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A COMBINATION OF PSORIASIS AND  
PURPURA RHEUMATICA.

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FIG. 1.

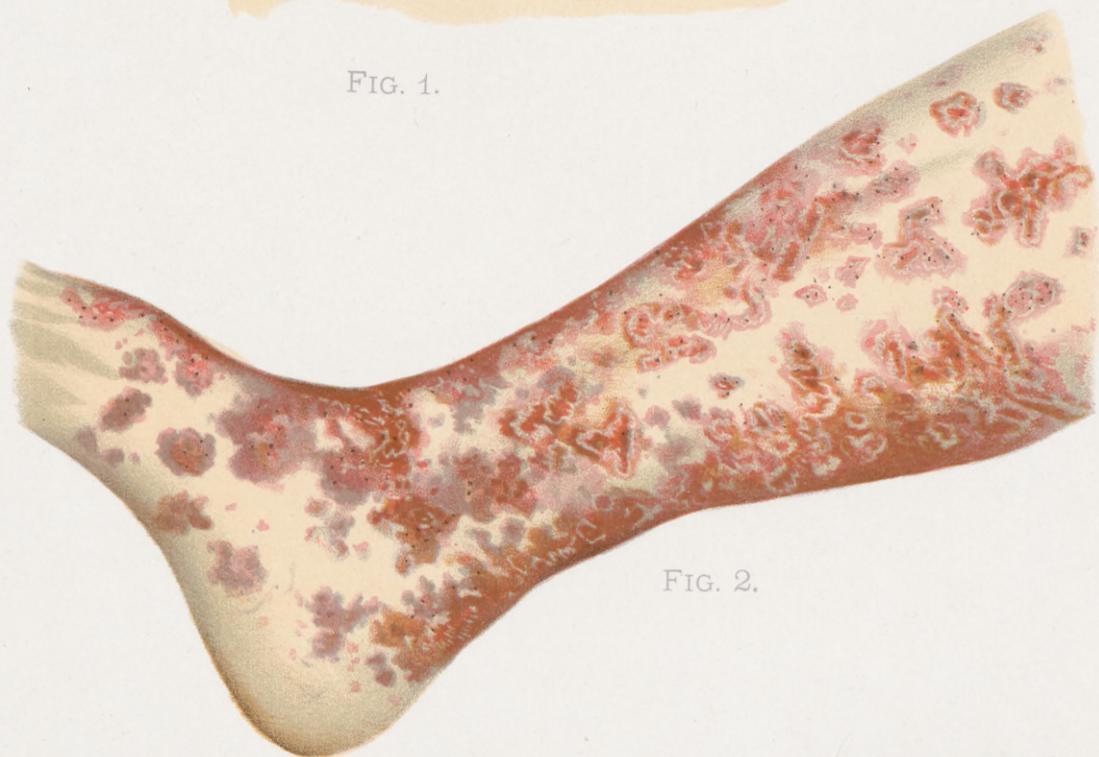


FIG. 2.

## A COMBINATION OF PSORIASIS AND PURPURA RHEUMATICA.

By J. A. FORDYCE, M. D.

A PATIENT has recently been under my observation at the New York Polyclinic affected at the same time with two independent diseases of the skin. On parts of the cutaneous surface each disease has preserved its own characteristics; on other parts they are combined, presenting, however, the distinctive marks of each. Such union of these diseases is certainly rare, I being unable in dermatological literature to find a similar observation. Among my notes taken during a visit to the Baretta Museum of the St. Louis Hospital, in Paris, I find a reference to a "mouflage" representing psoriasis and purpura on the same individual; but whether the lesions existed independently or combined, as in my case, I do not now recollect.

The simultaneous occurrence of these two diseases is interesting on account of its rarity, but more so as a like cause has been invoked to account for their production.

The history of my case is as follows:

James McD., aged forty-one years, native of England. His father and mother are living, at the ages of seventy-five years; neither are nor have been affected with psoriasis or rheumatism. He has two sisters who, he says, suffer with a scaly skin eruption of the same character as the one he presents; aside from their skin disease they are in good health.

He is addicted to the periodic indulgence in alcoholic drinks, but has enjoyed good general health independent of the troubles about to be mentioned. As long as he can recollect he has had a scaly eruption about the extensor surfaces of the knees and elbows, which would spread from there to the trunk, scalp, and over the extremities. This eruption would at times disappear, then reappear. It has pursued this course through years. He says the scalp

was first involved ten years ago, long after the eruption appeared on the extremities and trunk. During the past three years he has suffered at frequent intervals from pains and swelling in the knees and feet; from his account, it would appear that the joints were not directly involved, but that the swelling and pains were in the vicinity of the articulations. He recalls sudden tumefactions from the size of a pigeon's egg to the size of a hen's egg about the knee and ankle and at intermediate spots between these joints. These swellings would be preceded and attended with pain; they would usually last for several days before disappearing, sometimes gradually, more often, however, suddenly. He can not recall whether in disappearing any change in their color took place.

Four months ago he began to suffer with pains of a burning character, and with "pins-and-needles" sensations in the legs below the knees. On the spots where these sensations were felt a purpuric eruption appeared, the appearance of the eruption coinciding with the disappearance of the pains.

The eruption consisted of purple spots, not raised above the surface, distinctly circumscribed, and not disappearing on pressure. About the knee and ankle joints, and on the dorsum and inner surface of the foot, circumscribed painful swellings were noticed. Motion of the knee and ankle joints was attended with decided pain. On several occasions during the past few months he has passed blood by the rectum, but has had no hæmorrhage from any other mucous surface.

The skin eruption and painful swellings have disappeared and reappeared several times since their onset, an over-indulgence in alcoholic stimulants having on several occasions preceded an outbreak. Symptoms of constitutional disturbance have been present, although he does not think he has had fever.

An examination shows characteristic spots of psoriasis on elbows, knees, trunk, scalp, face, and thighs. Below the knees a disseminated scaly eruption is present having a violaceous base, and showing beneath the scales a petechial eruption capped by a small blood crust, as if capillary hæmorrhages had been caused by the detachment of the scales. (See colored plate, Fig. 2.) In the upper half of the leg the violaceous color disappears almost completely on pressure; as the neighborhood of the ankle is approached, however, the color is uninfluenced by pressure. Spots of purpura having an irregular boundary are present on the dorsum and the inner surface of the foot.

The knee and ankle joints are painful, and on the inner surface of the right knee and dorsal surface of the feet the painful subcutaneous swellings before mentioned are present; on the dorsum of the left hand, over the metacarpal bone of the thumb, an exquisitely sensitive swelling is also present. An examination made one week later shows that the purpuric spots are transitory in duration; spots which were purpuric at the former examination show only traces of their past existence, and showing the changes in color produced during the absorption of a blood extravasation.

The subsidence of the cedematous swellings on the lower extremities leaves a purpuric staining of the skin; this is not the case, however, on the hands.

An examination of the heart reveals no organic lesion, nor was the urine found to contain albumin.

In considering the foregoing case we see that, although psoriasis is present in two other members of the patient's family, a rheumatic history is distinctly denied; furthermore, that the psoriasis existed for years before any manifestation of the articular pains or eruption.

The advent of the eruption and pains in the joints after alcoholic excess would indicate a relationship of cause and effect, inasmuch as such a connection has been observed. The presence of a purpuric eruption having been preceded by pains and swellings of the joints is sufficient to constitute the disease described by Schönlein as peliosis rheumatica. Whether this form of purpura is a distinct disease dependent on the rheumatic poison—a form of exudative erythema—or only a minor degree of morbus maculosus, is a question not yet determined.

The occurrence of transition cases between the so-called peliosis rheumatica and purpura hæmorrhagica would seem to disprove the validity of creating an independent type of disease; indeed, my own case presented, in the hæmorrhages from the intestinal canal, a symptom of purpura hæmorrhagica, thus supporting the opinion advanced by Immermann\* that purpura rheumatica is only a less severe form of morbus maculosus. The coexistence of purpura simplex, purpura rheumatica, and purpura hæmorrhagica renders this theory plausible.

F. P. Kinnicutt, † after a *résumé* of the views of German, French, and English dermatologists, with an analysis of a number of cases of purpura rheumatica, together with the observation of a case of his own, concludes that the affection presents a group of symptoms sufficient to permit of a differentiation of the affection from both purpura and erythema nodosum, and that it should be accorded the position of a well-defined and independent affection.

This view of the matter is not supported by Kaposi, ‡ who is disposed to classify purpura rheumatica among the exudative erythemata, rather than with purpura. He supports his opinion by remarking that purpura rheumatica is often found associated with the other manifestations of exudative erythema—as herpes iris, urticaria papulatum, and erythema nodosum.

Crocker, § among the recent English dermatological writers, accepts this view, and also remarks that purpura rheumatica differs in no manner from erythema multiforme, except that hæmorrhage into the extravasation is constant in the latter and exceptional in the former.

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\* Immermann, art. "Morbus Maculosus," Ziemssen's "Cyclopædia of the Practice of Medicine," Am. translation, vol. xvii.

† "Peliosis Rheumatica," "Archives of Dermatology," vol. i, p. 193.

‡ "Pathologie und Therapie der Hautkrankheiten," dritte Auflage, Wien, 1887.

§ "Diseases of the Skin," London, 1888.

Osler's \* cases, which began as purpura associated with articular pains and swelling of the joints, followed later by gastro-intestinal irritation, hæmorrhages from the intestinal tract, albuminuria, and, in some cases, ending fatally, would certainly show the close relationship between the lighter and more serious forms of purpura. He remarks that the interchangeability of these cases of purpura with urticaria and with angio-neurotic œdema favors the suggestion that this group of affections may depend upon some poison—an alkaloid, possibly—the result of faulty chylopoetic metabolism, which in one may excite a form of urticaria, in another a peliosis rheumatica, and in a third a fatal form of purpura.

The close relationship of purpura rheumatica with the rheumatic poison would seem in some cases to be quite clear, in view of the fact that pathological changes in the affected joints have been found at the post-mortem examination, as in a case described by Leuthold, † and that aortic insufficiency has also been seen to develop in the cases described by Schwartz, in Kaposi's clinic.

All the forms of exudative erythema occasionally occur during the course of an acute articular rheumatism, either as a reflex angio-neurotic affection or as a direct result of the rheumatic poison.

The vaso-motor theory of Fabre ‡ makes all forms of purpura a disturbance of innervation, so that any cause which is sufficient to disturb the equilibrium of the vaso-motor center—be it rheumatism, ptomaines, or other organic or inorganic poison—could induce the condition. Whether erythema nodosum has distinctive features enough to entitle it to be recognized as an independent affection is doubtful; at all events, the two affections are closely allied, as they frequently occur combined, affect by preference the same regions of the body, occur at the same seasons of the year, and both forms of disease complicate the rheumatic state.

Lewin has found other forms of erythema along with erythema nodosum in twenty-five out of fifty-five cases. Polotebnoff § considers erythema nodosum as a modification only of erythema exudativum, distinguishable by a deeper seat and greater degree of intensity.

Although there are good reasons in some cases of purpura for establishing a close relationship between it and rheumatism, fewer and less valid ones can be invoked to connect psoriasis with the rheumatic condition. Since my attention has been called to a possible relationship between rheumatism and psoriasis, I have interrogated all the patients who

\* "On a Rare Form of Purpura associated with Articular, Gastro-intestinal, and Renal Symptoms," "New York Medical Journal," December 22, 1888.

† "Berliner klin. Wochenschrift," 1865, No. 50.

‡ Fabre, "Les relations pathogéniques des troubles nerveux." Paris, 1880.

§ "Zur Lehre von den Erythemen," "Dermatologische Studien," fünftes Heft, Hamburg, 1887.

have come under my care with the latter disease, but in a few cases only have I succeeded in obtaining a personal or family history of rheumatism.

It is in France especially where the coexistence of psoriasis and rheumatic affections of the joints has been observed. Bourdillon,\* in a recent work on the relationship of these affections, has collected and analyzed thirty-six cases in which the two diseases occurred in the same individual; the greater number of these cases were observed in the wards of the St. Louis Hospital of Paris.

The joint affections observed were of all grades of severity from simple articular pains to the most severe forms of arthritis deformans. In the greater number of these cases, however, the involvement of the joints occurred long after the appearance of the cutaneous affection, and in many of them not until the psoriasis had been transformed into an exfoliative dermatitis. Alibert † mentions briefly the occurrence of joint affections during the existence of psoriasis.

Rayer ‡ cites the case of a patient afflicted with a psoriasis of eighteen years' duration, who entered a hospital suffering at the same time with psoriasis and rheumatism. Gibert,\* in the chapter devoted to squamous affections, speaking of a female patient under his charge, says:

"This woman presents the most serious case of such affections that I have ever seen: the body, dried up and almost mummified, with rigidity and contractures of the joints, presents everywhere a surface like parchment. She left the hospital after a residence of several months, then returned later, and died in the last degree of marasmus and emaciation."

Cazenave || relates the case of a very distinguished scholar who had been afflicted during a number of years with a generalized psoriasis, in whom periodically acute exacerbations with swelling, redness, and the more abundant production of scales took place, attended with malaise and some febrile movement. During the first few days of his attack it was impossible for him to move; at the expiration of several weeks he recovered little by little his former state. Besides, adds Cazenave, the articulations were swollen, the joints deformed, and the vertebral column curved.

A second case is reported by Cazenave in which not only the skin, but the joints also were affected by psoriasis, during which the last phalangeal joints became affected with a painful and inflammatory swelling, followed by an increase in their volume. Under the influence of Fowler's solution the skin disease became ameliorated, but the joints remained painful and swollen.

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\* "Psoriasis et Arthropathies," Paris, 1888.

† "Traité des maladies de la peau," edition 1822.

‡ Tome ii, 1835.

\* Gibert, 1839, "Traité des mal. spéciales de la peau."

|| Cazenave, 1847, "Abrégé pratique des mal. de peau."

Cazenave reports these cases without commenting on their relationship, whether it was that of cause and effect or mere accidental coincidence.

Devergie,\* having observed the occurrence of swelling in the joints of the fingers and toes during the existence of a generalized psoriasis, asks himself the question if this condition of the small joints which resembles gout, the osseous tophi alone excepted, depends exclusively upon psoriasis, or if it only shows itself under the influence of this malady when the subject had been formerly the subject of rheumatic manifestations.

Bazin † was disposed to assign all cases of psoriasis to the effect of diatheses, and divided his cases into two classes—*psoriasis arthritique* and *psoriasis herpetique*.

In one of the cases quoted by Bazin to uphold his theory, the patient suffered with articular and muscular pains before the appearance of the skin affection.

The former existence or presence of articular pain during an attack of psoriasis was sufficient to constitute, in his mind, a psoriasis arthritique. Piogey, ‡ Adams, § Duron, || Germain, ^ and Duckworth ¶ have observed and commented on the association of these maladies. †

Besnier has stated that among one hundred patients affected with psoriasis, five are found who present some form of joint trouble, but only one who has general arthritis deformans. This percentage appears too large for our own country, where the association of the two maladies has scarcely been noticed. It may be, however, that their coexistence has been overlooked.

The form of joint affection which has most frequently been observed to accompany psoriasis is an arthritis resulting in ankylosis and deformities whose rheumatic nature is very questionable, and whose ætiology is not well understood; it is certainly more closely allied to the arthropathies

\* Devergie, "Traité des maladies de la peau," 1854.

† "Leçons théoriques et cliniques sur les affections cutanées de nature arthritique et dartreuse," 1868.

‡ Piogey, "Psoriasis arthritique," Société anatomique, séance du 31 mars 1878.

§ Adams, "Observation concerning the Association of Psoriasis and Osteo-arthritis," "Medical Press and Circular," London, 1881.

|| Duron, "Quelques considérations sur les rapports du psoriasis et du rhumatisme, et en particulier, du rhumatisme fibreux," "Thèse de doctorat," Paris, 1886.

^ Germain, "Psoriasis associé au rhumatisme," Société des sciences médicales de Lyon, 10 nov. 1886.

¶ Sir Dyce Duckworth, "Observation concerning Psoriasis associated with Rheumatism and transformed into Pityriasis Rubra," London "Lancet," April 9, 1887.

† I have taken the foregoing historical facts from the work of Bourdillon on "Psoriasis and Arthropathies," without consulting the original references, except in a few instances. They show that, with two exceptions, the observations have been made by French writers.

that develop during tabes than with the joint troubles of rheumatic origin.

Cases in which the arthropathies preceded the psoriasis are rare, the greater number developing joint troubles after suffering for years with extensive or universal psoriasis. We might conceive that an extensive involvement of the cutaneous surface could so far impair the bodily nutrition as to indirectly produce this condition. This theory certainly seems more plausible than to ascribe both affections to a common cause—a neurotic disturbance.

Psoriasis, as ordinarily met with, does not impress one as dependent upon a constitutional derangement or neurotic influence; on the contrary, we have every reason to look on the disease as one of mycotic origin. The spread of the disease from a localized spot, its rapid dissemination, the central involution and peripheral evolution of the patches, its assumption of circinate and gyrate forms, its superficial seat in the cutaneous structure, the rapid suppression of the disease by antiparasitic remedies—all speak strongly in favor of a mycotic origin. The similarity of psoriasis, in its clinical history, to the other vegetable parasitic affections of the skin led Lang\* to the belief that a fungus was the cause of the disease, and later he succeeded in finding a fungus in the rete layer, immediately above the papillæ, where the disease is supposed to begin.

The presence of Lang's fungus in the lesions of psoriasis has not been generally confirmed, neither has its relationship to the disease been proved by cultivation and inoculation experiments, the non-contagious character of the affection rendering investigations of this character difficult or impossible. It is now announced that Dr. Destout, of Lyons, has unquestionably proved the parasitic origin of the disease, and that an inoculation made by him on May 9th caused the appearance of the eruption on the 25th of the same month; should his inoculation experiments be confirmed by subsequent investigation, psoriasis will have to be removed from the skin affections dependent upon a constitutional condition and assigned to a place among the parasitic diseases.

The association of the two diseases which forms the subject of this paper, though interesting by reason of its rarity, can scarcely be looked upon as other than an accidental one, in view of the fact that we have not sufficiently valid reasons for ascribing them to a common cause—rheumatism.

66 PARK AVENUE.

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\* "Versuch einer Beurtheilung der Schuppenflechte nach ihren klinischen Charakteren," "Vierteljahresschrift f. Dermat. u. Syph.," 1878, p. 433.





