPY IN SOLCA-GUAYAQUIL

SUPERVIVENCIA EN PACIENTES CON CÁNCER DE CÉRVIX SOMETIDOS A QUIMIO-RADIOTERAPIA EN SOLCA-GUAYAQUIL

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Background: Cervical cancer (cc), being a pathology of high incidence in Ecuador, requires a priority multidisciplinary therapeutic approach to obtain optimal benefit in overall survival. The aim of the present study is to describe overall survival (OS) in patients with locally advanced cc treated with chemoradiation, according to histological type and clinical stage.

Methods: This is an observational, analytical, retrospective, retrospective, longitudinal study of patients with stage IIB-IVA CC who received treatment with chemoradiation therapy during the period from January 2010 to December 2014 with 10-year follow-up. The SPSSv29 statistical system was used. Survival analysis was performed using Kaplan Meier method and Log-Rank test.

Results: Of a total of 1909 patients, 1581 were excluded because they did not meet the eligibility criteria. The overall survival rate was 43%. According to histological type: 276 patients presented squamous cell carcinoma (SCC) and 52 adenocarcinoma (ADC); presenting a survival of 44% for SCC and 35% for ADC. The calculation by clinical stage, II-B, shows a survival of 46%. For stage IV.

A of 20% up to 46 months (graph 1). The Log-Rank test (p0.04) shows a significant statistical value with benefit for stage II-B. (See table 1).

Conclusions: Overall survival at 10 years was 43%, showing a significant difference for histological type, being higher for squamous cell carcinoma, and also showing a significant difference between stages.

Graph 1.

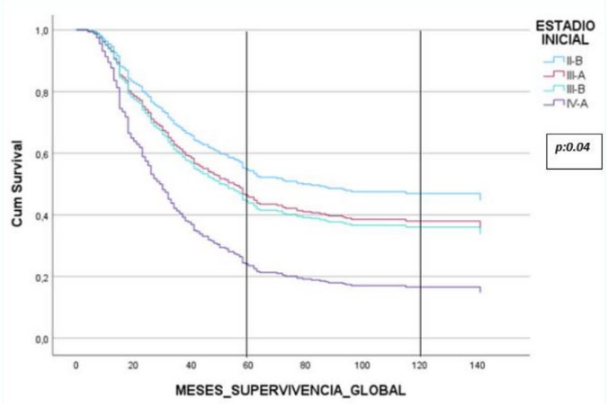

Table 1.

VARIABLE	Total. Pctes	N° evento	SG 5 años	SG 10 años
Supervivencia	328	184	50%	43%
Adenocarcinoma	52	31	49%	35%
Carcinoma Escamocelular	276	153	50%	44%
Total	328			
II-B	230	122	54%	46%
III-A	53	32	42%	39% (93 meses)
III-B	30	18	41%	40% (77 meses)
IV-A	15	12	20% (46 meses)	
Total	328			