

dle ear the urine clears up as the otitis subsides, but in the limited number of cases with both observed in this series this coincidence, if such there be, was not found. It is interesting to note in passing that the majority of the cases of otitis (70%) developed in cases with comparatively mild fever, that is, in those with a temperature not over 102°. Otitis seems, therefore, like nephritis, a complication quite as apt to occur in mild as in severe cases of scarlatina.

Diphtheria was said to be a complication in six cases. Whether these were all cases of true diphtheria developing upon scarlet fever, the writer cannot say. At any rate, they were characterized by very severe angina and well-marked false membrane. In five of these, or 83%, there was albumen in the urine; in but one case was nephritis present.

Pneumonia occurred in three cases, two of which ended fatally. All presented albuminuria. Nephritis was not observed in any of them.

Severe abscesses of the neck were present as a complication in three cases. In one nephritis occurred; in one simple albuminuria, and in one the urine was normal throughout.

Out of three cases of *inflammation* of one or more joints, one had nephritis, one catarrh, and one no albumen.

Measles complicated two cases, beginning the twenty-third and twenty-fourth days of the original disease. Albuminuria was present in one, nephritis in neither.

Summing up, in brief, the results regarding complications, it is found that 25 out of the 100 cases presented some of the above complications, not including nephritis. Out of these 72% had albumen at some time, 20% had nephritis, 12% had catarrh, 40% had simple albuminuria, 28% had no albumen at any time. Complicated cases, therefore, present a much larger proportion of albuminuria and severe nephritis than do simple cases, while the proportion of cases with catarrh is not materially changed. It is noteworthy, also, that 63% of the cases of severe nephritis were in patients also having some of the above complications.

Scarlatinal nephritis seems to differ in one very important respect from acute nephritis of other origin.

So far as the writer has observed it is quite apt to develop quickly without giving any signs of its presence in the appearance of the patient. Oedema is apparently not a common accompaniment in the earlier part of the case. Nearly all the cases in this series were found by the urinary examination before any other evidence of their presence had been observed.⁴ Occasionally, a slight rise in temperature accompanies the onset of the nephritis. Close and constant attention to the urine is therefore the only way to make sure that nephritis is not developing.

The writer regrets that he is unable to say anything about the *prognosis* of the nephritis. In all but four of the cases of scarlet fever here recorded, recovery took place. In none of these four fatal cases was nephritis detected. Death in two was due to pneumonia, in one to diphtheria. In none of the cases did nephritis become chronic. The total number of cases of nephritis is, however, too small to be of any positive value as regards prognosis.

The results obtained from the comparison of these 100 cases of scarlet fever may be summed up as follows:

ALBUMINURIA.

Albuminuria was present at some time during the disease in 49% of all the cases; it was slightly more common in males than in females. Early albuminuria maintains a pretty constant relation to temperature, being of much more frequent occurrence in cases with high temperature. It was present much more frequently in adults than in children when the temperature was the same, and of almost universal occurrence in adults with high temperature; it does occasionally occur in cases with a low temperature; over-crowding and poor ventilation were not factors in its production. Early albuminuria occasionally is caused by or leads to renal catarrh, very rarely to severe nephritis; catarrh is not apt to be developed into severe nephritis.

NEPHRITIS.

SEVERE NEPHRITIS.

In 8% of all cases of scarlet fever.
Is most common in children under 9 years of age.
Least common time, 8 to 18 years of age.
82% in males.
Rather more common in winter than in summer.
Is not influenced by the number of cases in the hospital (over-crowding and poor ventilation).
Is as common after mild as after severe cases of scarlet fever.
Generally begins between third and fourth week of the disease.
Generally during desquamation.
Common duration, 5 weeks.

RENAL CATARRH.

In 10% of all cases of scarlet fever.
Occurs with equal frequency in children and adults.
Least common time, 8 to 16 years of age.
70% in females.
Season has no influence.
Idem.
90% in severe cases.
Most common in first week.
Most common time before desquamation.
No regularity of duration.

COMPLICATIONS.

Excepting renal catarrh, *otitis* is the most frequent complication of scarlet fever, occurring in 10% of all the cases. It is as common in mild as in severe cases of scarlatina. It sometimes begins early, but usually not till the period of desquamation and sometimes very late. Sixty per cent. of cases with otitis have albuminuria, 20% nephritis.

Most of the cases complicated by *diphtheria* present albuminuria. Nephritis is not especially common. Of the other individual complications no summary is needed.

It should be said that the proportion of cases in this series presenting albuminuria is larger than is generally supposed to occur, but the percentage of cases with nephritis agrees very closely with that observed elsewhere.

CUTANEOUS ERUPTIONS IN INFLUENZA.¹

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THE following cases are cited as a contribution to the literature of that many-sided disease, influenza, particularly as very little has been written about this phase of the disorder:

CASES I and II. A. B., aged six months; first seen January 1, 1892. Mother says child has been sick for several days with fever, cough, vomiting and constipation, and to-day a rash has appeared which she thinks is measles. Upon examination I found tongue thickly coated, chest, abdomen and back covered with

⁴ See British Medical Journal, 1889, II, p. 657.

¹ Published by authority of the Surgeon-General.

a discrete eruption, pale, but exactly like that of a mild case of measles, and well-marked broncho-pneumonia; there was high fever, but not having a thermometer temperature was not taken; no catarrhal symptoms; no redness of tongue or pharynx. Influenza was then prevalent; the eruption was the only point of resemblance to measles; there had been no measles within 150 miles of us for many months, and I diagnosed influenza, but nevertheless isolated the patient and took the same precaution as if the disease had been a contagious one. The next day the eruption had spread over the entire body, was confluent and much more vivid except upon the face; other symptoms as before. Though still in doubt, I thought best to treat the case as one of measles, and reported it as such to the Surgeon-General of the United States Army.

The same day, January 2, 1892, a half-breed infant of about nine months was brought to me by its mother, a Shoshone Indian squaw, with exactly the same symptoms except the pneumonia, the eruption being most typical and everywhere confluent. This second case had been brought in that day from a "tepee" on Upper Big Wind River, about twenty-five miles distant, and I was informed by the mother that there were one or two other cases of the same nature in that region.

January 3d, the eruption in both children had almost entirely faded, and on the 4th was gone, without the slightest desquamation.

The second case I did not see after this date, but heard that the child made a good recovery. The first has been constantly under my observation, its recovery from the pneumonia being slow and difficult. In the family of the latter there were two other children, one of whom, with the father and mother, was subsequently affected with the characteristic symptoms of the grip, but without any eruption.

CASE III. Nez-Percé, Shoshone Indian soldier, aged twenty-one and one-half years; admitted to hospital, January 9, 1892. Complaints of headache, cough, pains in the chest and debility. Upon examination I found acute laryngo-bronchitis, a coated tongue and a few small papules like those of acne upon face and chest; temperature 100°. The next morning, on visiting the ward, I was astonished to find his face, chest and back covered with discrete superficial vesicles, many of them markedly umbilicated but without inflammatory bases. Temperature: A. M. 99.6°, P. M. 102.8°; eyes slightly injected; complains only of severe frontal headache.

January 11th. Vesicles have become pustular; no new ones; feels much better. Temperature: A. M. 100.8°, P. M. 101.4°.

January 12th. Feels well; pustules rapidly drying up.

January 16th. Spots dried up rapidly, forming thin crusts, which dropped off leaving no scar.

This case so closely resembled varicella that the patient was isolated for several days. However, the soldier had not been absent from the post; varicella had not been heard of in the country for many years, and I considered that disease excluded. The other symptoms were those of the grip, and my experience with the two cases referred to above led me to make that diagnosis here also.

Up to this date, January 25, 1892, I have not seen or heard of any more cases of eruptive disease in this neighborhood; and the Agency physician, who treats a large number of Indians, says he has not met with

any except one case of influenza with a vesicular eruption like the one referred to.

My cases were very puzzling to me at first; but their history, subsequent course, absence of any of the symptoms of the exanthemata except the eruption and fever, and the presence of the characteristic symptoms of grip, the absence of any probable source of contagion, and the fact that no new cases developed, all led me to the inevitable conclusion that the history of influenza has not yet been fully told.

Clinical Department.

THREE CASES OF PUS IN THE FEMALE PELVIS; ABDOMINAL SECTION.¹

BY WALTER L. BURRAGE, A.M., M.D., OF BOSTON.

CASE I. Pyosalpinx. Large tube of pus. S. J., single, a domestic, thirty-two years of age and a native of Nova Scotia, entered St. Elizabeth's Hospital, June 3, 1890. The diagnosis made in the Out-patient Department was retroversion. She was a thin woman, rather pale, and gave a history of chronic dyspepsia. It was questionable whether she had had gastric ulcer a year before. Her general health was poor. The chief complaint at the time of entrance was of frequency of micturition and general weakness. Her catamenia were regular, scanty (only one napkin), and attended by no pain. Local examination showed what appeared to be a large uterus in the third degree of retroversion. The sound was not passed because there was some suspicion of pregnancy. She was treated with packing, and kept under observation until June 23d, when she was anesthetized.

Dr. F. W. Johnson saw her with me then in consultation. We found the mass behind, previously thought to be the fundus of the uterus, to be a cyst the size of a large Florida orange, firmly adherent and resistant, though much less resistant than when the patient was not under the influence of an anæsthetic. It had a doughy feel. The uterus was pushed forward and to the right, the sound entered its cavity two and three-quarters inches. There was a nodule on the right side the size of a small duck's egg.

From the situation of the cyst, in Douglas's pouch; from its doughy feel; from the fact that the patient had had no chills, no elevation of temperature since she had been under observation, and from the absence of history of previous inflammatory attacks, it was considered that we had to do with a case of dermoid cyst of the ovary in all probability. It was thought best to keep her under observation, and, if possible, build up her general strength, meanwhile watching the tumor.

After six weeks the tumor had increased in size a little; she had had two slight attacks of pain referred to the lower abdomen, and an elevation of temperature of one or two degrees for a day or two, shortly after the ether examination; the rest of the time the temperature had been normal. In spite of a generous diet and tonics, her appetite continued poor, the bowels were obstinately constipated and her strength not improved. Accordingly the proper course seemed to be to remove the tumor. August 11th, with the assistance of Drs. W. M. Conant, E. L. Twombly and

¹ Read before the Warren Club, Boston, December 1, 1891.