

swelling of the abdomen, culminating, as a rule, in a bout of vomiting, the whole condition being associated with a sensation of intense prostration. These attacks first appeared when she was 6 years of age, and when she approached the age of 15 years swellings of various parts of the body began to become associated with them. As stated, the "bilious attacks" usually culminate in vomiting; but if this method of termination does not accrue, swellings of one hand or of one foot supervene, the appearance of the swelling coinciding with a sensation of relief from the general symptoms. These swellings occur about twice in the year. When the hand is affected the dorsum is affected primarily, the swelling spreading to the fingers, which swell like sausages. When the foot is affected the plantar surface is involved first, the swelling quickly involving the toes. The condition usually subsides within 24 hours. On one occasion a violent bout of vomiting ensued, which dispersed the swelling immediately. The "bilious attacks" appear to be premenstrual in their periodicity.

#### Family History.

She volunteered to me a very exact family history, which is here briefly summarised. The condition is familial, and is traceable to her father's mother. She has no definite proof of any antecedent family involvement. In all the members quoted the outstanding signs have been those of "bilious attacks," the symptoms of which correspond with her own subjective symptoms. These invariably appeared in childhood, and at a later period, usually coincident with the age of probable puberty, oedema signs manifested themselves.

(1) *Grandmother* died at the age of 72 of "old age." She was liable to frequently recurring "bilious attacks" during the course of her whole life, and frequent attacks of localised swelling in various parts of the body.

(2) *Father* (son of this grandmother) is still alive at the age of 59 years. He suffers from frequent "bilious attacks" and has attacks of oedema, which recur roughly at fortnightly intervals over long periods, and manifest themselves on a hand or foot or on the face. On one occasion he had a severe attack of swelling of the throat (? larynx) and was in great respiratory distress for 24 hours.

(3) *Uncle* (brother of father) suffered from "bilious attacks" and attacks of oedema, and died at the age of 21 years from an acute attack of oedema of the throat (? larynx), death supervening after two days' illness.

(4) *Aunt* (who was a step-sister of the father through his mother's second marriage) suffered from "bilious attacks" and attacks of swelling, which became more frequent as she grew older. She died at the age of 44 from an acute throat attack.

(5) *Cousin* (son of aunt quoted) suffered from attacks which were similar to those of his mother. He died suddenly at the age of 21 years from an acute throat attack.

(6) *Brother*, aged 30, has suffered from "bilious attacks" since infancy and attacks of swelling of various parts of the body since the age of probable puberty.

Her remaining direct relatives comprise one full brother, one full sister, and three step-brothers, children of her father's second marriage. Her brother and sister have shown no signs of the condition, and one brother, who was killed during the war, and one sister, who died of influenza two years ago, were likewise free from symptoms. Of the three step-brothers, one, who is 5 years of age, shows signs of a tendency to the same type of "bilious attack," but hitherto has shown no evidence of swelling of any part of the body.

In all these cases the frequent "bilious attacks" constitute the main group of symptoms. If these are not relieved by vomiting swellings appear, and often afford relief to the bilious headache and prostration. Occasionally vomiting follows the appearance of the swelling, and both conditions subside very rapidly.

The present patient (M. W. M.) states that in the case of her father, if swelling of any part of the body accompanies a bilious attack a longer interval of freedom from bilious attacks ensues, and if the swelling does not appear the bilious attacks are more frequent and severe. In her own case, she states that if the bilious attack does not end quickly by vomiting the swelling is liable to appear, and she thinks that the vomiting is a safeguard against the oedema.

#### Remarks.

The family history is most striking, and, as so many fatalities have resulted from the disease, the present patient has a very acute interest in her condition and can vouch for the accuracy of the information which she has given. The hereditary transmission dates at least from the grandmother on the father's side, and the history shows that both males and females participate in the transmission and are equally affected by the condition. The outstanding point in the symptomatology is the association of gastric symptoms with the oedema. In all members of the family affected these two sets of symptoms were combined, and no member had one group of symptoms without the other. The "bilious" symptoms manifested themselves at an early period of life, and the oedema signs usually appeared at an age which suggests the probable onset of puberty. The oedema never appears without accompanying gastric symptoms, but the gastric symptoms may appear without the oedema. The onset of oedema seems to cut short a bilious attack, and in one member of the family seems to guarantee a longer period of immunity from such attacks. In the present patient the periodicity of the attacks suggests a menstrual

relationship, but she is positive that in other female members of the family the attacks have been too frequent to have any such relationship. The present patient appears otherwise healthy, and shows no evidence of other disease.

Quincke's theory, which assumes an intoxication from the intestinal contents, does not cover the hereditary facts of the condition. It is an open question whether the condition is of gastro-intestinal origin or whether the gastro-intestinal symptoms, as has been suggested, are the result of a similar oedema of the intestinal mucosa. The association between the two groups of symptoms is, however, undoubted, and they are apparently part of the one condition. The suggestion is that both are probably reflex phenomena resulting from some other cause.

#### "ACIDOSIS" FOLLOWING BEE-STINGS.

By J. O. BEVEN, M.A., M.R.C.S. ENG.

I HAD recently to attend on a brother medical man and two ladies who were attacked by the rock bee, *Apis dorsata*, when climbing the rock fortress of Sigiri, in the North Central Province of Ceylon, and my notes may be of use to anyone called upon to deal with a similar emergency.

The party was attacked by large swarms of bees on the summit of the rock at 7 A.M. and had to make the notoriously dangerous descent attended by their tormentors. They motored to the rest house close by, where some of the stings were removed and where they got some whisky, which was used both externally and internally. They then motored to Habarane, 15 miles away, where I was shooting, and found them at the rest house at 9 A.M. The pain had been very intense at first, but was then easier, and there was less swelling than one would expect.

Dr. S., stung in upwards of 120 places, mostly about the head, neck, and shoulders, I found in a collapsed condition. There was incessant vomiting of greenish-yellow fluid, associated with severe abdominal cramp and profuse watery diarrhoea. The stools resembled rice water, and contained practically no faecal matter. There was air hunger and the pulse was very rapid and weak, and sweat was literally pouring off the patient. I got a large supply of sodium bicarbonate at the local dispensary, and since there was no means at hand for injecting it, kept on giving half-ounce doses every ten minutes, together with brandy. These were at first returned within three or four minutes of being swallowed, but after about 45 minutes the vomiting became less frequent, and the pulse and respiration improved. At this stage Miss B., who till then had merely felt rather sick, collapsed, and, fortunately, Mrs. S. was in a fit state to attend to her husband, having suffered least of the three.

Miss B. had been stung in over 80 places, and the poison seemed to have a delayed action, which was very acute when it came. Within a few minutes she was cold, clammy, and almost pulseless, the respirations were slow and gasping, and I greatly feared that the almost continuous vomiting must induce heart failure. I packed her with hot bottles and all the rugs I could lay hands on, and gave the bicarbonate and brandy as often as the vomiting would allow. There was no diarrhoea in this case, and only slight cramp, but the breathing grew worse and drowsiness was succeeded by periods of coma. I had almost begun to despair, when at the end of an hour the vomiting grew less frequent and the pulse and respiration better. When two doses of the mixture had been retained the patient fell into a natural sleep. Recovery in both these cases was astonishingly rapid, and within a few hours there was little to show for the trying time they had been through. The next day several of the stings had an area of ecchymosis the size of a florin round them, but there was no swelling.

A week later Mrs. S., who had originally escaped lightly, developed a general erythema, with patches of urticaria, and the most intense pruritus. Dr. S. followed suit, and nothing seemed to afford much relief in either case. The rashes disappeared in about five days, and were then succeeded by very indolent, scattered furuncles, which lasted for some weeks. The furuncles appeared on areas which had been particularly badly stung and were peculiar in that they contained much serum and hardly any pus.

I have not been able to get any information as to the nature of the venom of the rock bee. In the present case, making allowances for difference in weight and sex of the victims, the severity of the illness was in proportion to the amount of venom injected. How far the subsequent trouble was due to the bee-stings is a matter for conjecture. One of the original victims had no further symptoms, and this one had been most severely ill at the time. The other two developed exactly similar symptoms within 48 hours of each other, and without any ascertainable cause. They had neither of them been similarly afflicted before. Assuming that the stings caused the rashes and furunculosis, it is difficult to explain how a poison, acting rapidly and rapidly excreted, should be able to give rise to symptoms after the lapse of a week.

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