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Albinism Cancer Requires Worldwide Epidemiological Research

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Abstract

Cancer of the skin, in general, is believed to be rather uncommon in black persons. Collected reports from the US showed that, out of 357 skin cancer cases, 5 (1.4%) were expressly stated to be albinos. A Nigerian comparable series of 435 patients manifested 15 (3.4%) albinos. Therefore, it is hypothesized that albinism is a good model for studies on skin adaptation as it concerns albinos in USA and in an indigenous people of Nigeria and elsewhere.

Introduction

Elsewhere, I hypothesized that reprint requests can be used to analyze medical parameters [1]. Can the reprints in my possession as regards albinism facilitate epidemiological researches? Yes! The reprint [2] that I received on albinism itself defined it as "the clinical manifestation of heritable metabolic defect in the melanocytes (pigment cells) of the eyes, hair and skin." It delineated three groups including cutaneous albinism.

Now, I have a reprint [3] from fellow Nigerians whose work was done in the very country from which many ancestors of American blacks emigrated. Their work on skin cancer detailed 435 patients of whom 15 (3.4%) were albinos. Therefore, one question arose. How far did albinos feature in the seven reprints [4-10] received personally concerning American blacks, who presented with skin carcinomas?

Results

Table 1 shows the detailed data in chronological order, taking care to avoid duplication. Six reprints [4-9] yielded 357 cases out of which 5 patients (1.4%) were expressly stated to be albinos. The seventh reprint concerned 81 skin patients of whom 43 presented with squamous cell carcinoma, 12 of these being reported as having "a predisposing condition, including burn scar, cutaneous horn, chronic leg ulcers, scrotal ulcers, condyloma acuminatum, discoid lupus erythematosus, or albinism." In other words, albinism not only was relegated to the last position but also was unnumbered.

Authors	Series	Albinos
Fleming et al. [4]	163	2
Mora and Perniciaro [5]	38	1
Mora and Burris [6]	128	2
Matsuoka et al. [7]	14	-
Mora et al. [8]	13	-
Morimoto and Guvevitch	1	-
Totals	357	5

Table 1: Reported incidence of carcinomas in American blacks.

Discussion

Nigerian writers [2] reported 3.4% incidence of skin carcinoma among albinos in their series. The present brief review has shown an incidence of 1.4% among US blacks. The difference is probably significant because, as I demonstrated previously [11], reprint requests have considerable tracing power in scientific information and documentation. In other words, the reprints I obtained from the US are probably capable of portraying the realities on the ground there.

What of albinism elsewhere? A report [12] from Uganda stated that some albinos exist in that country "but apparently not as many as in South Africa." Therefore, it should be of interest to find out the relative frequency of albinism among American blacks.

Of interest also is the comparative exposure to sunlight in the United States and elsewhere as far as albinos are concerned. In this connection, it is noteworthy that Findlay [13] considered evolutionary trends and wrote thus: "lessening of pigment in all degrees up to albinism is followed by far worse damage in Negroes that whites because the habit of sun exposure is not moderated but proceeds unaltered." If that be the case, life style differences may also affect the incidence of carcinoma among albinos in different parts of the world.

In all probability, albinos constitute a subset that is eminently suitable for epidemiological research on pigmentary disorders. Thus, it is on record that "Albinism is a good model for studies on skin adaptation" [14]. Therefore, just as Harahap [15] compared skin cancer among Indonesians in different Provinces of that country, it is well to focus research on the ethnic levels worldwide. For instance, Summer [16] cited work on the Hunza, a dark skinned people living on the high plateau of the Himalayan Mountains North of Kashmir, to the effect that skin cancer is not known there at all. Their case is particularly important since carcinogenic radiation is reputed to be increased by concomitant great altitude and absolute purity of air in that region of the world. Accordingly, what happens to their albinos?

This is an intriguing question. As I see it, the discomfiture of albinism has received little or no attention in important recent texts. Thus, the weighty 2-Volume Ackerman's Surgical Pathology [17] does not mention albinism. Nor does the current WHO publication on Cancer in Africa [18]. Accordingly, in all probability, beaming the light of epidemiological research on the pigmentary disease of albinism worldwide will more than repay dividends.

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