

Survival of Adolescents and Young Adults (15 to 24 years old) with cancer: analysis of Hospitalbased Cancer Registry in Brazil



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INTRODUCTION

Cancer in Adolescents and Young Adults (AYA) consists at approximately 6% of all cancers and its incidence is 2.7 times higher than in children under 15 years old. One of the great challenges regarding this population is the decision at where they should be treated. The behavior biological/clinical is diverse in both Pediatric Oncology and Adult Oncology. Brazilian previous analysis demonstrated that 49% of the patients between 15 and 19 years old were treated in pediatric units and 96% of the patients between 20 and 24 years old were treated in adult units. The unit where AYA patients are treated can influence the survival.

Table 3

OBJECTIVE

To analyze the overall survival of the Adolescents and Young Adults (AYA) according to the hospital unit of treatment (Pediatric or Adult Oncology Unit) in Brazil.

METHODS

Information from registered cases in Hospital-based Cancer Registry Figure 1 (HBCR) in Brazil were selected. Telephone contact to all hospitals were made to request the data of the last contact of the patient and current status (death or alive). Patients from 15 to 24 years age, registered in HBCR from 2007 to 2011 diagnosed with Leukemia, Lymphoma, Sarcoma, Bone and Central Nervous System tumors were included. Data will be tabulated on SPSS Program 23.0 version and calculation of the estimators of the survival probability will be realized using Kaplan-Meier method.

PRELIMINARY RESULTS

There are 187 Hospitals Units (HU) enrolled in HBCR, excluding those from São Paulo State. Contact was made with 175 HU (94%). Until now, 42 hospitals (24%) replied (Table 1). Among these tumors, lymphomas had Pediatric Oncology Unit and 74.3% were treated at Adult Oncology Unit. the highest frequency in all regions (37.5%) (Table 2). Hospital from the South Region return more frequently (40.7%) and 74% were treated in Adult Oncology unit (Table 3). Figure 1 shows the percentage of cases with follow up received, according to region: Northeast (16%), southeast (34%), South (51%) and North (60%).

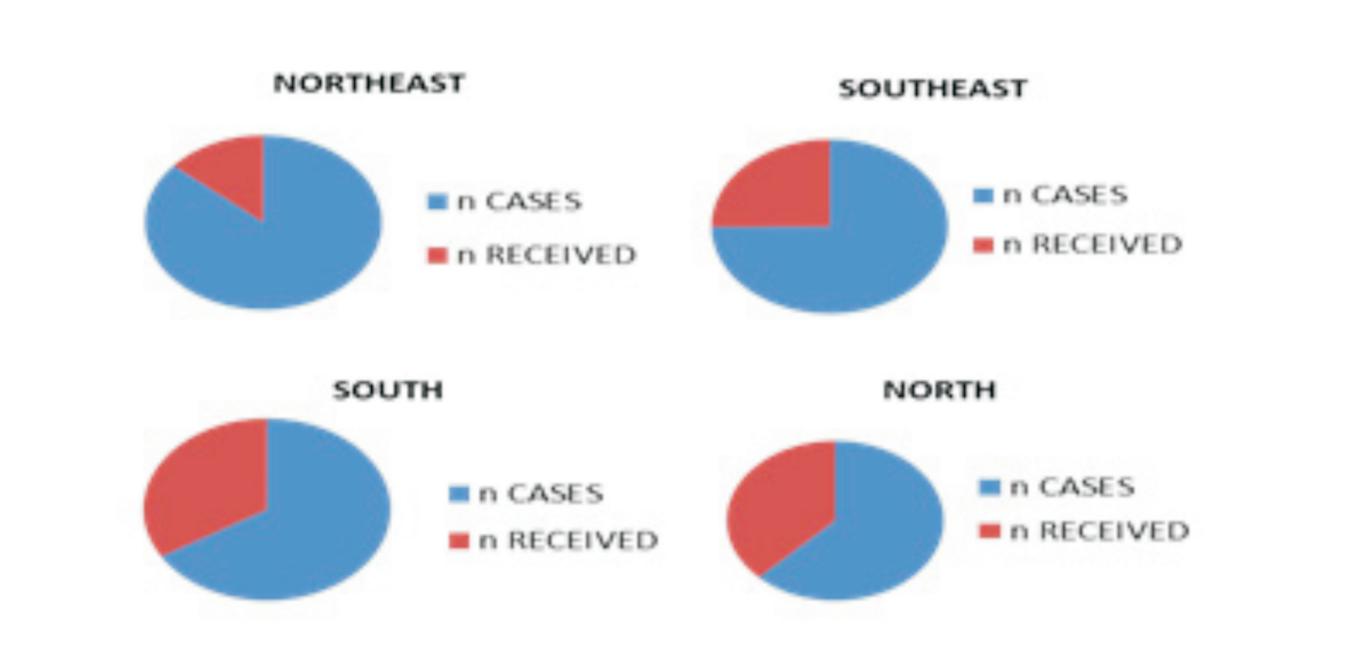
		CONTACT	CONTACT REPLIED
REGION	n HU	n HU (%)	n HU (%)
SOUTH	61	60 (98.4)	15 (25.0)
SOUTHEAST	50	42 (84.0)	13 (31.0)
NORTHEAST	49	48 (98.0)	10 (20.8)
MIDWEST	17	16 (94.1)	_
NORTH	10	09 (90.0)	04 (44.9)
TOTAL	187	175 (93.6)	42 (24.0)

HU: HOSPITAL UNIT

Table 2

	REGION				DKAZIL
TYPE OF	NORTH	NORTHEAST	SOUTHEAST	SOUTH	
NEOPLASIA	n (%)				
Lymphoma	112 (31.1)	171 (39.1)	262 (36.8)	410 (39,5)	955 (37.5)
Leukemia	102 (28.3)	130 (29.7)	119 (16.7)	235 (22,7)	586 (23.0)
CNS	48 (13.3)	51 (11.7)	116 (16.3)	146 (14,1)	361 (14.2)
Bone Tumor	63 (17.5)	67 (15.3)	131 (18.4)	168 (16,2)	429 (16.9)
Sarcoma	35 (9.7)	18 (4.1)	83 (11.7)	78 (7,5)	214 (8.4)
TOTAL	360	437	711	1037	2545
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		Treated at Pediatric	Treated at Adult		
REGION	n Cases (%)	Oncology	Oncology		
		n (%)	n (%)		
SOUTH	1037 (40.7)	270 (26.0)	767 (74.0)		
SOUTHEAST	711 (27.9)	173 (24.3)	538 (75.7)		
NORTHEAST	437 (17.2)	61 (14.0)	376 (86.0)		
NORTH	360 (14.1)	151 (41.9)	209 (58.1)		
BRAZIL	2545	655 (25.7)	1890 (74.3)		



According to updated follow up, 25.7% of the AYA were treated at

PROSPECTS

To analyze overall survival according to treatment unit (Pediatric or Adult), to identify if there was difference between these units, independently of other variables with prognostic value.

- 1. Balmant N, De Camargo B, Reis R et al. Cancer incidence among adolescents and young adults (15 to 29 years) in Brazil. J Pediatr Hemato Oncol 2016; 38(3):e88-96.
- 2. Boissel N, Auclerc MF, Lhéritier V et al. Should adolescents with acute lymphoblastic leukemia be treated as old children or young adults? Comparison of the French FRALLE-93 and LALA-94 Trials. Journal of Clinical Oncology 2003; 21(5):774-780. 3. Desandes, E. et al. Pathways of care for adolescent patients with cancer in. Pediatr Blood Cancer. 2012; 58: 924-9.
- 4. Martins HTG. Perfil do Atendimento de Adolescentes e Adultos Jovens com Câncer no Brasil. [Projeto de iniciação científica] apresenta ao INCA. Rio de Janeiro, 2016.
- 5. Ram R, Wolach O, Vidal L et al. Adolescents and young adults with a acute lymphoblastic leukemia have a better outcome when treated wit pediatric-inspired regimens: systematic review and meta-analysis. American Journal of Hematology 2012; 87(5):472-8. 6. Zebrack B, et al. Assessing the health care needs of adolescents and young adults cancer patients and survival. Cancer 2006; 107:2915-293

Projeto Gráfico: Serviço de Edição e Informação Técnico-Científica / INCA

