



EXPERIENCE OF AN ONCOLOGICAL PEDIATRIC SURGEON: 12-YEAR RETROSPECTIVE STUDY. QUITO, ECUADOR

Alexánder Antonio Jara Chávez*	MD. General Practitioner / De Los Colimes Y Avenida De Los Granados Quito - Ecuador *Corresponding Author
Carolina Vanessa Saldaña Rodríguez	Medical Resident At "hospital De Especialidades De Las Fuerzas Armadas N.1" Quito - Ecuador
Silvana Jeannett Suarez Merchan	Medical Resident At "hospital General IESS Quito Sur / Av. Maldonado Quito - Ecuador
Víctor Alfonso Terán Pérez	Medical Resident At "Clinica Pasteur" Quito – Ecuador
Betty Fernandez Santamaria	Medical Resident At "Hospital De Especialidades De Las Fuerzas Armadas N.1" Quito - Ecuador
Paulina Elizabeth Durán Mora	MD. General Practitioner
Jéssica Isabel Vargas Palma	Medical Resident At "Hospital De Especialidades De Las Fuerzas Armadas N.1" Quito - Ecuador
Juan José Paz y Miño Moscoso	Medical Resident At "Hospital Oncológico Gral. Solon Espinosa Ayala" Quito - Ecuador
Carina Fernanda Chávez Jaramillo	Medical Resident At "hospital Universitario Andino Chimborazo" Riobamba - Ecuador
Carlos Humberto Vicuña Mariño	MD. Pediatric Surgery Oncology Attending Physician At "hospital Oncológico Gral. Solon Espinoza Ayala" Quito - Ecuador / Deceased

ABSTRACT

OBJECTIVES: Description of different types of surgeries performed most frequently by a Pediatric Oncologist Surgeon.

METHOD: Retrospective analysis of pediatric patients with oncological pathology who underwent surgical treatment by a Pediatric Oncologist Surgeon in the city of Quito – Ecuador, from July 2005 to October 2016.

RESULTS: For the present study, a total of 2075 surgeries were identified, classifying them according to areas of the body; resulting in the most demanded surgeries with 62.93% thoracic surgeries, secondly with 13.25% (275) were abdominal surgeries; neck surgeries occupy third place with 7.13% (148), fourth with 6.50% (135) skin-related surgeries; Inguinal region occupies the fifth place with 2.31% (48), surgeries performed in the oral cavity in sixth place with 1.44% (30) and lastly with 6.40% (133) we find several surgeries such as Catheter Picc Line fittings, excision and tumor biopsies of limbs, cleaning and surgical review of areas that are not mentioned before.

CONCLUSION: In medicine it is important to an oncological pathology the timely detection and appropriate treatment by specialized and trained professionals in a given area. The lack of specialists in Pediatric Oncological Surgery is evident; in Quito - Ecuador during the years of the present study there was only one specialist who with his scientific contribution, surgical ability and multidisciplinary team in oncology improved the quality and lifestyle of patients and family members; In addition, with this study, a precedent is created in an area as delicate as cancer surgery of children.

KEYWORDS : Pediatric Cancer Surgery, Pathology. Quito, Ecuador

INTRODUCTION

Currently, along with the increase of cases of childhood cancer, the need for health specialist professionals and subspecialists capable of improving the quality and lifestyles of pediatric cancer patients has been born, and why not talk about healing and subsequent re-insertion into society with the least associated comorbidity.

A subspecialty that has become fundamental for this objective corresponds to Pediatric Oncological Surgery; It should be noted that there are very few subspecialists in this branch. In Ecuador until 2017 (the year in which the Pediatric Surgeon

died, whom we refer to in this article) there was only a qualified doctor who attended and transferred the vast majority of pediatric cancer patients who required a diagnostic surgery, either as a part of treatment, or surgery was the treatment.

Another reason to carry out this study is that in the medical literature the study and research projects and projects on Cancer Surgery in children are almost not existing.

This study serves as a precedent for future studies to be carried out, especially in countries with limited economic resources where there is no complete access to specialized or

professional health centers.

METHODOLOGY

We conducted a retrospective study of pediatric patients with oncological diagnosis / tumor who underwent surgical treatment by Dr. Carlos Vicuña - Pediatric Oncologist Surgeon from July 2005 to October 2016.

Files of 2075 surgeries were reviewed, identified in computer records stored by the specialist Pediatric Surgeon Oncologist.

The information obtained from the digital medical records was analyzed using the Excel statistical package.

RESULTS

A total of 2075 surgeries were performed on pediatric cancer patients; of which they were classified according to body areas; giving the following results:

1. 1306 Thoracic Surgeries corresponding to 62.93% of the total; Of which the Subcutaneous Implantable Catheter Placement occupies the first place with 876 surgeries performed and corresponds to 67.07% of thoracic surgeries.

TABLE 1. Surgeries Performed per year. General Analysis

SURGICAL EXPERIENCE OF A PEDIATRA ONCOLOGO SURGEON 2005 - 2016													
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	TOTAL
MOUTH	2	1	1	1	9	1	5	3	4	0	3	0	30
NECK	9	19	12	11	18	7	19	18	14	6	11	4	148
CHEST	18	49	75	98	117	106	109	82	148	158	191	155	1306
ABDOMEN	6	11	20	13	19	23	24	38	27	35	36	23	275
REGION INGUINAL	1	4	6	1	6	13	4	1	4	3	3	2	48
SKIN	5	6	8	21	21	21	10	9	9	8	10	7	135
OTHERS	0	12	14	9	17	21	26	6	6	12	6	4	133
TOTAL	41	102	136	154	207	192	197	157	212	222	260	195	2075

TABLE 2. Surgeries Performed per year. Descriptive Analysis

SURGICAL EXPERIENCE OF A PEDIATRA ONCOLOGO SURGEON 2005 - 2016			
	Subtotal	Porcentaje	Total
Mouth			30
Biopsy Of Injury	11	36.66	
Tumoral Resection	8	26.66	
Neck			148
Biopsy: Ganglio / Injury / Cyst	45	30.40	
Resection: Ganglio / Injury / Cyst	27	18.24	
CHEST			1306
Subcutaneous Implantable Cateter Placement	876	67.07	
Subcutaneous Implantable Cateter Withdrawal	203	15.54	
Abdomen			275
Exploring Laparotomy	220	80	
Biopsy Tumor / Injury	46	20.90	
Nefrectomy / Nefroureterectomy	45	20.45	
Inguinal Region			48
Orchiectomy	16	33.33	
Biopsy (Testicular / Rectal)	9	18.75	
Skin			135
Injection / Nodules / Nevus Resection	103	76.29	
Biopsy Injuries / Nodules / Nevus	15	11.11	
Others			133
Arm Tumor Resection / Soft Parts / Orbital / Etc	54	40.60	

2. 275 Abdominal Surgery corresponding to 13.25% of the total; being the Laparotomies with 220 surgeries the most performed and corresponding to 80% of abdominal surgeries.
3. 148 Neck Surgeries corresponding to 7.13% of the total; of which the Biopsies of Cervical Nodes and Injuries are the most performed ones with a number of 45 surgeries, corresponding to 30.40% of Neck surgeries.
4. 135 Skin Surgeries corresponding to 6.50% of the total; practicing 103 exeresis of lesions, nevus, nodules, corresponding to 76.29% of skin surgeries.
5. 48 Inguinal Surgeries corresponding to 2.31% of the total; Orchiectomy with 16 surgeries corresponding to 33.33% of Inguinal Surgeries.
6. 30 Oral Cavity Surgeries corresponding to 1.44% of the total; among which the Biopsy of Injury with 11 surgeries are the most performed ones and correspond to 36.66% of oral cavity surgeries.
7. 133 Surgeries of areas not mentioned above corresponding to 6.40% of the total, of which Tumor Exeresis of Extremities, Retro orbitals, orbitals, lacrimal canal, pre auricular, etc. They occupy the first place with 54 surgeries performed corresponding to 40.60%.

Osteotomy / Maxilectomy / Lumbar Puncture / Etc	20	15.03	
Total			2075

DISCUSSION

The Pediatric Oncologist Surgeon with solid knowledge base and good surgical criteria is a fundamental pillar in the proper treatment of children diagnosed with cancer. His action through surgery with complete excision, margins free of resection, with the best and most updated surgical technique in addition to having a team to perform the treatments required for each patient such as neo-adjuvant chemotherapy, adjuvant chemotherapy and radiotherapy are necessary to achieve the main objective of healing in pediatric cancer patients.

CONCLUSION

Doctors with a subspecialty in Pediatric Oncology Surgery are very scarce; Research studies on their work is almost not existing in the medical literature. That is why we believe it is essential to capture in a retrospective study about the 12-year experience of the only doctor qualified in this branch in Ecuador during the time of the study. He was also part of a multidisciplinary team which managed to improve the quality and lifestyle of pediatric cancer patients and their families. His theoretical knowledge and technical ability were important to achieve the long-awaited results of reducing morbidity as well as mortality and increasing survival rates of children with cancer disease.

This study also shows us the statistical experience of the surgeries performed so that future generations can benefit from it.

In memory of Dr. Carlos Humberto Vicuña Mariño

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