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PART I.

ORIGINAL COMMUNICATIONS.

ART. XV.—*A Case of Dermatitis Gangrænosa.*^a By
J. MAGEE FINNY, M.D., Dubl.; Past President, Royal
College of Physicians, Ireland; King's Professor of
Practice of Medicine in the School of Physic, Ireland;
Clinical Physician to Sir Patrick Dun's Hospital.

CASE.—James B., aged two and three-quarter years, was admitted to Sir Patrick Dun's Hospital on May 4th, 1900, suffering from a number of punched-out circular sores on the face and hairy scalp, and a few similar though larger ulcers on the backs of the wrists and on the nates, and some small ones on the penis, scrotum, and pubes. The sores on admission were covered with a greenish yellow pus, and in one or two only was the pus raised above the edge of the ulcer. After the application of a creolin poultice, the floor of the sores was quite clean and of a deep red colour, with the edges sharply cut, of a similar red colour, which was strictly limited to its immediate neighbourhood. No bullæ were present at any time. The size of the sores varied from the size of a threepenny piece to half-a-crown, the greatest number being about the size of a shilling. Two on the back of the right hand—one over the wrist, and the other over the metacarpo-phalangeal joint of the index finger—were each about the size of a two-shilling piece, while a solitary ulcer over the right trochanter was still larger. Most of the ulcers were discrete, although a very

^a Read in the Section of Medicine of the Royal Academy of Medicine in Ireland, on Friday, November 15th, 1901.

narrow strip of healthy skin intervened, but on the forehead, above the right eye, on the right cheek, and on the left eyelid two adjoining ulcers coalesced, forming an irregular gyrate outline made of two circles meeting. The eyelids were enormously swollen and adherent from the discharge which exuded from between them, and could not be opened so as to examine the eyes; the circular or oval ulcer on the left upper eyelid produced the very strange appearance depicted in a photograph taken at the time. The lips and margin of the *alæ nasi* were also sore and ulcerated, with considerable tumefaction. The ulcers did not seem to be very painful or very irritable, as, with the exception of those about the mouth, they were not scratched or rubbed by the little patient. The lower limbs were covered with an ill-defined rash, not unlike the staining of measles. The limbs were greatly emaciated, and the skin was rough and loose. The child, when admitted, was very weak and prostrate—not able to turn from side to side. He was greatly emaciated and had a cough; no physical signs of lung disease were, however, discoverable.

The treatment consisted in giving as much nourishment as could be taken, and of washing with creolin, applying boric acid poultices, dusting the sores with iodoform, and applying a weak *echthylol* and lanoline ointment to the eyes.

No improvement followed, for although no more spots appeared, and no pus was discharged, there was no evidence of healing, while the skin surrounding the sores on the wrist and hip became of a deeper and more purplish colour.

The child died on May 9th.

The *post-mortem* examination was made by Professor O'Sullivan, F.T.C.D., and revealed general tuberculosis. The thymus gland was caseating; a caseous nodule existed in the apex of the right lung, and similar patches through the left; the bronchial and mesenteric glands were caseous. The tonsils were ulcerated and the cervical glands enlarged and firm. The ulcers on the skin were, in most instances, clean cut, circular, with smooth floor and sinuous edges; the wall in a few cases sloped inwards.

Inquiries as to the family and previous history of this remarkable case revealed that the child's parents were healthy. There was no suspicion of syphilis. There was no illness in the house or among the other children of his family. The patient had been under Dr. Wallace Beatty's care at the out-patient department of the Adelaide Hospital from April 12th, 1900, until admission to my hospital. Dr. Beatty has most kindly supplied me with

the notes made of the child's state when he first saw him. "It appeared to be a case of impetigo—a remarkable case. In the suprapubic region there are a number of closely-set, large pin-head sized pustules; also on the skin of penis and prepuce, wrists and backs of the hands." A note taken on May 3rd reads—"Extensive ulceration has set in about the face, the right hip and front of the left knee, consisting of deep, punched-out ulcers, round, with their base covered with pus." There were no bullæ present at any time.

As the eyes were very sore, Dr. Patrick Maxwell, to whom Dr. Beatty sent the child, examined them on April 12th at the National Eye and Ear Infirmary, Molesworth-street. He reports—"There is a diphtheritic-like membrane covering the whole of the left upper eyelid on its ocular surface, and a small corneal ulcer. The right eye exhibits a large corneal ulcer, and a similar membrane involves the edge of the lids." A subsequent note, on April 27th, showed that the left cornea was practically gone, and the diphtheritic membrane was replaced by deep, punched-out ulcers. The great swelling of the lids prevented any lengthened exposure of the eyes for examination.

The foregoing case, then, seems to have been one of originally a pustular rash—impetigo—and when first seen the pustules were of small size, not larger than a large pin-head; that in three weeks' time these pustules were converted into deep and wide ulcers; and that, at the same time, the destructive process was similarly progressing in the eyelids and cornea—a veritable panophthalmitis.

The photographs—which were taken by my resident pupil, Mr. Gibbon FitzGibbon—give a true and graphic idea of the situation and relative sizes and shapes of the ulcers, but fail to convey the deep contrast which existed between the raw meat colour of the floor of the ulcers, the purplish red shade of their edges, and the light fair skin of the body.

It is an example of that rare disease which has been described under various names, and of which very few cases have been published. The earliest account of it was by Dr. Whitley Stokes in Ireland in 1807, under the designation "White Blisters," "Eating Hives," or "Pemphigus Gangrænosus." His cases occurred in children from three months to four years of age. He drew a dis-

inction between it and varicella, although he thought "swine-pock" (*V. Globata*) resembled it in its earlier stages. Jonathan Hutchinson (1882) gives a graphic and exhaustive description of it in *The Med. Chir. Trans.*, Vol. LXV., under the title "Varicella or Vaccinia Gangrænosa," his first case having appeared in *Brit. Med. Journal*, December, 1879. In 1880 Sir Wm. Stokes reported a similar case in *THE DUBLIN JOURNAL OF MEDICAL SCIENCE*, under the name of "Gangrenous Inflammation following Vaccination," or "Vaccinia Gangrænosa." Dr. Eustace Smith ("Diseases of Children," 1886, p. 49) refers to it "as a dangerous complication of varicella," while the name of "Rupia Escharotica" was applied to it by Fagge in "Guy's Hospital Reports." The most recent designation is given by Dr. Crocker ("Diseases of the Skin," 2nd edition, p. 330) as "Dermatitis Gangrænosa Infantum." This last appears to me, from a study of the reported cases, to be the best, as being wide and comprehensive, and for that reason I have adopted it as the title of my communication, for while it admits the close relationship between it and vaccination, on the one hand, and varicella on the other, it does not limit it to those diseases, as is done by the names adopted by Jonathan Hutchinson, Eustace Smith, and Stokes.

J. Hutchinson, in 1881, adduced the following grounds for connecting the gangrenous sores with varicella and with vaccinia after vaccination, and for pressing the view that it was a modified varicella, viz.:—(1) The co-existence of varicella at the time, and in other members of the patient's family; (2) the severe form does not happen to delicate children more frequently than to robust; (3) the spots occur all together, and the tendency to cicatrise is alike simultaneous, and the cure is rapid; (4) there is constitutional disturbance.

According to Crocker, Mr. Hutchinson no longer holds to his original opinion, and the definition by Crocker of its being a gangrenous eruption following varicella or other pustular eruptions of children will, I consider, be generally accepted and adopted, as he writes—"Any eruption of isolated pustules may be the starting point of the

ulcers." He records twenty-three cases, including fourteen cases of his own, of ages varying from three months to three years; the majority (14) were under one year old, 6 under two, and 3 under three years. The ulcerative process was generally, when not associated with vaccinia or varicella, in the lower half of the body, the buttocks and thighs. Sir John Wm. Moore in his "Eruptive and Continued Fevers," 1892, p. 130, speaks of "a remarkable case of the affection in a young lady, who for years suffered from urgent gastric symptoms, apparently of a neurotic origin."

In my case there was no evidence to associate it with either vaccination or varicella. The former had been performed two and a half years before, and there was no varicella in the patient's family or neighbourhood. Indeed, at that time of the year (May, 1900) chicken-pox was not prevalent in any part of Ireland, except in a distant part of County Donegal. This information the Registrar-General, Mr. R. C. Matheson, courteously gave me in reply to my inquiries on the subject. Moreover, Dr. Beatty, who saw the child very early in its illness, describes it as impetigo, attacking the penis and lower parts of the abdomen.

The pathology of the disease is very obscure. The disease is a very rare one, and the opportunities of a full *post-mortem* examination still rarer, as it is not always fatal, and a considerable number of the cases are very mild and recover. It attacks mostly females (Crocker), and, as Hutchinson points out, the subjects of it are not the most feeble. It does not spread in families, nor does it seem to be contagious. Yet its whole characters would indicate a microbic infection in children under certain constitutional conditions. A *Bacillus pyocyaneus* was demonstrated in the ulcers by Ehlers of Copenhagen, but the same was found by Oetlinger in pemphigus and diphtheritic ulceration, and by Neumann in cutaneous hæmorrhages (Crocker). Dr. Eustace Smith (*ibid.*) "has no doubt it is connected with the curious tendency to spontaneous gangrene sometimes met with in children," and Osler (4th Edition of his book on "Practice of Medicine,"

1901, p. 75) writes in the same strain—"In delicate children, particularly the tuberculous, gangrene (varicella escharotica) may occur about the vesicle (Hutchinson), or in other parts, as the scrotum."

When one reflects on the vast numbers of children there are who live under the most insanitary conditions, and how common pustular eruptions are among infants and young children—as evidenced by every dispensary and out-patient department of our city hospitals—it cannot but strike one that, in this dermatitis gangrænosa, we are face to face with a most rare and unaccountable condition. The presence of tubercular disease has been noted in very many of the fatal cases, as pointed out by Barlow; and of this constitutional state my little patient is an example, tubercle being found in the thymus gland and lungs. But it cannot, I think, be considered as cause and effect, having regard to the frequency of tuberculosis in children, on the one hand, and to the fact that many cases of gangrenous dermatitis completely recover, and show no sign of tuberculosis before or after the attack.

The presence or not of tubercular disease must, however, have a very decided bearing upon prognosis and treatment, considering the tender age of the patients and the low state of their vitality, as evidenced by the presence of a pustular eruption.

ART. XVI.—*Medical Careers.*^a By THOMAS MYLES, M.D., Univ. Dubl.; President of the Royal College of Surgeons in Ireland; Surgeon to the Richmond Hospital, Dublin.

THE custom of delivering inaugural addresses in this College has of late fallen into disuse for reasons which it is not necessary for me to discuss. I hope you will, therefore, forgive me for saying that I think the present moment is not an inopportune one to depart from the usage of the last few years, and inflict a very short address on you. I do not intend to occupy you for any length of

^a An Address introductory to the Session of 1901-1902, delivered in the Royal College of Surgeons in Ireland on Saturday, November 2nd, 1901.