A Note

ON

POSTURAL ALBUMINURIA.

By SIR WILLIAM H. BROADBENT, M.D., F.R.S.,

Physician-in-Ordinary to the King and to the Prince of Wales;
Consulting Physician to St. Mary's Hospital.

FUNCTIONAL albuminuria, which was the subject of three important papers read before the Medical Society by the President, Dr. Rose Bradford, and Dr. West, and of an interesting debate, is a question which has occupied my attention for many years, and as time did not permit of my taking part in the discussion, I hope I may be allowed to make a few observations now.

The first point which comes out is the necessity for greater precision in the definition of what we mean by functional albuminuria. Albuminuria can never be physiological; the term "functional," though admissible in the sense given to it by Dr. Pavy as a contra-distinction to structural, is vague; the albuminuria of the apparently healthy, the designation accepted by Dr. Rose Bradford, is still more unsatisfactory. To begin with, many of the subjects of intermittent albuminuria are not in apparent health; they faint in church or at drill, as pointed out by Dr. Armstrong and Dr. Clement Dukes, and as a descriptive term it includes structural disease of various kinds and continuous, as well as intermittent or occasional, presence of albumen in the urine. It can only serve as a starting-point for discrimination and classification. Without entering upon this point, which occupied much of all three of the original papers, it may be said definitely that there is an affection which may be called postural albuminuria. We can eliminate early nephritis and nephritis in process of recovery, early stages of contracted granular kidney, unsuspected heart disease, albuminuria from fever, from overfeeding or indigestion, gout or oxaluria, or from adventitious discharges from different parts of the genito-urinary tract. There is left a group of cases in which the characteristic feature is albuminuria on rising from bed in the morning, usually passing off in the course of the day. These cases are exceedingly common, especially in boys and young men working up for examination, and, applied to them, the designation albuminuria of adolescence is perfectly appropriate, but the name postural albuminuria is no doubt better, as open to no uncertainty. The albumen is not due to food; it does not appear if the patient remains in bed to breakfast or after meals later in the day; it cannot, as was clearly shown by Dr. Rose Bradford, be toxæmic; it disappears quickly on lying down. It is obviously in relation with the erect posture after a night's rest in bed, and scarcely less obviously with imperfect cardio-vascular adjustment to the changed hydrostatic conditions. Albuminuria from excessive exertion is also circulatory, the cardio-vascular capacity for adjustment having been overpassed. It does not seem to me that any antecedent affection of the kidneys by febrile disease need be postulated.

The amount of albumen is usually small, but it may be very considerable. It is important that this form of albuminuria should be recognized, since the treatment required is the exact reverse of the milk diet and protection from exposure to cold and fatigue, which would be suitable in renal disease; and the debate will have been of signal service if it should lead to the adoption of the term postural.

The antecedent which in my experience has been most common is a neurotic family history, and the condition invariably existing in the patients themselves has been cardio-vascular instability. The pulse varies greatly in frequency and tension, often while under examination, certainly at different periods of the day, and is unduly influenced by changes of position, such as lying down or standing up. A distinctly high-tension pulse, not very uncommon in childhood and early youth, would take the patient out of the category of postural albuminuria, and would warrant suspicion of actual renal disease or of juvenile gout.

The action of the heart affords further evidence of the instability of the circulatory system. Both Dr. Pavy and Dr. Armstrong spoke of the violent cardiac impulse. According to my experience it is the impulse of the right ventricle which is forcible, the apex beat being weak. Contrast between a weak apex beat and left ventricle sounds and the powerful right ventricle impulse and loud sounds has seemed to me to be constant in these cases. Another observation of

like significance is that the second sound is reduplicated when the patient lies down.

The prognosis is favourable. I have never known true postural albuminuria to resist treatment or to develop into actual renal disease. Usually all the treatment required is good simple food, fresh air, and vigorous exercise. There is no need to forbid school games, except perhaps house runs and long paper-chases. Tonics such as iron, arsenic, strychnine, and quinine will be useful in many of the cases. Constipation should be corrected by aloetic or other aperient of the tonic class. On the morning after a mild pil. hydrarg., c. colocynth, et hyoscyamo the albumen may be absent even when habitually abundant. This should be borne in mind when a candidate for one of the public services has to undergo the medical examination.

If these cases are treated for renal disease, put on milk diet, protected from cold, and forbidden to take exercise, they will probably go from bad to worse, and I have met with several instances of confirmed nervous valetudinarianism apparently attributable to this error in early life.

A SUMMARY OF

Two Clinical Lectures

ON

EMPHYEMA AND BRONCHIECTASIS.

Delivered in the Edinburgh Royal Infirmary.

By ALEX. JAMES, M.D., F.R.C.P. EDIN.

Physician to the Infirmary.

WE have seen how a large bronchiectatic cavity, when incised and drained through the chest wall, tends to produce a pleural cavity. The fibrosed lung around the bronchiectatic cavity, being allowed to contract by the establishment of drainage, separates itself from the parietal pleura to which it has been previously bound by adhesions, and so tends to produce a pleural cavity which much resembles an empyema. The diagrams show how this occurs; they also show two practical points which should always be borne in mind in dealing with such cases. The first is that extensive resection of ribs is as necessary for the healing of a large bronchiectatic cavity as it is for an old-standing empyema. The second is that, if this extensive rib resection is not performed, we must, as time goes on, experience increasing difficulty in introducing the drainage tube into the lung cavity through the pleural opening.

The diagrams represent how a large bronchiectatic cavity B will tend to contract and form a pleural cavity C, as the result of the establishment of drainage through the chest wall, causing a lessening of its distending forces.

Let me here further make a slight digression to demonstrate how these same mechanical conditions account for the difficulty which we experience in the healing of phthisical empyemas. I have a skiagraph of one such case, which was lately in my ward, and in which, months after the operation, could be seen a long probe passed through the wall opening, which easily reached the apex of the lung above the clavicle. In this case the original empyema cavity had been a relatively small one—containing only about 10 oz. or 12 oz. of pus—but it had been sufficient to start progressive cicatricial contraction of the lung apex, and so to separate it from the posterior wall of the chest.