

## ERYTHEMA MULTIFORME WITH VISCERAL LESIONS.

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WHILE this title reads "erythema multiforme" it should be understood that the manifestations in the skin comprise also lesions which might be classified under the headings, purpura, urticaria and simple erythema. Osler notes particularly the extremely varied character of the skin lesions in the cases he has collected.

Through the kindness of Drs. A. H. Williams, E. G. Shaffer and R. G. Morrison, with whom I saw these patients, I am enabled to report two of these rare, bizarre, often unrecognized and, withal, intensely interesting cases. They have become known to American clinicians, I believe, almost solely through the several articles by Osler, published in the *American Journal of the Medical Sciences*. From their importance they deserve more widespread recognition.

CASE I. H. Male, twenty-three years of age; seen April 17, 1908, with Drs. A. H. Williams and E. G. Shaffer at Mercy Hospital. He has never been very robust, but has had no serious illness. Twelve days ago, after eating some veal, he was taken ill with colicky pain, great thirst and vomiting, continuing until much bile was ejected. There was no especial tenderness, rigidity nor distention. The temperature was 98.6°, pulse 100. The urine contained hyaline and granular casts and a few blood cells. After calomel and an enema the bowels moved and by the fourth day he was decidedly better. He went out on the sixth day. On the following day the joints were so stiff and sore that sodium salicylate was prescribed, under the impression, apparently well founded at that time, that acute articular rheumatism was developing. The temperature rose to 100°, pulse 90. A thick, tender, edematous, red-denied infiltration appeared on the left forearm and left ankle, followed by large patches of erythema about the left knee and ankle. Later, between 75 and 100 small bluish-purple spots came out over the left hip, evidently purpuric. At night, colicky, paroxysmal pain occurred, localized indefinitely at the epigastrium, and requiring  $\frac{1}{4}$  gr. of morphia hypodermatically for its relief. Slight distention was present on the ninth day. He was better on the tenth day, but the bowels failed to move, and the pain recurred at night, requiring morphia. The temperature was subnormal, being but 95° by mouth, pulse 118. Anxious facies, clammy sweat and hiccough appeared, and more distention of the abdomen. No sharply localized tenderness existed, but the whole abdomen was sensitive, the left side, perhaps, more than the right. No special rigidity. He vomited three times, bile appearing. No fecal odor noted. Bowels moved by edema after several fruitless attempts. There was no delirium; no hemorrhages were noted, excepting later in the urine.

The urine now had specific gravity of 1.030, very acid, no albumin, no sugar. The erythematous lesions were present on certain days, but nearly disappeared at other times. Although a definite intestinal obstruction was carefully considered, Drs. Williams and Shaffer wisely decided to delay, because the signs and symptoms were not sufficiently positive.

I found him in about the condition indicated. The spleen was moderately enlarged. The urine now showed a trace of albumin, many red cells, leucocytes and innumerable hyaline and slightly granular casts. There were many papular, dull red spots over the body,

a quarter of an inch across or less, but no extensive erythematous lesions. Careful examination revealed no reason for more than mere consideration of the possibility of gastric crises of locomotor ataxia, lead poisoning, gallstone disease, appendicitis, gastric ulcer, organic intestinal obstruction or other trouble than that mentioned.

We decided that the abdominal symptoms were the internal manifestations of the same trouble which had caused the erythema multiforme, and that, consequently, surgical intervention was not indicated. Under rectal feeding, purgation with calomel, laxative enemata, spartein, and later, Fowler's solution, the patient made a good recovery, and went home in two weeks. The urine was practically clear when he left the hospital.

CASE II. X, physician, twenty-nine years old; seen with Dr. R. G. Morrison, April 29, 1908, at St. Luke's Hospital. He is of neurotic temperament. After eating unripe strawberries he had an attack of erythema multiforme, with large patches of exudative erythema on the abdomen, about the large joints and on the hands, wrists and legs. The palms and the backs of the feet showed many spots a half inch more or less in diameter, called purpuric by some of the physicians who saw him, and erythematous by others. As they left a definite staining of the deep tissues, showing plainly on the tenth day, when I examined him, I considered them purpuric. Many spots appearing like large rose-spots were present on the abdomen early in the disease. Considerable edema existed about the wrists for one or two days. A single ecchymosis was present under the mucous membrane of both upper and lower lips. Sharp nose bleed occurred. Severe arthralgic pains caused much complaint. The temperature rose as high as 103.8°, declining gradually to normal on the tenth day. The pulse varied from 80 to 120. The patient was semi-comatose during the first two or three days, awakening to complain of frightful headache and photophobia. The neck was retracted, there was stiffness in the muscles of the back, the knee jerks were exaggerated, and an imperfect Kernig's sign was stated to have been present. Very marked hyperesthesia existed over the face and neck so that the lightest touch was painful. The Widal reaction was negative and the spleen was not enlarged. The heart was negative.

On the fourth day a spinal puncture was made with rather unsatisfactory findings, but on the sixth day perfectly clear fluid was obtained containing no microscopic evidence of meningitis. Flexner's serum for cerebrospinal meningitis had been sent for, but was not used. After the spinal punctures the comatose condition cleared up, but the headache persisted. The urine was negative throughout; no gastric nor intestinal symptoms appeared.

When I saw him, on the tenth day, he was practically free from fever, had but little headache and the erythematous eruption had disappeared. The staining mentioned on the palm and the backs of the feet still persisted.

Treatment was wholly symptomatic, directed especially to the relief of the headache and joint pains.

Convalescence was rapid and he left the hospital well, early in the third week.

It is to be carefully noted that, of the 14 leading phenomena mentioned as occurring in Osler's group of 29 cases, the number present in any given case varied between 4 and 10.

1. Purpura is noted in 22 cases. 2. Urticaria is noted in 17 cases. 3. Edema is noted in 5 cases. 4. Erythema is noted in 14 cases. 5. Fever is

noted in 14 cases. 6. Colic is noted in 25 cases. 7. Vomiting is noted in 15 cases. 8. Diarrhea is noted in 5 cases. 9. Hemorrhages are noted in 14 cases. 10. Nephritis is noted in 14 cases. 11. Albuminuria is noted in 15 cases. 12. Arthralgic pains, 17 cases. 13. Endocarditis, 3 cases. 14. Enlarged spleen, 3 cases.

Various other manifestations were noted in one or two cases only.

In our first case there were edema, erythema, fever, colic, vomiting, hemorrhages (from the kidneys), nephritis (including the albuminuria, classified separately in the article quoted), arthralgic pains and enlarged spleen.

In Case II, purpura, edema, erythema, fever, hemorrhage, arthralgic pains and the group of symptoms relating to the nervous system, coma, hyperesthesia, photophobia, *et cetera*.

The first case is like many of those heretofore reported. The second varies in detail from any on record, so far as I can learn, but the general picture conforms to the type.

Thus Case I, in the series quoted, had delirium in recurring attacks, while Case XV had five or six attacks of aphasia and hemiplegia, alternating or recurring. Our second case had chiefly the symptoms of meningeal irritation as noted above. It emphasizes, I think, the idea that we must be prepared for the utmost diversity in the internal manifestations of the group of skin diseases we are considering.

## Clinical Department.

### THE TREATMENT OF ECZEMA.

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In the therapy of so protean a disease as eczema, it is the height of absurdity to imagine that one single drug or preparation will prove curative or is even applicable in every case. As time goes on, however, and we gain a more complete and exact knowledge of the pathology of this condition, even though its etiology does remain obscure and undefined, our ability to rationally combat it materially increases.

While the internal treatment is, as a rule, largely symptomatic, the enforcement of proper hygienic measures is to be advised in every instance. The frequent use of soap and water is contra-indicated, and especially so if the water is hard or the soap contains excessive amounts of uncombined alkali. An occasional sponge bath in soft water, heated until comfortably warm to the touch, and containing 2 oz. of bran or oatmeal to the gallon, is more often beneficial than otherwise. If soap is used at all it should be bland and non-irritating in character. The simple superfatted soaps devised by Unna answer admirably, but they must be recently prepared.

If grease and dirt collect on an affected surface it is best to gently swab the part with a soft rag dipped in deodorized benzine, and immediately follow this with a thorough coating of olive oil.

I have found the milk feeding advocated by Dr. Bulkley an extremely valuable procedure, but it must be properly carried out if the best results are to be obtained.

Commonly, unless the patient is engaged at hard physical labor, it is wise to completely eliminate meat from the diet for a considerable period of time. I find it simpler and more satisfactory to gauge the amount of allowable proteids by repeated examinations of the urine.

Alcohol, because of its effect on the peripheral circulation, is to be forbidden altogether.

In babies and young children eczematous inflammations of the skin are very frequently associated with, and apparently dependent on, malnutrition and an insufficient intake of fats. Cream feeding, with or without a teaspoonful dose of a 10% aqueous solution of ichthyol, three times daily, as an intestinal antiseptic, is far better than the host of external applications so often advised.

That the general health should receive attention goes without saying. Constipation especially, when present, is to be remedied and it is well to always bear in mind that the more nearly we approximate Nature's methods the more likely we are to secure satisfactory and lasting results. The importance of a regular morning hour for this duty is to be impressed upon the patient. Whole wheat and Graham bread, corn "gems" or shredded wheat biscuit with cream, together with stewed or fresh fruit, should be eaten at breakfast. If a drug must be used, I prefer one of the cascara preparations.

If anemia is a factor, iron or arsenic, alone or together, may be ordered, or Startin's *mistura ferri acidi* given a trial. While the proportion of iron in the latter is quite small, the amount taken up by the body is very considerable and I have found it a most excellent hematinic.

In discussing the topical treatment of this disease it is essential that we divide it into types, and the simpler the classification the better. The terms "acute," "sub-acute" and "chronic," with reference to the stage and not the duration of the affection, while not as clear-cut and definitive as could be desired, serve fairly well.

From a histo-pathologic standpoint there are three morbid conditions present in all forms of the disease. These consist of a parakeratosis (which is really an irregular, excessive cornification), an acanthosis (a proliferation of the prickle cells, with consequent increase in thickness of the epithelial layer), and an excess of moisture, with resulting separation of the cells (which Unna characterizes as a "spongy metamorphosis").

In the first stage of the disease, when the condition is identical with a simple dermatitis and all of the changes incident to an acute inflammatory process are present in the upper part of the corium, the excess of moisture, in the form of serum, gives rise to edema. If the process continues, acanthosis results from hyperproliferation of the rete, and, finally, as a result of this rapid formation of cells, we get a parakeratosis, although the outer layers are immature and imperfectly cornified.

In the acute and the early exudative stages of