ON

ALBUMINURIA WITH PARAMETRITIS.

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It has repeatedly occurred to me, in taking care of cases of parametric inflammation, to be much more alarmed at the evidence of renal disorder offered by copious albuminuria than by the more striking parametric affection. In a recent example of psoas parametric abscess this occurred, the urine showing half albumen on boiling, and the woman having a puffy face and other symptoms attributable to the renal disturbance. In this prolonged case the abscess was opened in the right groin. It healed rapidly, and, as it healed, the albumen disappeared.

I therefore resolved, having the able and willing co-operation of my resident assistant at St. Bartholomew's Hospital, Dr. Hurry, to make use of my notes of cases of perimetritis and parametritis occurring there, with a view to elucidating the connection between these diseases and albuminuria.

Finding the records of "Martha" in sufficiently good order from the beginning of 1881, Dr. Hurry made extracts of 32 cases of perimetritis and 21 of parametritis, 53 in all.

In order to dispose at once of the 32 cases of perimetritis I shall now mention the remarkable restriction of the albuminuria to the parametritic cases. Among the 32 perimetritic cases there was not one of the kind of albuminuria of which I here treat. In 24 of the 32 cases no albumen was found. In 5 there was found only a trace, such as may be accounted for by the admixture of a small quantity of vaginal discharge. In the remaining 3 there was found albumen in considerable quantity, but also pus in quantity sufficient to account for the albumen; and this, in all these cases, without cystitic symptoms, the urine being acid, the pus being discharged into the bladder from a perimetric abscess.

It should be remarked that the diagnosis of perimetric from parametric phlegmon and abscess is not always quite secure; and it was premature to use this albuminuria as an important aid in the distinction. Parametric phlegmon or inflammatory swelling in the pelvic cellular tissue originating in uterine injury or disease, and parametric abscess or a collection of pus under the same conditions, are distinguished from perimetric phlegmon and abscess, or inflammation of and abscess within the peritoneum with great assurance. The indications are derived from the situation of the swelling, its relations, the direction of its spreading, the place of bursting, and the presence or absence of retraction of the thigh. In 10 of the 21 cases of parametritis the thigh was retracted. But although the diagnosis is in most cases secure I cannot ask for implicit faith in it as made in the 53 cases, to which reference is made in this paper. In all of them, however, the actual diagnosis was made and written before the investigation was thought of, and without using albuminuria as an element in it—a use which I shall, in future, feel justified in making.

In 11 of the 21 parametritic cases there was albumen in the urine. In 4 of these 11 cases there was also pus in the urine, and these 4 cases I exclude from the category available for the present discussion, the albu-

minuria being explained by the presence of pus: another case I exclude because the quantity of albumen was a trace. There are thus left 16 cases of parametritis without complication, and of these 16 cases 6 had albuminuria, or $37\frac{1}{2}$ per cent.

In all of these 6 cases the albumen was in considerable quantity, from about one-tenth to above one half; in 1 case the urine on boiling was nearly solid.

In all the cases the urine had acid reaction; and the specific gravity varied from 1015 to 1030.

In 6 of the 16 cases the parametritis ended in abscess; and of the 6 cases with albuminuria 3 ended in abscess, the termination in abscess thus seeming to involve increased liability to albuminuria.

In all of the cases the albumen gradually diminished as convalescence from the parametritis was established. In 4 it completely disappeared before the patients left the hospital. In 2 (in 1 of which the albumen had been one quarter, and in the other the urine became nearly solid on boiling) the disappearance was very nearly completed at the time of leaving the hospital.

The 21 parametritic cases were, with one exception, puerperal. There is nothing extraordinary in this preponderance of puerperal cases; and the occurrence of albumen in the single non-puerperal case is important as indicating that the renal disorder is not confined to puerperal cases.

The albuminuria in these parametritic cases was too copious to be accounted for by vesical irritation; and besides, there was no vesical irritation in any of the cases, no cystitis, no symptoms of cystitis. The cases in which pus was found in the urine are, as already said, excluded from the category under discussion.

In a footnote (p. 23) to my translation of Braun's chapter on Uræmic Convulsions, published in 1857, it is said: "I have lately been able, in several cases, to attribute the occurrence of slight and temporary attacks of nephritis, in the early weeks of suckling, to exposure

to cold. These attacks have been, in some cases, accompanied by all the symptoms of a weid, and followed by slight cedema of the ankles and legs. In all the cases the urine presented fibrin cylinders under the microscope, and was in some proved to be albuminous." This extract I make because it might be supposed that the albuminuria and the parametric inflammation were both the results of the same cause in the cases under discussion. That it was so I know of nothing in the history of the cases to lead me to believe; and there are strong arguments against the view. Thus, the albuminuria of the parametric cases was without casts except in one; the albuminuria occurred in the case that was not puerperal in its origin or history; the albuminuria was long continued, persisting during the parametritis; lastly, the albuminuria disappeared with the parametritis. It is, therefore, highly probable that the albuminuria is associated with the parametritis, as a consequence, and not caused by the cause of the parametritis.

This albuminuria cannot be confused with that resulting from prolonged suppuration; for in one half of the cases there was no suppuration, in the rest the suppuration was of short continuance, and in all the albuminuria diminished rapidly or disappeared with convalescence.

I am unable to suggest any sufficient reason for the association of copious albuminuria with this special inflammation, and, so far as I know, with no other. But the embryonic proximity of the kidneys and internal genital organs may be called to mind. It is also not rare to find the kidneys aching, and sometimes swollen and tender as well as aching, in menstruating women. Further, there is a well-known tendency of parametric inflammation to select, in spreading, the direction of the kidneys, and to produce inflammation of cellular tissue with or without abscess in the region of the psoas muscles and of the kidneys.

Whatever may be its explanation, it is important to recognise that in parametric inflammations there is a tendency to renal mischief as evidenced by albuminuria.