

Psoriasis among African Blacks: The Abidjan Experience of 17 Years

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Abstract

Summary: Data from the black skin of psoriasis in Africa is limited. We studied the epidemiological, clinical and management in Ivorian hospital.

Materials and methods: We performed a descriptive cross-sectional study of patients seen in consultation or hospitalization for psoriasis in the Treichville University Hospital of Dermatology Center of Abidjan January 1, 1996 to December 31, 2012.

Result: The prevalence evaluated hospital 17 years is 0.46% (447 cases of psoriasis over 96,677 consultations). The mean age was 35 ± 10 years with a median of 39 years. Male predominant emerged with a sex ratio M/F 2.85. 18 patients were infected with HIV. 382 cases (85.46%) corresponded to common plaque psoriasis and 65 cases (14.54%) to severe forms often and rarely erythrodermic or pustular arthropathiques. Two cases of death from respiratory failure were recorded in two patients also pneumonia.

Conclusion: A total of psoriasis is relatively poorly represented affection in African hospitals and predominates in the male, with a representation of the clinical forms little different from that found in European series of dermatological recruitment.

Keywords: Psoriasis; Inflammatory dermatosis; Black skin; Africa

Introduction

Psoriasis is a chronic inflammatory skin disease that occurs in genetically predisposed subjects with predominantly cutaneous expression and joints. It is a condition affecting about 2% in the Caucasian general population in Europe and the US, while data from sub-Saharan Africa indicate a lower prevalence (0.3% to 1%) [1]. Psoriasis of the black African has the same clinical features as the white matter, but its management is hampered in Africa the difficulties of access to care but also to a specific psychological and cultural context. In Côte d'Ivoire there is little data available on psoriasis. This study was therefore conducted to determine the prevalence of psoriasis compared with other dermatoses encountered in hospitals, describe its epidemiological characteristics, identify the different clinical forms of the disease, and to report the progress of the disease in treatment when this element was known.

Materials and Methods

We performed a descriptive cross-sectional study using records of patients seen in consultation and records of patients hospitalized for psoriasis in the Treichville University Hospital of Dermatology Center of Abidjan January 1, 1996 to December 31, 2012. Psoriasis was diagnosed clinically or histological confirmation. A data collection form was developed for each case including age, sex, occupation, or triggering factors favoring disease, the clinical form of psoriasis, para

clinical tests (histology and HIV status), treatment prescribed and the evolution of the disease under treatment. The development was considered favorable when pruritus, erythema, and/or squamae regressed or disappeared and unfavorable when lesions were stationary or aggravation. Data were compiled and analyzed with EPI INFO software version 6.0.

Results

Epidemiological aspects

We recruited 447 cases of psoriasis on 96,677 consultations in 17 years or a hospital prevalence of 0.46%. The number of hospitalized patients was 50 or 11.18% and 397 were monitored externally (88.82%). The mean age was 35 ± 10 years with a median of 39 years (Figure 1). Male predominant was noted (74%) with a sex ratio M/F 2.85. Factors triggering or contributing were reported in 35 patients, ten cases of psycho-shock, 3 cases of alcohol-smoking and 18 cases of HIV infection (203 patients who had HIV testing 8.8%). Other contributing factors were not found.

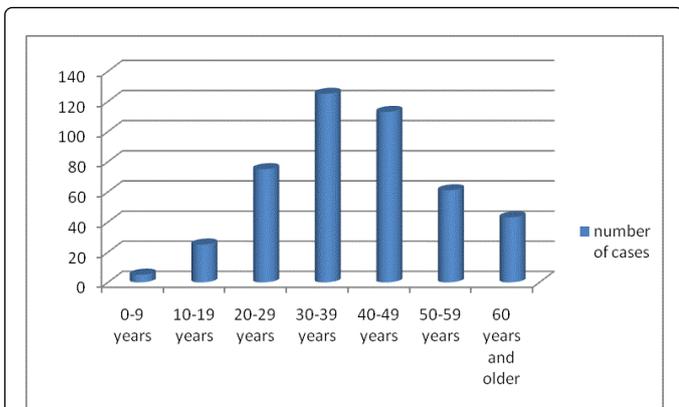


Figure 1: Distribution of cases of psoriasis by age.

Clinical and laboratory aspects

We identified 382 cases (85.46%) of vulgaris psoriasis (Table 1) and 65 cases (14.54%) with severe psoriasis. Erythrodermic psoriasis was the most common severe (86.15% or 56 cases out of 65) followed by the arthropathy form (6.2%) and the pustular form (7.7%). The diagnosis was essentially clinical.

Vulgar psoriasis clinical forms	Number cases	of	Percentage (%)
Plaque psoriasis	301		78.80
Scalp Psoriasis	35		9.16
Guttate psoriasis	28		7.33
Palmar plantar psoriasis	9		2.36
Psoriasis folds	5		1.31
Psoriasis mucosal	4		1.05
Total	382		100

Table 1: Distribution of cases according to the vulgar psoriasis clinical form (N=382).

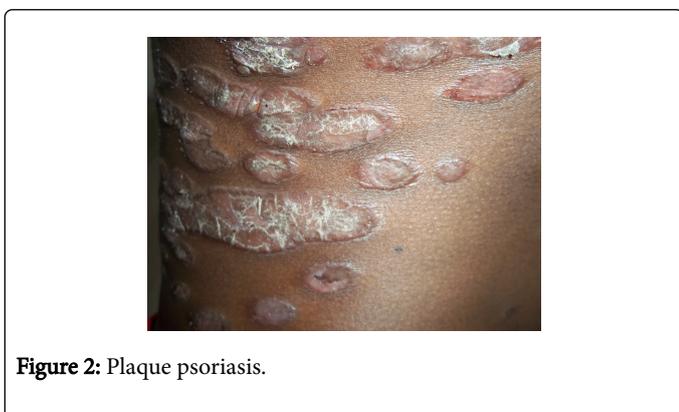


Figure 2: Plaque psoriasis.

A skin biopsy was made with histological confirmation of psoriasis in 47 cases or 10.5%. Eighteen patients had a positive HIV serology. These 18 patients are divided into six cases of vulgaris psoriasis

(33.33%), ten cases of erythrodermic psoriasis (55.55%), pustular psoriasis (5.56%) and arthritis psoriatic (5.56%) (Figure 2).

Therapeutic and evolutionary aspects

The treatment was indicated in 379 patients or 84.79% of the cases. The only topical medications were the most used in the treatment of psoriasis (62% of prescriptions). The protocols used were a combination of corticosteroids, acetyl salicylic acid and natural vitamin A (47.8%); calcipotriol (23.7%), the anaxeryl (7.8%). For systemic treatments: methotrexate (5.2%) and acitretin (4.9%) (Figure 3).

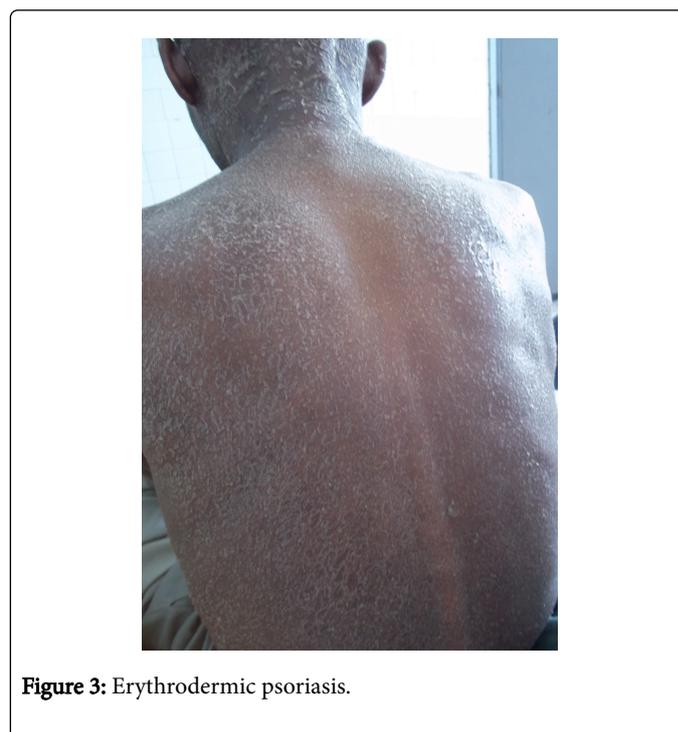


Figure 3: Erythrodermic psoriasis.

The treatment specified in 24 patients out of 57 with erythrodermic psoriasis and was dominated by the methotrexate-democorticoides Association (29.16%) or methotrexate alone (20.83%). In pustular psoriasis, treatment was either soriatane alone or with a topical corticosteroid. The topical keratolytic association and oral analgesic (4 cases) was the first choice in the treatment of psoriatic arthritis. Evolution has been specified in 195 patients on 447, or 43.6% of lost touch. For the monitored patient data is summarized in Table 2. Two deaths in 1st Day and 4th Day respiratory distress were recorded in two patients also pneumonia.

Evolution has not been specified for 3 cases of pustular psoriasis on the 5 cases observed. The remaining two had a good evolution 30th day. It was not noted any adverse outcome in patients with pustular psoriasis. The evolution of arthritis psoriatic has not been obtained for two patients. For the other two cases a good evolution was observed at 15th day for one and 90th day for the other.

Observation time	Favourable evolution		Unfavourable Evolution	
	Number	Percentage (%)	Number	Percentage (%)
15th Day	63	29.30	11	5.12

30th Day	67	31.16	13	6.04
60th Day	35	16.28	4	1.86
90th Day	18	8.37	4	1.86
TOTAL	183	85.12	32	14.88

Table 2: Evolution of vulgar psoriasis (N=215).

Discussion

Our prevalence data are similar to those mentioned by Pitche in Togo [1-3] and Boisseau-Garsaud in Martinique [4], 0, 8 and 0.6% respectively of psoriasis among consultants in dermatology. Recently published data show that psoriasis is rare in African Americans (less than 1% of the population), including those residing in the United States and in continental Africa [5]. Although population studies on the prevalence of psoriasis have not been conducted in Africa, prevalence in the hospital series is generally higher (2.6 to 3.3%) in East Africa (Kenya, Uganda and Tanzania) compared to the West African countries (from 0.05 to 0.3% in Nigeria, Mali, and Angola) [6]. These prevalence differences were attributed to climate especially sunlight that would have a moderating effect on the expression of the disease but with regional variances related to climate and genetics [7].

Adults aged 20 to 50 years account for 70% of the patients in our series. The mean age of patients was 36.7 years in accordance with Boisseau et al. [4] 38.9 years and Mahé et al. [8-10] 36.7 years. Children and adolescents (under 20 years) are 6.7% of patients. These data are similar to those of European and American series [2,4,5]. Male dominance observed in our study with a sex ratio M/F 2.85 had already been noted by several authors [1,3,6], is not found in European and American literature on Caucasian populations including sex ratio M/F is balanced to 1 [11,12]. Boisseau-Garsaud in Martinique [4] Chang in China and Zili [6] in Tunisia found a small male with a sex ratio M/F 1.1, respectively; 1.55; 1.16 and thus closer European series. This strong African male remains unexplained. Its 18 cases positive for HIV, the priority of one or the other condition could not be specified as well as the influence of HIV infection on relapses. Among the vulgar psoriasis, plaque psoriasis was the most common form (78.8%) followed by scalp psoriasis and psoriasis in drops in line with the literature [1,4,6,10]. Among the severe forms (14.54%), erythrodermic form predominated in our recruitment. Mahe et al. [10] reported erythrodermic forms 1% and 13% of arthropathiques rheumatism. Boisseau-Garsaud et al. [4] notaient 5.4% erythrodermic and pustular psoriasis in their series. In Abidjan, Komenan [1] recently compiled 60.7% of erythrodermic forms. Therapeutically, our data call little comment. If use of systemic therapy, methotrexate seems the most suitable alternative for the treatment of erythrodermic psoriasis attack if there is no cons-indications to its prescription. Prescription of sun exposure has not been notified in the records of patients. However, during the consultations, it is generally advised psoriasis patients to be exposed to the sun or wear short clothes. For hospital, a courtyard serves as rest and sun exposure area for psoriasis. Note, however, the lack of standardization of the practice.

The psychological care of patients was limited to the doctor-patient relationship. Some patients received anxiolytics and no psychological or psychiatric consultation was recommended. The only patient with psychiatric disorders was already monitoring the psychiatric ward that sent for the care of her psoriasis. The evolution was not specified as in 43.62% of patients reflecting a usual average follow rate of patients, because many of them do not meet the proposed appointment. We found 85.1% of favorable development for psoriasis vulgaris and 81.8% for erythrodermic psoriasis. The association with HIV infection is a poor prognosis factor (10 cases of HIV positive on 56 cases of erythrodermic psoriasis in our study). However, two deaths are linked to psoriasis in our study. Boisseau-Garsaud et al. [4] reported a case of death in their series with the waning of pustular psoriasis eruption.

Conclusion

Despite the limitations of this study related to the large number of lost sight, given the limited resources used, the results of hospital care seem relatively satisfactory. The potential role of this biological damage inspection in a large teaching hospital in West Africa remains difficult to assess.

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