



SPECTRUM OF HEMATOLOGIC MALIGNANCIES IN A TERTIARY PEDIATRIC CENTER IN THE PHILIPPINES FROM YEAR 2013 – 2017

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INTRODUCTION

Pediatric malignancies in the Philippines have a reported incidence of approximately 3,500 new cases per year and approximately 50-60% of cases are hematologic malignancies(HM). Information on the spectrum of pediatric HM is sparse.

OBJECTIVES

To describe the spectrum of hematologic malignancies in children seen at PCMC from 2013-2017.

METHODOLOGY

This is a retrospective descriptive study of patients diagnosed with HM at a single tertiary institution in the Philippines, from January 2013 to December 2017. We reviewed the clinical and histologic parameters of 220 consecutive patients diagnosed with HM.

Table 1. Distribution pattern, median age at diagnosis and male to female ratio of hematological malignancies at Philippine Children's Medical Center from 2013-2017.

	All Patients				Males		Females	
	N	% of HM	Median Age	M/F	N	% of HM	N	% of HM
All HM	220	100	7	2	148	100	72	100
Lymphoid Neoplasm	170	78	9	2	116	78.37	54	75
NHL	30	14	9.3	2	21	14.19	9	12.5
HL	18	8	14	1.5	11	7.43	7	9.72
MM	1	0.5	---	---	1	0.68	0	0
ALL	121	55	6	2	83	56.08	38	52.78
Myeloid Neoplasm	32	14.5	5	1.7	20	13.51	12	16.67
MPN	1	0.5	---	---	0	0	1	1.39
AML	28	13	10	1.5	17	11.49	11	15.28
Myeloid sarcoma	2	1	7.5	---	2	1.35	0	0
MDS	1	0.5	---	---	1	0.68	0	0
Dendritic/Histiocytic Neoplasm	18	8	1	2	12	8.11	6	8.33
Langerhan Cell Histiocytosis	18	8	1	2	12	8.10	6	8.33

RESULTS

Of the 220 patients diagnosed with hematologic malignancies, 148(67%) were males and 72(33%) were females. The overall median age(MA) at diagnosis is 7 years (1 month to 18 years). The MA for myeloid and lymphoid malignancies was 5 and 9 years, respectively. Acute lymphoblastic leukemia was the most frequent HM(55%, MA 6years) in our pediatric population, followed respectively by non-Hodgkin lymphoma(14%, MA 9.3years), acute myeloid leukemia(13%, MA 10years), langerhans cell histiocytosis(8%, MA 1year), Hodgkin lymphoma(8%, MA 14years), and myeloid sarcoma(1%, MA 7.5years). Myeloproliferative neoplasm, myelodysplastic neoplasm, and multiple myeloma, accounts for 0.5% each. Among the NHL, Burkitt lymphoma was the most common(33%), followed respectively by anaplastic large cell lymphoma (17%), acute T lymphoblastic lymphoma(14%), subcutaneous panniculitis-like T cell lymphoma (7%) and extranodal Marginal zone lymphoma(3%). Ten(4.5%) cases of HM had no immunologic workup.

CONCLUSION

This single institution study of HM spectrum in the pediatric population parallels that of the national cancer registry of the department of health of the Philippines.

Keywords: *Pediatric, Filipino, Hematologic, Malignancy*