SWELLING OF THE EYELIDS WITH INTERMITTENT ALBUMINURIA IN CHILDREN.

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Two papers have recently appeared in the pages of the BRITISH MEDICAL JOURNAL upon the presence of traces of albumen in the urine in the "apparently healthy." The subject is an important one, and though the following notes of cases of intermittent albuminuria are incomplete, they may be of interest. The term "apparently healthy" could not perhaps be applied with justice to the general condition of the children who were the subjects of this albuminuria, but they were not distinctly ill. In popular language they would be described as weakly or delicate. The aspect was that of listlessness, associated on some days with a swelling of the eyelids, which was absent on others.

Although some children who present swelling of the eyelids may be found to have occasional traces of albumen in the urine in others repeated examination of the urine may fail to discover it, but I have seen one case of intermittent swelling of the eyelids in which albumen was always present in the urine, and yet the child did not seem to suffer worse health than those whose urine was always free.

The three following cases are examples of swelling of the eyelids associated with the occasional presence of albumen in the urine.

CASE I.—A boy, aged 4½, attended the out-patient department of the Bristol Hospital for Sick Children on April 13th, 1898, with very marked swelling of the eyelids. The upper eyelids, moreover, were markedly discoloured, being yellowish-brown, like a disappearing bruise. Below the left lower eyelid there was a purplish tinting. The mother stated that eighteen months before the eyelids had been similarly "puffed up." The recent swelling had been present for six weeks, but had varied in amount, sometimes disappearing altogether. There was no oedema of the legs. Urine passed in the out-patient room did not contain the faintest trace of albumen. On April 18th two specimens of urine were examined—one passed the same morning, the other in the middle of the previous day. There was a trace of albumen in the morning urine, but none in the other specimen. The urines were tested twice carefully with the same result. On April 25th three specimens were tested, from the morning, evening, and middle day. No albumen was found in the first and third, but a trace was present in the second. The eyelids were less swollen. On October 18th, 1899, when I saw the boy again, he appeared to be in perfect health. No swelling of the eyelids had occurred since July, 1898. Two specimens of urine were afterwards obtained, and neither contained any albumen.

CASE II.—A boy, aged 10, who was brought to the hospital on January 30th, 1899, was rather thin and lethargic-looking, but intelligent. Nothing could be found wrong in the physical signs of the heart, lungs, or abdomen. On February 6th the mother mentioned that the boy's eyelids often became swollen. They were not swollen at the time; there was, on the contrary, a somewhat sunken hollow appearance about the eyes. Urine passed in the out-patient room contained no albumen. On February 20th three specimens of urine were tested: that of the morning and evening contained not the least trace of albumen, but that of midday gave a very marked ring with cold nitric acid. On March 6th and 28th three specimens were again tested, but they were all free from albumen. However, on October 12th, 1899, the boy was visited at his parents' home. He was still lethargic in appearance and disposition. Two specimens of urine were obtained, both of which contained albumen. The morning urine gave a very faint ring with nitric acid, but in the evening specimen the ring was very marked.

CASE III.—A girl, aged 10, attended the hospital on August 3rd, 1898, marked swelling of the eyelids and face was present. Nine months before, when she had seen me for the same affection, I had tested three specimens of her urine but found no albumen. On August 6th the swelling of the eyelids and face had disappeared. Of two specimens of urine examined, one, that of the previous evening, contained no trace of albumen, but the morning specimen gave a very marked ring with nitric acid, and on boiling, a deposit which was sufficiently abundant an hour later to occupy a third of the height of the urine in the tube. Apparently I did not examine the urine again, but the girl was seen recently. During the nine months that had elapsed since her visit to the hospital, swelling of the eyelids had occurred from time to time. Three specimens of urine were examined. There was no trace of albumen in the morning or in the evening urine, but that of the middle day gave a very marked ring with nitric acid.¹

It should be stated that in none of the above cases could a history of scarlet fever be obtained.²

As I have previously mentioned, cases closely resembling the above are not uncommonly seen, in which there is occasional swelling of the eyelids associated with lethargy, but repeated examination of the urine may fail to show any albumen in the urine. The following two cases are examples:

CASE I.—A boy aged 10 was brought to the hospital on August 8th, 1898. He was stated "to be languid and easily got tired" and that his eyelids were puffy at times. There was some swelling of the eyelids on the day of his first visit. The urine passed in the out-patient room contained no

albumen. On August 22nd two specimens of urine were tested, but no albumen was found in either. On September 19th two specimens were tested; no albumen in either. On October 3rd one specimen showed no albumen. The boy was seen again on October 12th, 1899, when the eyelids were still said to swell occasionally, and the boy's aspect was not that of good health. Three specimens of urine were tested; all were free from albumen.

CASE II.—A girl aged 7 attended the hospital on October 11th, 1899. She was brought up for general weakness, and was said to suffer from headache. For two years there had been occasional swelling of the eyelids, especially in the morning. The swelling was said sometimes to be very marked, and when it passed away left a discoloration like that of a bruise, especially in the right eye. During subsequent visits five specimens of urine were tested; two passed in the morning, two in the evening, and one in the middle day. All were free from albumen.

In the following case albumen was apparently always present, yet the general condition of the child did not seem to be worse than that of most of the preceding.

Case of Occasional Swelling of the Eyelids in which Albumen was always Present.—A girl, aged 3, was brought to the hospital on September 3rd, 1896, with a history of having had occasional swelling of the eyelids for over a year. There was no history of scarlet fever. At the time of the first visit the eyelids were markedly swollen, but on the second visit the swelling had disappeared. The urine, however, was found to contain albumen and the child was admitted. The urine was frequently tested and albumen was always found to be present, but the amount was "variable." Three years later the child was again seen. She was then thin and delicate-looking, with a somewhat sunken appearance about the eyes. The eyelids, however, were said to still swell occasionally, but the right eyelid more than the left. The right hand and right foot were also said to swell at times. The swelling was said to come on after some unusual exertion, such as "dancing round a barrel organ" or after excitement such as a quarrel with her brother. Four specimens of urine were examined; all contained albumen.

In an interesting paper upon albuminuria in children Le Gendre³ speaks of the presence of intermittent albuminuria. His description of the children in which it occurs could be well applied to most of the above cases, whether albumen was present or absent. They are said to be "ailing, pale, and tired, and to take no pleasure in play." The sister of one boy, the subject of occasional swelling of the eyelids, who attended the Bristol Hospital for Sick Children, said it was a standing joke against him that his play was to "watch the pigeons."

In England transient albuminuria in youth rather than in childhood has attracted attention. Dr. Clement Dukes has frequently written papers upon the subject. At first Dr. Dukes was disposed to think lightly of the presence of traces of albumen in the urine occurring occasionally, but later expressed a less favourable opinion as to the probable prognosis.⁴ The frequency with which Dr. Stirling⁵ found albumen present in boys—in 12.8 per cent. of those in training ships—would suggest that the mere existence of albuminuria need not indicate organic disease. It is inconceivable that all the boys who were the subjects of this mild form of albuminuria had lesions of the kidneys. Probably the albuminuria was in most instances of the nature of the "exertion albuminuria" of Dr. Herbert Hawkins. That work or strain was in great measure responsible for the appearance of the albumen is suggested by the fact that the percentage of cases of albuminuria was much higher in boys who played in the band. While, however, in children, as in adults, albumen may appear under some circumstances in the healthy; in others it may indicate deviation from the usual health, or from what we may call a healthy standard. It is difficult to say whether some children, whom we describe as delicate, are the subjects of a mild form of chronic disease, or whether they have been born with a constitution fitted only to take life quietly. Intermittent albuminuria may be considered to be either pathological or constitutional. The swelling of the eyelids associated with it is suggestive of nephritis, but the fact that similar swellings frequently occur without any albuminuria, seems to indicate that the albuminuria when present is comparatively unimportant, and merely a symptom of a condition that has not its primary seat in the kidneys.

It is probable that there is a form of nephritis that commences insidiously, and is seen eventually on the *post-mortem* table as the variety of the small white kidney to which Dr. Rose Bradford has drawn attention. This kidney, when it occurs, is most frequently seen in young adults. Usually there is nothing in the history to indicate when the disease commenced, but it is perhaps reasonable to suppose that some cases have existed from childhood. This form of nephritis is, however, rare; too rare, I think, to be a sequel of the majority of cases of intermittent albuminuria in children.

Examination of cases in which intermittent albuminuria

has been known to exist for several years may throw light upon the nature of the ailment, but until it has been proved that the prognosis is serious I should wish to look upon the occasional appearance of albumen in the urine, and the swelling of the eyelids associated with it, as evidence of some vasomotor instability or defective metabolism.

NOTES AND REFERENCES.

¹ Cold nitric acid is mentioned as the test used, but where a ring with nitric acid was obtained there was also a precipitate on boiling in every instance. ² A fourth case of swelling of the eyelids with intermittent albuminuria occurring in a boy, aged 10, is at present under my care at the Bristol Children's Hospital. ³ *Medical Week*, 1895, p. 25. ⁴ *Lancet*, 1891, p. 1323. ⁵ *BRITISH MEDICAL JOURNAL*, i. 1889, p. 807; *Lancet*, ii, 1887, p. 1157.

THE SEAT OF PAIN IN BILIARY COLIC.

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In that comparatively small region of the body that lies between the diaphragm and a line drawn at the level of the umbilicus is to be found a large proportion of those diseases that call for treatment in everyday practice. The close proximity and intimate connection between such important organs as the stomach, duodenum, pancreas, liver, gall bladder, and bile ducts, and the fact that these organs can for the most part be only indirectly explored, render the diagnosis of disease in that region specially difficult. Not seldom do the most skilled and careful investigators find great difficulty in deciding whether they have to deal with a case of ulceration or malignant disease of stomach, contraction of pylorus, malignant or other disease of the gall-bladder and bile-ducts, or even a wandering kidney or appendicitis. As these various diseases demand such different treatment, medical and surgical, any contribution, however slight, that may serve as a guide to a correct diagnosis, may not be unacceptable.

A long and painful experience of biliary colic, a careful observation of the seat of pain before calculi were at various times passed, and, as was natural, a more than usually minute inquiry into the symptoms of those who have similarly suffered, have led me to the conclusion that the seat of pain has seldom, if ever, been correctly described in text books. The description given by Naunyn, Mayo Robson, Kehr, Waring, and others, is mostly in the same terms. It would be too tedious to quote what is said by the many writers on the subject. Naunyn's description comes nearest to my own personal experience, and to what I have observed in others, but does not quite accord with it:

The pains usually commence in the epigastrium and afterwards spread into both hypochondria and to the back, while they are often felt not only to the right but on both sides of the vertebral column. Sometimes they extend upwards to the head and neck, or downwards to the lumbar, and even to the sacral region. Now and again they radiate into the upper part of the thigh and along the arms even to the finger-tips.

It may seem absurd that from my own personal experience, and an inquiry into only a limited number beyond those I have met with during over twenty years of private practice, I should call in question statements made, for example, by Kehr, whose book recently published gives an account of the 433 operations he has undertaken during the past few years for diseases of gall bladder and bile ducts. But, as Kehr himself admits, his cases were mostly operated on a day or two after they came to his clinic, and he further insists that if we are to arrive at a right appreciation of those symptoms that lead to diagnosis of gall stones, we must look not to the surgeon or consultant, but to the medical man who is called on to treat the patient when acutely suffering, and is in daily or it may be hourly attendance.

I do not know that I can better express my own experience than by giving the statement of a patient who has long suffered from biliary colic, and refused operation. In answer to a leading question suggesting that the pain must be over the gall bladder, she answered, "You know better. When the pain begins there I know I am to have a slight attack, and don't mind it much; but I know I am in for it when the pain begins in the back." If patients were not influenced by the suggestion of the medical attendant that the pain is in the region of the gall bladder, or questioned about it afterwards, when, even if otherwise observant, the severity of the pain or the effect of opiates has dimmed the recollec-

tion, but asked to carefully note during further attacks the onset, progress, and disappearance of the pain, I think it would then be found that my experience is by no means unique. Long before an acute attack there are generally pains in the back often mistaken for lumbago or some spinal mischief; but when a calculus is fairly lodged and trying to find its way through the bile ducts the pain begins about the tenth or eleventh dorsal vertebrae, gradually passes round, and though not quite disappearing, gives place to excruciating pain in the right and often in the left hypochondrium, middle or lower abdomen, frequently above the right nipple, but practically never the right shoulder. Immediately before the pain subsides, and when in all probability the stone is just entering the duodenum, a peculiar gliding sensation is sometimes felt about two inches to the right of the tenth to twelfth dorsal vertebrae.

That pain often begins in the right hypochondrium and then radiates elsewhere I readily admit; but I have not found these attacks followed by the passage of gall stones, and in carefully going over the history of numerous cases operated on by Kehr, I cannot but conclude that this pain is practically always due to the fact that the gall bladder is distended with calculi, unhealthy bile or pus, that there is hour-glass contraction, or a localised peritonitis or adhesions.

When a medical man is called to a patient suffering from the passage of a biliary calculus, the pain may be shooting, tearing and dragging in all directions, and the torture so exquisite, that little can be learned from the patient as to past history or the nature or seat of pain, a diagnosis is by no means easy. In my experience, however, a whiff of chloroform not sufficient to produce unconsciousness will often remove the difficulty. Under chloroform the distant or referred pains gradually cease, and the order of cessation to anyone cool enough to observe it is often interesting, and there remains only a distinctly localised pain at the bile ducts. This is what one might naturally expect from the similar effect of chloroform on neuralgia proceeding from a carious tooth, or sciatica when the pressure is on some particular part of the nerve.

NOTES ON A CASE OF BRIGHT'S DISEASE
COMPLICATED WITH GANGRENE.

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THE extreme rareness of gangrene in Bright's disease leads me to think that it will be worth while to record the following case. During an experience of more than thirty years I have never seen a case like it, nor can I find any record of one.

Early in March, 1899, I was called to see Mr. G. S., a gentleman aged 46, strong and active, widely known in agricultural circles, and the representative of a long line of highly respected owners of the estate on which he lived. The symptoms at first were bronchial, following an attack of influenza, for which he had treated himself previous to sending for me. As swelling of the legs came on, the urine was examined, and found to be: specific gravity 1020, with much albumen and slight sugar. He was most unwilling to lie in bed, and would not only walk out, but also superintend and even help with the work. One day, after some unusual exertion, the heart's action became very irregular. There was no murmur, but very tumultuous action, intensified at times, and causing attacks of dyspnoea. At last he was prevailed upon to lie in bed for fourteen days, during which time the sugar entirely disappeared, the albumen lessened in quantity, and the heart's action improved so much that he could lie down night by night in comfort. He got comparatively well, able to go about, take long journeys, and act as judge at several large agricultural shows. The general treatment was nutritious food, warm clothing, avoidance of chills, cheerful company, change of scene, and an effervescing saline, in which digitalis largely figured. He called at my house periodically, and remained under continuous treatment the rest of the year, during which period the albumen on two occasions nearly disappeared. I advised removal to a warmer climate and a more level country, but this he would not hear of, as he preferred his native home in the bosom of the Yorkshire Wolds.

On January 14th, 1900, I was invited to dine with him but was prevented. Two days later I received an urgent letter to visit him. The friends I was to have met on that Sunday told me how ill he seemed to be then. When I saw him the legs were very much swelled, there was intense dyspnoea, with tumultuous action of the heart. He was at once sent to bed. The urine was scanty, specific gravity 1020, highly albuminous, but no sugar. There was no atheroma of the arteries. On January 24th I met Dr. Parkin, of Hull, in consultation. Our prognosis was unfavourable. On February 6th, whilst Mr. S. was washing himself close to the bed, violent pain came on suddenly in both legs. He could not move, and had to be helped back to bed. The