

PERSISTENT NODULES IN SCABIES

Report of an atypical case

F. Sannicandro and M. Mastrodonardo

ABSTRACT

We report a case of scabies observed in a woman treated with oral steroids for chronic idiopathic thrombocytopenic purpura. The case seems worth presenting because of the peculiar clinical picture and course featured.

KEY WORDS

scabies, persistent nodules, atypical course

INTRODUCTION

Sarcoptes scabiei evokes a variety of cutaneous lesions. Besides the pathognomonic burrows, which are directly related to the presence of the mite, other non-pathognomonic skin changes can be observed. The latter, i.e. urticarial papules, vesicles, bullae, pustules, nodules, scaling plaques and linear bloody crusts are attributed either to septic complications and to a specific reaction or sensitization to mite components and topical remedies (1, 2, 3, 4, 5, 6).

The diagnosis is easily made when the family history is contributory, lesions show peculiar sites distribution, and mites are detected in intact burrows. On the contrary, infestation can be overlooked or misdiagnosed by general practitioners, especially if they are not aware enough of this clinical occurrence. Furthermore, scabies can give some diagnostic problems to specialists too when it develops with

scarce or somehow atypical lesions, or previous local or general therapies changed its spontaneous course.

CASE REPORT

Our patient is a 64-year-old housewife. She was periodically treated with low-dosage oral steroids (alpha-methylprednisolone, 1 mg/kg body weight/daily) and platelets transfusions nearly for thirty years as affected by chronic idiopathic thrombocytopenic purpura (Werlhof's disease). She was referred to us for a 2-month history of increasingly numerous papulonodular, mildly pruritic lesions. The eruption had appeared on the abdomen, but it rapidly spread over the trunk and limbs. None of the general and topical therapies (steroids, antibiotics, antimycotics) which were administered by patient's general practitioner had shown effective.

Family interview was uncontributory; in particular, no history of previous or concurrent pruritic eruptions was recalled. Physical examination showed no skin change other than scarce petechial crops located at distal limbs, and widespread, round to oval, dome-shaped, dark-reddish, papulonodular lesions scattered on trunk and limbs (Fig. 1). The eruption spared only the face, scalp, palms and soles. Because of scraping, the lesions were often abraded and topped by serohemorrhagic crusts. Their diameter ranged from 0.4 to 1.2 cm.

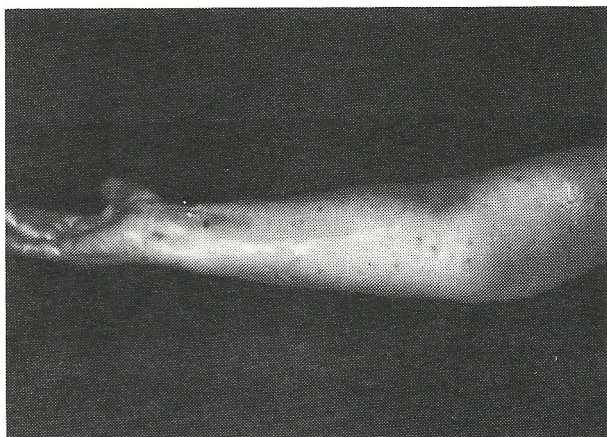


Fig. 1: Numerous nodules are scattered over the upper limb

A complete blood cell count and chemistry panel were performed, including detection of anti-HIV titer, CD4, CD8 and CD4/CD8 ratio. All these investigations gave negative results. Further, a recent lesion was excised and underwent light microscopic examination. Histology showed the presence of a moderately dense inflammatory cell infiltrate composed

mainly by lymphocytes, histiocytes, and eosinophils, located in the upper and middle dermis (Fig. 2).

On the basis of these clinicohistological data we were still unable to make a definite diagnosis until we found two intact burrows on the ulnar aspect of the right palm. Direct isolation of a mite from one of them, and non-viable fragments from the other one, led to the diagnosis of scabies, and allowed us to interpret papulonodular lesion described above as "persistent scabious nodules" (PSN). Then, detection of mite products was also achieved in crusts covering PSNs.

Dimethylphenylene disulphide was then administered to the patient and nearest relatives as well. A 5-day therapy, which was repeated after 1 week, led to a significant improvement of the itch; moreover, no recent lesion was seen during patient's stay in our Clinic. By contrast, most of the infiltrative lesions still persist six month after dismissal.

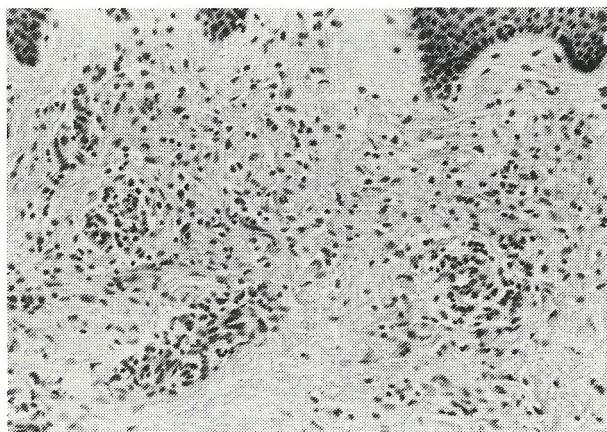


Fig. 2: Histology of a recent nodular lesion
In the upper and middle dermis there is a perivascular and interstitial lympho-histiocytic infiltrate with few eosinophils.

DISCUSSION

In our opinion, the presented case shows some quite atypical features which will be briefly discussed, as they differ in some way from those reported (1, 3, 4, 7, 8, 9). First, the absolute negativity of the family interview. Actually, all the patient's closer relatives denied having suffered from itching dermatoses either before and after the onset of scabies in our patient.

Second, the monomorphic characteristic of the eruption, which had failed to feature any skin change other than nodules for a long time. In particular, even under the closer physical examination, burrows had been absolutely lacking until the fortuitous discovery of only two of them.

Third, the very large number (more than 50) of nodules, which were scattered over almost the whole body surface.

Finally, the way in which previous or concurrent therapies (namely, low-dosage peroral steroids taken to treat Werlhof's disease) would possibly have induced such peculiar clinical picture and course remains far to be clearly assessed.

REFERENCES

1. Ayres S, Jr and Anderson NP: Persistent nodules in scabies; histologic observations and treatment. *Arch Dermatol Syphilol* 1932; 25: 485-93
2. Kitchevatz M and Pochtitch Z: Réactions allergiques cutanées dans la gale. *Bull Soc Fr Derm Syphil* 1934; 41: 989-91
3. Grant PW and Keczkcs K: Persistent nodules in scabies. *Arch Dermatol* 1964; 89: 239-42
4. Kostantinov D and Stanoeva L: Persistent scabious nodules. *Dermatologica* 1973; 147: 321-327
5. Falk ES and Bolle R: In vitro demonstration of specific immunological hypersensitivity to scabies mite. *Br J Dermatol* 1980; 103: 367-73
6. Reunala T, Ranki A, Rantanen T and Salo OP: Inflammatory cells in skin lesions of scabies. *Clin Exp Dermatol* 1984; 9: 70-7
7. Bonaduce F: Sintomatologia rara da acaro della scabbia (granuloma acarico). *Dermosifilograf* 1927; 2: 399-41
8. Samman PD: Persistent scabietic nodules. *Br J Dermatol* 1963; 75: 35-35
9. Braun-Falco O, Plewig G, Wolff HH and Winkelmann RK: Epizoonoses, in: *Dermatology*, Berlin, Springer-Verlag, 1991, pp. 248-61

AUTHORS' ADDRESSES

Francesco Sannicandro M.D., Department of Dermatology, "S.S. Annunziata" Regional Hospital, 74100 Taranto, Italy
Dr. Mario Mastrolonardo M.D., Department of Dermatology, University of Bari, 70124 Bari, Italy

REPORTS ON CONFERENCES

DERMATOLOGY 2000 Vienna, May 18-21, 1993

The conference took place at the new and large Congress Center in Vienna, the official opening was on the afternoon preceding the working sessions. The participants were greeted by the Austrian Minister of Health and Social Services, by the mayor of Vienna, by the rector of the University as well as by a number of other prominent personalities. The Conference was organized by the Department of dermatology of the Vienna University. The chairman of the Conference and its Scientific Committee, which consisted of 20 prominent dermatologists from many countries, was Klaus Wolff. The ample programme included plenary lectures, interactive symposia, teaching symposia, sponsored symposia/by drug companies/ as well as posters.

Plenary lectures covered many of the topics which are important for better understanding of pathophysiologic mechanisms responsible for the development of various skin diseases. These lectures were clinically oriented to enable the participants to perceive better the etiology of various skin diseases: regulation and dysregulation of keratinization, defective cell to cell and cell to matrix cohesion in bullous dermatoses, angiogenesis etc.

The Interactive symposia which were on the agenda in the afternoon were dedicated to various dermatological problems and to their efficient treatment. At the end of the afternoon

sessions Hotline lectures were on the programme: mechanisms of inflammation, new approaches to the treatment of cancer, somatic gene therapy and others.

Teaching symposia included following topics: vasculitis, paraneoplastic skin diseases, intensive care in dermatology, immunosuppressive drugs, STD, cosmetic dermatology and surgery. Special attention was paid by the organizers to the poster exhibition, most of them being of excellent quality. Quite a number of them were dedicated to various dermatological problems and to various modalities of treatment.

The Conference was attended by nearly 3500 participants from various parts of the world. Four were from Slovenia and three from Croatia. Among the social events the cocktail following the official opening of the conference, the performances of Carmen and Don Juan in the State opera in Vienna, a visit to the Spanish riding school as well as others deserve to be mentioned. The Conference was sponsored by a number of drug companies, the main contribution seemed to be from Sandoz.

Jože Arzenšek M.D.