$GYDQFHV LQ &DQFHU 3UHYHQWLRQ

Hepner et al., Adv Cancer Prev 2016, 1:1
'2 , 10.4172/acp.1000e101

(GLWRULDO 2SHQ DF

Risk of Melanoma among Survivors of Hematologic Malignancies

Hepner A[1], **Gregorio JVAM**[1], **Garicochea B**[1] **and Munhoz RR**[1,2*]

[1]*Oncology Center, Hospital Sírio Libanês, São Paulo, Brazil*

[2]*Instituto do Câncer do Estado de São Paulo, Universidade de São Paulo, São Paulo, Brazil*

[*]**Corresponding author**: Rodrigo R. Munhoz, Oncology Center – Hospital Sírio Libanês, Rua Dona Adma Jafet, 91, 2nd Floor-Building A, Brazil, Tel: +55-11-3394 5356; E-mail: rodrigo.rmunhoz@hsl.org.br

Rec Date: Jan 12, 2016; **Acc Date:** Jan 13, 2016; **Pub Date:** Jan 30, 2016

Editorial

According to Surveillance, Epidemiology, and End Results (SEER) reports, 71,850 new cases of Non-Hodgkin's Lymphoma (NHL) and 54,270 cases of leukemia were estimated in 2015, corresponding to 7.6 % of all newly-diagnosed malignancies [1]. In the past few years, with the development of new therapies, median 5-year overall survival rates for patients with hematologic malignances have reached 50% to 85%, depending on the subtype, with higher percentages seen in more indolent conditions, including Follicular Lymphoma (FL), Chronic Lymphocytic Leukemia (CLL) and Hodgkin's Lymphoma (HL). As a result, a rapidly growing population of cancer survivors is expected and concerns about long-term treatment-related toxicities and incidence of Second Malignant Neoplasms (SMNs) have gained even greater importance [1].

A meta-analysis including a total of 10 studies investigating the incidence of solid SMNs, encompassing 115916 NHL survivors treated between 1961 and 2004 suggested a 1.32- fold increased risk for solid tumors [2]. Similarly, Schaapveld et al. reported a standardized incidence ratio of 4.6 (95% confdence interval 4.3 to 4.9) among 3905 patients treated for HL in comparison to the general population in the Netherlands and a sustained risk for second cancers even 40 years afer treatment [3]. Another study based on SEER registries between 1992 and 2006 identifed lung cancer and cutaneous melanoma as malignances with an increased risk in CLL and FL survivors [4]. In line with previous fndings, a recent publication of a Canadian group reported an increased cancer death rate in solid-organ transplant recipients compared to the expected in general population suggesting that immunosuppressed environment may contribute to the development of those neoplasms [5]. Te factors underlying the increased risk of second malignances among survivors of hematologic neoplasms are complex. Most authors suggest that difering immunologic alterations, genetic susceptibility, specifc treatments (especially with alkylating agents) and environmental factors, such as tobacco use and infections may be involved [4].

In a recently-published and extremely relevant contribution, Lam et [illegible] Mect before or afer the diagnosis of the NHL had more than a two-fold

would lower the mortality from melanoma in citizens with 20 years or older [7-9]. Based on this data, Germany started a nationwide screening program in 2008. From the age of 35 years onwards, every individual was entitled to full-body visual inspection of the skin at two-year intervals. Unfortunately, recently data up to the year of 2013 concluded that there had not been any downward trend in melanoma mortality since the introduction of the screening project [10]. Hopefully, the incorporation of new techniques such as dermoscopy, confocal microscopy and total body photography will potentially increase the accuracy of screening methods.

In the absence of defnitive data, experts advocate that individuals at high

er risk for melanoma (white men ≥50 years, history of signifcant sunburn, multiple moles, history suggesting a familial melanoma syndrome or with multiple atypical nevi) should be counseled about skin self-examination, use of regular sunscreen and have a periodic full body skin examination performed by a properly trained clinician/dermatologist. In addition to detection of early melanoma, such measures could potentially translate into a reduction of cause-specifc mortality. Based on the data that subgroups of hematologic malignancies, such as CLL and lymphoma survivors are at increased risk for cutaneous melanoma, these specifc populations should be included in the high-risk group and currently available recommendations should be extended to these patients. Moreover, eforts to better characterize the long-term risks in patients treated for acute leukemia and recipients of autologous or allogeneic bone marrow transplant are of upmost importance.

References

1. http://seer.cancer.gov/statfacts/html/melan.html
2. Pirani M, Marcheselli R, Marcheselli L, Bari A, Federico M, et al. (2011) Risk for second malignancies in non-Hodgkin's lymphoma survivors: a meta-analysis. Ann Oncol 22: 1845-1858.

3. Schaapveld M, Aleman BMP, van Eggermond AM, Janus CP, Krol AD, et al. (2015) Second câncer risk up to 40 years afer treatment for Hodgkin´s Lymphoma. N Engl J Med 373: 2499-2511.
4. Morton LM, Curtis RE, Linet MS, Bluhm EC, Tucker MA, et al. (2010) Second malignancy risks afer non-Hodgkin's lymphoma and chronic lymphocytic leukemia: diferences by lymphoma subtype. J Clin Oncol 28: 4935-4944.
5. Acuna SA, Fernandes KA, Daly C, Hicks LK, Sutradhar R, et al. (2016) Cancer Mortality Among Recipients of Solid-Organ Transplantation in Ontario, Canada. JAMA Oncol 7: 1-8.
6. Lam CJ, Curtis RE, Dores GM, Engels EA, Caporaso NE, et al. (2015) Risk Factors for Melanoma Among Survivors of Non-Hodgkin Lymphoma. J Clin Oncol 33: 3096-3104.
7. Breitbart EW, Waldmann A, Nolte S, Capellaro M, Greinert R, et al. (2012) Systematic skin cancer screening in Northern Germany. J Am Acad Dermatol 66: 201-211.
8. Waldmann A, Nolte S, Geller AC, Katalinic A, Volkmer B, et al. (2012) Frequency of em yod
8 l col .
R fm "