about to be carried out by more capable hands, through the kindness of Dr. Burrell at the Brompton Hospital, Dr. Goodechild at Blencathra Sanatorium, Dr. Peill at The Sanatorium, Bridge-of-Weir, Dr. Varrier Jones at Papworth, Dr. Dickinson at Newcastle, and possibly also in Lancashire.

A CASE OF AORTIC STENOSIS.

BY

W. HARVEY BENNETT, M.D.,

BOLTON.

THE patient whose case is here recorded was a married woman, aged 53; she had had one child, which died in infancy. She gave a history of being a normal child till

Pulsus alternans, August 7th, 1929.

Auricular fibrillation, August 8th, 1929.

Anachrotic and coupling of beats, August 16th, 1929.

she was 7 years of age, when she had a slow fever with extreme weakness and purpura; she was confined to bed for many weeks, and she never completely recovered her strength, though her general health was good and no medical attention was required till she was about 35 years of age, when increasing shortness of breath compelled her to seek advice. She was then told that she had a very loud murmur, was advised to rest and not in any way to exert herself or hurry—that there was no danger in her

condition provided she avoided strain. The doctor kept her under observation till he died.

She first consulted me in 1926, complaining of breathlessness, dyspepsia, and insomnia. The pulse was 100, with occasional intermission. The area of cardiac dullness extended 5 inches to the left and 2 inches to the right of the mid-sternal line; the apex beat was heaving and well outside the nipple line. A loud aortic systolic with thrill and double mitral murmurs were present.

The dyspepsia and insomnia were relieved by bismuth, magnesia, and bromides. Calcium seemed to relieve the breathlessness, and she continued to take tablets of calcium lactate, 5 grains, daily for about three years, as when she discontinued them she always felt worse.

On June 10th, 1929, the pulse was 84, and there was an increase in the frequency of intermission. She complained of breathlessness, a done feeling in the abdomen, and loss of appetite. The liver was enlarged 2 inches. Digitalis, sp. aether. sulph. co., and tr. card. co. relieved the distress and she went to the seaside for rest and change of air. At the end of a week she returned home, much worse, with pleural effusions reaching symmetrically to the angles of the scapulae, and went to bed for complete rest. She became orthopnoeic; the temperature was raised intermittently to about 100°. The pulse was anachrotic with intermissions—partial heart-block. Pulsus alternans and then auricular fibrillation developed, as shown in the tracings. There was coupling of the beats after digitalis in small doses, but after fibrillating for one week the pulse dropped from 130 to 80. The blood pressure was 140 systolic and 90 diastolic.

On August 8th there was evidently infarction of the right lung, as effusion increased on that side, and blood was found mixed with the fluid when 30 oz. were removed, giving some relief to the dyspnoea. The urine also contained blood at about that time.

Death occurred from cardiac failure on August 22nd, and, though a private patient, I was able to obtain the heart for examination.

The heart weighed 17 oz. The aortic valves were calcified and admitted a finger-tip. Ulceration and vegetations were present on the cusps. The mitral ring admitted two fingers; the valves were thickened but not deformed; there was a deposit of calcium at the base of the anterior curtain. The extent of calcification is shown in the radiogram.

In this case evidently a rheumatic infection in childhood had caused changes in the valves—especially the aortic—which steadily progressed during forty-six years to calcification, and ended in ulcerative endocarditis with infarction of lung and kidneys.

One is in doubt as to the advisability of administering calcium in such cases. The association of auricular fibrillation with infective endocarditis is said to be rare, and is worthy of note.

VALUE OF THE BROMINE TEST FOR DIAGNOSIS OF PREGNANCY.

BY

GLADYS H. DODDS, M.D., D.P.H.,

ASSISTANT IN THE OBSTETRIC UNIT, UNIVERSITY COLLEGE HOSPITAL.

In the *British Medical Journal* of November 2nd, 1929 (p. 829), C. I. B. Voge described a new test for pregnancy. The test, which is simple and inexpensive, can be carried out by any practitioner and an immediate result obtained. Voge correlated his findings with those of the Zondek-Aschheim test and found a very close relation between the two. The drawback to the general use of the Zondek-Aschheim test is that it is expensive and requires a laboratory with a supply of immature female mice.

The reaction consists in the detection of the presence in the urine of compounds of the β -iminazolyl type by means of bromine water. Bromine water of ordinary laboratory strength (2 per cent.) is used and diluted with twice its volume of tap water; 1 c.cm. of this solution is added to 2.5 c.cm. of urine in a test tube and the mixture is brought to boiling point. A positive reaction is indicated by the presence of a pink or pinkish-brown coloration, which rapidly fades. In a negative reaction the original yellow colour remains. The reaction of the urine requires to be observed because in acid urine the coloration of the positive test is pinkish-brown, while in alkaline urine it is pink.