Report of a case of multiple myomata of the skin, accompanied by sever pain : with remarks / by W.A. Hardaway.

To the other anatomical features of the case we do not propose to refer. The reader will doubtless have noted the identity of the conditions with those in pernicious anæmia, even to the hyperplasia of the bone marrow and the pigmentation of the cells in the organs. One point, however, is worthy of note, viz., the large size and healthy appearance of the pancreas. This organ varies greatly in size, but we regard it as certainly hypertrophied in this case, and we may see here possibly a compensatory effort to supply the defects in gastric digestion.

A careful study of this case justifies, we believe, the conclusion that a primary atrophy of the mucous membrane of the stomach does occur; and it further bears out the original suggestion of Flint, confirmed by Fenwick, Nothnagel, and others, that certain of the cases of progressive pernicious anæmia depend upon profound alterations in the gastric tubules.

For the sections and drawings we are indebted to the skill of Dr. J. P. Crozier Griffith.

REPORT OF A CASE OF MULTIPLE MYOMATA OF THE SKIN,

ACCOMPANIED BY SEVERE PAIN; WITH REMARKS.[1]

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The following case, of which I shall present brief notes, together with a plaster cast showing the size and general arrangement of the growths, is, I think, worthy of record as a contribution to the study of painful tumors of the skin:

J. B., German, aged thirty-six years; he is married and has two healthy children; his wife is also healthy. His family history is good, and he does not recall that either of his parents ever suffered from any cutaneous disease. He has never had syphilis.

So far as his knowledge goes, his present trouble began about one year ago. He observed that when the weather changed—that is, became either hot or cold—he experienced a drawing pain, lasting about five minutes, in the place where the lesions are now situated. When the pain subsided he was unaware of anything abnormal in this situation. These pains were absent sometimes for two or three weeks, sometimes a day, sometimes three or four days. To relieve these paroxysms he would make firm pressure over the affected region. At this time, however, he does not remember that, between the paroxysms, any pain was evoked by either accidental or intentional pressure. Later on, but he cannot say when, he was aware of the presence of a few lesions, and from time to

[1] Read before the American Dermatological Association, August 27, 1885.

time thereafter he was conscious that others became developed. He is quite positive that for the last six months the patch has existed pretty much in its present shape, and has not further progressed.

Of course, all of these statements must be taken with due allowance, and we can only be tolerably certain as to the length of time during which the subjective symptoms have been present; the tumors themselves may have been established long before his attention was attracted to them, especially as they are situated on the back, out of the field of vision.

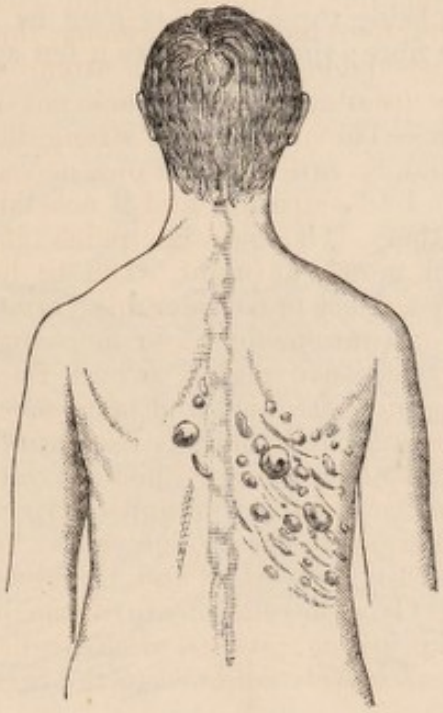
Present Condition.—The patient is a strong, hearty man, five feet ten inches in height, and, according to his own account, has never been sick. He is a peddler by occupation, and is constantly exposed to all the vicissitudes of weather. The neuralgic pains referred to above still persist. They come on mostly at night, when in bed. The intervals between the attacks are subject to considerable variations. At one time he will suffer nocturnal visitations for six or more nights together; then he will escape for two successive nights, or even for a week altogether. Of late, they have been more frequent and more severe. He is inclined to regard changes in the weather as largely responsible for his sufferings. The paroxysms appear suddenly and without premonition of any sort. Each attack lasts from two to three minutes, but is not repeated the same night. When a paroxysm occurs, the patient says that he feels as though he were being crushed together, and he rolls and tosses about in his bed in great agony. To gain relief, he turns on the affected side and instinctively makes deep, strong pressure with his hands. So far as he can judge, the pain is absolutely confined to the region of the growths and does not radiate.

Examination made in the intervals of the attack shows that the parts are not at all hyperæsthetic, superficial touch with the fingers producing no symptoms of any kind; but moderately deep direct pressure with the tip of the index finger will cause him to drop to the floor, moaning with agony. In this case the pain appears to be but momentary, and is entirely different in character from the vice-like pressure of the spontaneous attacks. While pressure made almost anywhere over the affected region will cause the patient to wince, the acute pain follows only upon pressure over the larger tubercles. I do not now recall that there was any change in the color of the region involved during a paroxysm, or that there was any difference in the temperature or the occurrence of quiverings or contractions in the parts; but I must confess that, as my attention was not particularly called to these points at the time, they may have been overlooked.

Description of the Lesions.—The infiltrated patch or plaque is situated on the right side of the back, in the mid-dorsal region, Fig. 1. It commences at the spinal column and takes an oblique downward course. It is four and a half inches long by two and a half inches wide. It passes over to the left side of the spine by two small tubercles. The great bulk is to the right of the column. The patch is made up of an aggregation of variously sized growths and infiltrations. Some of them are round and decidedly elevated above the level of the skin, at least three being as large as hazelnuts; others are elevated a few lines only and spindle shaped, or else dispersed in lines and streaks. The growth seems to involve the substance of the skin only, and is not bound down to the subcutaneous structures. The overlying epidermis is not scaly,

nerwise appreciably abnormal. The patch is of a reddish color, and e large tumors do not look unlike flesh moles. None of the growths e pedunculated.

FIG. 1.



Infiltrated patch.

ome time after he first came under observation, I passed a weak gal- ic current through the tuberculated region, and whether as a result he treatment, or from a mere coincidence, the patient thought that intervals between the paroxysms had been extended. However, he eared to suffer as much as ever when firm pressure was made over larger tubercles.

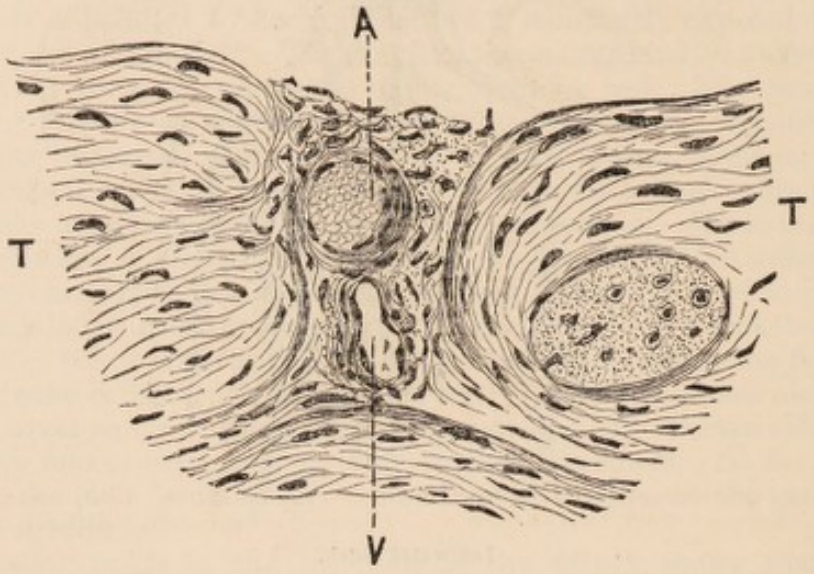
t my request, his physician, Dr. H. Tuholshe, cut out one of the e growths for microscopical examination. The tumor seemed to be apsulated in the skin. Dr. L. Bremer, of St. Louis, to whom the imen was submitted, made the following report of his microscopical stigations: "The tumor is about the size and shape of a large split ; it is hardened in alcohol. Vertical sections, unstained, show derately hypertrophied papillæ in some places, a comparatively thin r of derma, and beneath this an apparently smooth mass when ex- ined with a low power. Sections treated with picrocarmine show usual reactions of the epidermis, an intensely red color of the derma, a straw-colored mass beneath it. Prolongations from the derma, characterized by their red color, traverse the former as narrow ds in all directions. The straw-color of picrocarmine staining cates that the tissue lying beneath the red mass is composed of oth muscle fibre. I had no saffronine at my disposal to verify and oborate the result obtained by the picrocarmine test.

With a view of establishing the presumed presence of nerve fibres e new growth, osmic acid and chloride of gold were used; both these ents yielded negative results. Neither myelinic nor amyelinic nerve

fibres could be demonstrated. No new formation of nerves could b ascertained.

"On staining the sections with hæmatoxylon, rod-shaped nuclei a peared in great numbers, coming in different directions, showing th characteristics of the nuclei of smooth muscle fibres. They varied i length, some of them being three times as long as an ordinary nucle of the smooth muscle fibre; there were also a few spindle-shaped nucl

Fig. 2.



Proliferation of the muscular elements of an artery (A) and a vein (V). T T, tumor. Hæmatoxylon and eosine. Hartnack, 3, vii.

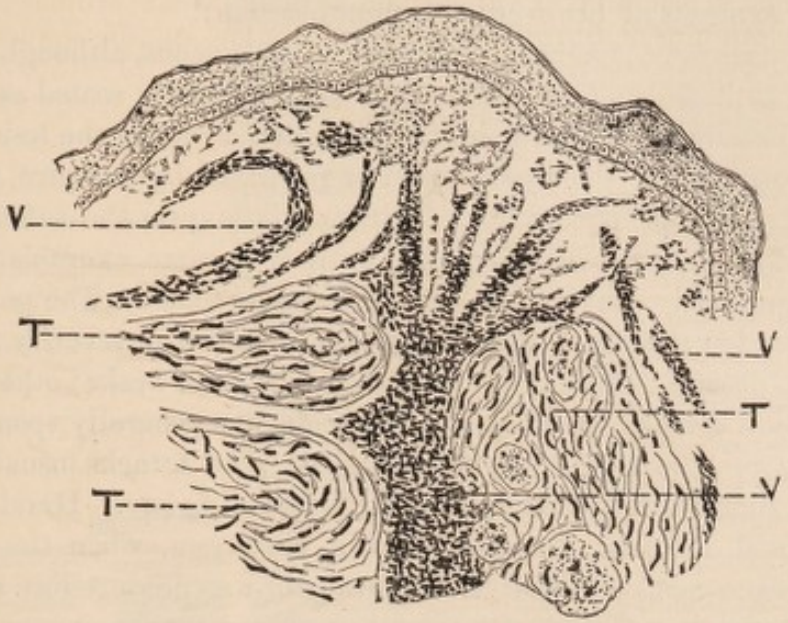
In the course of the septa furnished by the bands emanating from derma, arteries and veins could be seen in a state of proliferation of th muscular elements. The same could be observed to a still greater ext in the derma. No normal artery or vein was to be seen in the lat There was not, however, any appreciable round-cell infiltration aro the vessels, such as is seen in inflammatory processes. It is prob that some of these strings of nuclei represented cutaneous nerves. normal cutaneous nerve could be made out.

"The tumor, in my opinion, is a conglomerate of interlacing bun of smooth muscular fibres. These bundles are formed by the prolif tion of the muscular elements of the arteries and veins of the orig derma, Fig. 2. There seems to be a limit of this process at the point w the veins and arteries lose their muscular layer and pass into capilla This would account for the stationary, non-progressive character of tumor, as demonstrated by the clinical history of the case.

"In the fully developed tissue of the growth, I never observed process of division in the rod-shaped nuclei, whereas I could see the immediate neighborhood of the proliferating vessels. The gra transition from the muscular elements of the vessels into tissue t could be seen in a satisfactory manner in a number of specimens sta with hæmatoxylon and eosine, Fig. 3.

"I do not claim this report to be exhaustive, on account of the small amount of material obtainable: only one tumor was examined."

FIG. 3.



liferating bloodvessels and their relation to the tumor and the derma. V V V, vessels in a state of proliferation. T T T, lobes of the tumor. Hæmatoxylon and eosine. Hartnack, 3, iv.

EMARKS.—Looked at from a purely clinical standpoint, it will be that the case just reported bears a strikingly close resemblance to cases recorded by Duhring[1] and Kosinski,[2] which were looked upon he authors mentioned as instances of pure neuroma of the skin. In three cases we find certain characteristic features that they have in mon, viz., the presence of numerous tubercles more or less embedded e skin itself, and giving rise to unusually severe pains as a result of sure or else of a spontaneous character. While in Duhring's case occupied no nerve tract, in Kosinski's patient and my own this ection seems obvious. Whether the tumors in my case bore some ion to the cutaneous distribution of the dorsal nerves, I cannot say; y rate, the presence of nerve tissue in the tumor examined was not nstrated.

ooking further in this direction, we discover that in the muscle rs of the skin reported by Besnier[3] and Solles,[4] the growths were ful in the first observer's patient as the result of pressure only, but e patient of the latter the tumors were the seat of pain, both spon- us and when provoked by traumatism of various kinds, and which,

[1] AMERICAN JOURNAL OF THE MEDICAL SCIENCES, Oct. 1873, and Oct. 1881.
[2] Centralblatt f. Chirurgie, No. 16, 1874.
[3] Annales de Derm. et de Syph., 2me Sér. t. i. No. 1, 1880.
[4] Ibid., 2me Sér., t ii. No. 1, p. 60.

at first confined to the part irritated, afterward radiated in all direction
Wood's cases of subcutaneous painful tubercle, which were probabl
examples of fibromata and fibro-neuromata, also presented sympton
which differed little from those just described, as will be seen from th
following synopsis of his original communication:[1]

The tumors were generally single and subcutaneous, although in son
instances multiple, and in one instance so superficially seated as to for
a visible prominence. The pain was extremely acute in the lesion itse
but it also radiated. The pain could be provoked by pressure, and al
occurred in violent paroxysms. During a paroxysm the suffering w
slight at first, but rapidly increased until it became excruciating.
went off gradually, leaving the parts sore to the touch. The paroxysm
lasted from ten minutes to two hours, and increased in severity with t
age of the disease. Some had ease for days, or even weeks; others wou
have several attacks in one day. The pain was generally spontaneo
but could also be aroused by friction, etc. The attacks usually ca
on in the night, the patient waking in frightful agony. Handling t
parts caused no pain, except during a paroxysm, when the affect
region became acutely sensitive. Acute pain was produced at all tim
by changes in the weather. Some patients stated that they were sensi
of an increase in size in the tumor and a change in color during
attack.

Most of his patients were females. Wood credited Cheselden w
having first called attention to these painful tubercles. It is a signific
fact, that in all of these cases, whether classed as fibromata, neuroma
or myomata, the subjective symptoms are nearly identical.

I shall leave entirely to the consideration of pathologists the vari
interesting histological questions that arise in this connection; as,
example, whether there exist true neuromata in the sense of tum
composed of newly formed nerve fibres; the connection between fibr
and neuroma; what causal relation, if any, exists between these vario
constituted growths and the nervous system, etc.; but, as a clinicia
believe that the following conclusions, arising from a consideration of
points mentioned above, are to a degree justified:

That certain new growths in the skin and subcutaneous tissues
companied by severe pain, both of a spontaneous character, and
produced by direct irritation, may be of widely different histolo
structure; and that, therefore, from a clinical standpoint, we are
justified in assuming that a painful tumor or tubercle is a neuroma (fi
neuroma) from the subjective symptoms that it presents, or from
macroscopic character of the lesions.

[1] Edin. Med. and Surg. Journ., July, 1812.