

Adenocystic Carcinoma as a Molecular Variant of Albino Skin Cancer

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Abstract

Background: Albinism is an established risk factor for skin cancer in Black Africans, especially squamous carcinoma.

Main observations: I present 17 albinos with histologic diagnosis of adenocystic carcinoma who were seen at the National Orthopaedic Hospital, Enugu, Nigeria, from 1979 to 2008.

Two hundred and eight patients constituted the entire series. Out of them, the 17 adenocystic carcinomas were selected for special study. This showed an age range of 25 years to 63 years (mean, 41 years). Eleven were males and six females, i.e., M/F ratio of 2:1 approximately. The lesions measured from 3 cm to 11 cm, the average being roughly 5 cm. Of the sites affected, the head preponderated in two-thirds of the cases.

Conclusion: Albinism of the adenocystic carcinoma type should be recognized alongside the more frequent squamous carcinomas. However, no albino should suffer skin cancer let alone one reaching up to 5 cm across. This is possible with implementation of preventive public education strategies, including maternal care, empowerment of women, and indoor employment of albinos, this being a statutory action of Government.

Keywords: Skin; Carcinoma; Adenocystic type; Prevention; Albinism

Introduction

As an aftermath of the Nigerian Civil War, the Government appointed an Administrator for the East Central State. He established the Haile Selassie Institute of Orthopaedic, Ophthalmic and Plastic Surgery at Enugu, Nigeria. Subsequently, it was renamed as The National Orthopaedic Hospital. Throughout, I have been in charge of the Pathology Department. Having kept the results of all the personally examined surgical specimens, an interesting feature became apparent to me. Although a standard textbook affirmed that a major problem associated with albinism was “an increased risk of sun induced skin tumour, particularly squamous carcinoma,” [1]. I found that the adenocystic carcinoma variety featured also. As the cohort belongs exclusively to the “Ibo” or “Igbo” Ethnic Group [2] it seemed appropriate to report this epidemiologic finding in an international dermatologic journal, especially as it previously published on four such albinos [3].

Case Reports

During the 30-year period from 1979 to 2008, data were carefully collected in cases of albino skin cancers in terms of the epidemiologic features such as the age, sex, site affected and size of the surgical specimen as well as the histologic diagnosis.

Results

Out of a total of 208 surgical biopsy specimens of albino skin cancers, 124 (60%) were squamous celled. Adenocystic carcinomas were diagnosed 17 times (8%). Figure 1 is the histologic appearance, while Table 1 shows the epidemiologic characteristics. The ages ranged from 25 years to 63 years (mean 41 years). Eleven were males and six were females, i.e., approximately M/F of 2:1. The lesions measured from 3 cm to 11 cm, an average of roughly 5 cm. Of the sites affected, the head preponderated in two-thirds. Incidentally, Case 12 was published previously [4] in that the man's face exhibited in one microscope slide not only adenocystic carcinoma but also squamous carcinoma and basal cell carcinoma.

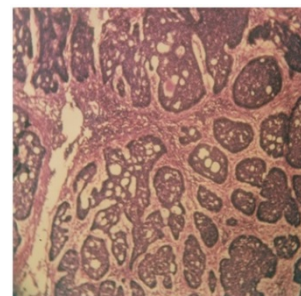


Figure 1: Histologic appearance of adenocystic carcinoma showing typical tiny cysts. H&E X800.

Serial (No.)	Laboratory (No.)	Name (initials)	Age (years)	Sex	Size (cm)	Site (s)
1	99/79	OA	46	M	7	Sternum
2	474/83	AB	36	M	4	Face
3	15/87	OR	25	F	6	Chest
4	112/87	OM	26	F	5	Trunk
5	115/87	OA	40	M	5	Chest
6	49/88	NP	32	M	11	Deltoid
7	191/88	10	35	M	4	Neck
8	207/88	OP	33	M	4	Face
9	57/94	OO	45	M	6	Lip, nose, neck
10	69/94	NA	32	M	9	Neck, eyelid
11	16/95	EO	43	M	4	Nose
12	880/05	EJ	48	M	4	Face
13	96/06	MI	63	F	5	Forehead
14	102/07	EJ	47	F	4	Eyelid, chest
15	160/06	IK	38	F	4	Ear
16	133/08	UA	51	M	5	Post auricular
	216/08	CC		F	5	Cheek

Table 1: Epidemiological data on 17 cases of adenocystic carcinoma in Nigerian albinos of the Ibo ethnic group.

Discussion

These figures revealed two outstanding features. First, the head suffered most. Secondly, the lesions were usually large. No wonder that a Nigerian group [5] was apologetic thus: "Most of our patients presented late."

Late presentation should be prevented. For instance, in Tanzania, the picture was one of enrollment "in an outreach skin care program"

[6]. In general, albinism should become a public health issue [7]. However, I am persuaded that the home front must be emphasized, i.e., mothers must play their parts materially. In fact, now that women empowerment is a tangible topic in academic and other circles [8]. The current deplorable albino incapacitations, and even deaths, should be a top topic. Moreover, the Government should consider statutory indoor employment of any albino.

Conclusion

Skin cancer should not be allowed to fester among albinos. Indeed, if it ever manifests, the lesion should be so minimal that excisional treatment would be satisfactory always. Actually, in the war against cancer in general, Sporn [9] lamented that "Too many adults still die from common epithelia cancers." As I see it, the war in the case of the adult albino should be the first to be won, seeing that no lesion will form. I can testify to this possibility with two of my female medical students who are both albinos and are now consultant physicians with unblemished faces!

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