dietetic treatment, though of course there are exceptions. It is interesting to note that the intestinal symptoms seem to be much more beneficially influenced than the mouth symptoms.

As regards the mode of action of the intensive bicarbonate treatment, I have very few remarks to offer. At one time I believed that large doses of bicarbonate by decreasing the acidity of the intestinal contents might check the growth of monilia fungi, considered by some authors to be the true cause of the malady, and by Low and myself to be merely the cause of certain symptoms, as, for instance, the frothiness of the stools. If recent hypotheses concerning the etiology of the malady be proved correct, then a different explanation will have to be found. At any rate, there appears to be little doubt that in sprue a certain degree of acidosis is often present, and that an intensive alkaline treatment is indicated.

Conclusion.

The administration in sprue of massive doses of sodium bicarbonate by the mouth and intravenously, in conjunction with the usual dietetic measures, gives satisfactory results in a large number of cases, especially as regards the intestinal symptoms of the malady.

ANGINA PECTORIS WITH AURICULAR FIBRILLATION.

BY

HAMILTON M. SANDISON, M.B., CH.B. EDIN.

With a Note by FREDERICK W. PRICE, M.D., F.R.S. EDIN.

THAT auricular fibrillation may coexist with angina pectoris is demonstrated in the case of M., a woman aged 72. The value of digitalis when its administration is controlled, not by its empirical dose but by its therapeutic effect, was evident in the treatment of the case.

M. has suffered more or less all her life from cardiac affection, but, notwithstanding the advice of her physician, has for the past ten years led a strenuous life. On several occasions in recent years, she has been compelled by a feeling of general and cardiac weakness to rest for two or three weeks in bed, and to take 7 or 10 minims of tincture of digitalis thrice daily. She regained strength during these rests in bed, but the action of the heart remained rapid and irregular.

In July, 1920, she had a more serious breakdown, associated with breathlessness on exertion, palpitation, frontal and occipital headaches, and several paroxysmal attacks of pain of varying severity. This pain, undoubtedly that of true angina, was situated in the region of the heart; it was sudden in onset, and associated with a feeling of tightness in the front chest, mental perturbation, intense anxiety, and a sense of numbness in the left arm.

The pulse was completely irregular, with a ventricular rate of 124, many of the ventricular contractions not being registered at the wrist. The systolic blood pressure was undoubtedly raised, most of the beats registering 210 mm.; the wall of the brachial artery was thickened. The left border of the heart was one fingerbreadth outside the nipple line, the right border two fingerbreadths to the right of the sternum, and the note in the neighbourhood of the junction of the manubrium sterni and right intercostal cartilages and spaces was impaired. There was an apical systolic murmur, propagated to the axilla, and the second sound in the aortic area was rather accentuated. There was an absence of albumin in the urine.

Dr. Frederick W. Price, who was called to see the case, confirmed the diagnosis of auricular fibrillation and true angina pectoris. It is accordingly of special interest to find that in the chapter on auricular fibrillation in his valuable work *Diseases of the Heart*, he states: "It would appear, however, that patients suffering from auricular fibrillation are exempt from definite attacks of angina pectoris." Dealing with the etiology of auricular fibrillation, in the chapter referred to, two main groups of cases are described: "(1) Those with a history of rheumatism, and (2) patients suffering from myocardial degeneration. In the case of the former the condition occurs more commonly in early adult life, and the patients frequently have valvular disease—more often mitral than aortic disease, and more especially mitral stenosis. In the second group of cases the condition is more common after middle age." M.'s case probably belongs to the first group,

since there is a definite rheumatic history, and in view of the long duration of the illness and the presence of mitral regurgitation.

The etiology of the angina pectoris is, perhaps, not so certain; but the supernormal blood pressure, the evidence of thickening of the wall of the brachial artery, and the accentuation of the aortic second sound point to arterial degenerative changes, while the impairment of percussion note in the aortic area suggests the possibility of fusiform dilatation of the ascending aorta.

M. was confined to bed for four weeks, and then very gradually allowed to resume a more normal life. Only a very small quantity of fluid was allowed with each meal, and the total intake of fluid did not exceed 1½ pints a day. Tincture of digitalis was administered during the first week in 15-minim doses thrice daily. At the end of the week, as there was no appreciable improvement, the dose was increased to 18 and ultimately 20 minims. During the second week there was obvious improvement; the ventricular rate gradually falling to 84. As there was now some complaint of general depression, headache, and giddiness, the digitalis was stopped for forty-eight hours, and then recommenced in 15 minim doses. It was found possible to continue with this dose, and the ventricular rate ultimately diminished to 74, and the pulse became much less irregular. The systolic blood pressure came down to 180 mm., a drop of some 30 mm. Coincident with the remarkable slowing and steadying of the heart's action there was a most gratifying improvement in M.'s general condition.

Note by Dr. Price.—I desire to express my thanks to Dr. Hamilton Sandison for allowing me the opportunity of reading his notes of this case, which he kindly called me to see in consultation. The case was undoubtedly one of auricular fibrillation and angina pectoris. The first statement quoted by Dr. Sandison from my book was written towards the end of 1917, and represented my experience up to that time. Since then, however, I had observed two cases of auricular fibrillation (proved by electro-cardiographic examination) who also suffered from typical attacks of angina pectoris, before seeing the case of M., which made the third.

ANEURYSM OF EXTERNAL CAROTID ARTERY TREATED BY LIGATURE OF COMMON CAROTID ARTERY AND INTERNAL JUGULAR VEIN.

BY

W. A. PEVERLEY, AND J. K. HAWORTH,
M.B., B.S. DURH., MALVERN, NATAL. M.S., M.D. DURH.,

THE following case we think may be of interest and importance.

A Zulu woman, aged about 30 years, came with a tumour of the neck which she said came on after having had a tooth out. There were no signs of injury to her jaw, but she had a swelling the size of a Tangerine orange just below the angle of the lower jaw on the left side. The swelling was expansile in every direction and pulsated visibly. There was a loud systolic bruit over it. The impulse and the bruit disappeared on compressing the artery against Chassaignac's tubercle, and the swelling could be emptied on gentle pressure. It filled up from below on releasing the pressure. The pulsation in the left superficial temporal artery was delayed. The case seemed definitely to be one of aneurysm of the external carotid artery, the only other possibility being a pulsating tumour of the carotid body, and the subsequent history disposed of that possibility.

Following the principle of simultaneous ligature of artery and vein, one of us (Peverley) tied the common carotid artery and internal jugular vein at the seat of election. The after-course was uneventful; the pulsation at once disappeared, and now, six weeks after operation, the tumour is only the size of a small nut, and is hard and fibrous. She had no signs of any cerebral disturbance.

The artery seemed healthy, and she had no syphilitic history, though she had had two stillborn children. A Wassermann test was not done.

It does not appear to be the usual practice to tie the vein as well, though Ceci (Paris Surgical Congress, 1904) proposed the theory and Boari (*Policlinico*, 1905) has found it most successful. It is interesting to note in this regard that Lynn and Shipley (Ochsner, *General Surgery*, 1917) carefully avoided tying the internal jugular vein, thinking, presumably, it added to the risk of the operation. The idea of ligaturing the vein as well as the artery in this case was merely an enlargement of Sir George Makins's principle of simultaneous ligature of vein and artery in

war injuries to blood vessels. It is well to remember that the internal jugular vein cannot safely be tied on both sides.

In the cases recorded up to the present there seems to have been marked success and few or no after-effects when the common carotid artery and internal jugular vein have been ligatured simultaneously.

Memoranda:

MEDICAL, SURGICAL, OBSTETRICAL.

HERPES AND VARICELLA.

THE interesting paper by Dr. Carver in the JOURNAL of February 12th induces me to send notes of a case which has come under my notice.

A child aged 7 years was brought to me with severe herpes of the great and small sciatic nerves. There were large confluent masses of vesicles on the right buttock and sacrum to the middle line, down the back of the thigh to the ham, and a few vesicles on the foot and between the toes; the leg below the knee was livid and oedematous. On about the third or fourth day isolated vesicles appeared on the face and forehead, one on the mucosa at vestibule of nose, a few on the trunk and arm, and one on the left leg. These vesicles appeared first as inflamed pimples, then became distinct vesicles which dried up, leaving a small scab. In appearance they were exactly like the pocks of chicken-pox, and if taken by themselves would have been enough to diagnose a mild attack of this disease. The pain in the leg affected was very intense.

Enfield.

FRED. TRESILIAN, M.D., F.R.C.P.

THE following note may be of interest in view of Dr. Carver's letter in the JOURNAL of February 12th:

An only child had well marked chicken-pox, the rash appearing on January 16th last. On February 7th the grandfather, who lives in the house, developed a small "herpetic" eruption over the second costal cartilage on the left side and an isolated spot above the left sternoclavicular joint. None of the spots became very vesicular. This would be a converse instance to that mentioned by Dr. Carver. The interval was twenty-two days from the appearance of the chicken-pox, but being an only child there was no real isolation.

Monkstown, co. Dublin.

R. L. HEARD, M.B.

THE following cases have some bearing on the alleged association of herpes and varicella:

1. An elderly lady had shingles in 1903. Six weeks after her attack commenced her daughter and son-in-law, who lived with her, were taken ill on the same day with an eruption which their doctor diagnosed as small-pox. The diagnosis appears to have been made because there was an epidemic, supposed to be small-pox, at Cambridge, and the man occasionally travelled in a train which came from Cambridge. As the wife was not exposed in the train, and she and her husband developed the rash on the same day, it seems reasonable to suppose they were infected from the same source—that is, by the patient with shingles.

2. A child, aged 6, living in an isolated country house in a park, developed varicella in April, 1919. The only possible source of infection was that he had, two weeks before, visited a house where the farmer's wife was suffering from shingles.

3. A lady developed shingles on December 29th, 1919. On February 8th, 1920, one of her children, aged 5, developed varicella, and a fortnight later her other two children followed suit. There was no other possible source of infection to be discovered. The interval between the incidence of shingles in the mother and chicken-pox in the child was forty-one days, but the child was not necessarily infected at the commencement of the mother's illness.

4. A boy, aged 14, in March, 1920, caught varicella from his brother, and infected his sister. He had a few vesicles scattered over his body, but between the fourth and tenth left ribs posteriorly was a very copious eruption resembling an extensive eruption of herpes. This looks like a connecting link, as there was nothing to explain the localization of the rash in this neighbourhood.

Bedford.

W. GIFFORD NASH, F.R.C.S.

In view of the interest excited by the paper of my friend Dr. Carver in your issue of February 12th may I record the following facts?

On January 29th I was attacked with herpes of the left musculo-spiral nerve. For two days previous to the onset of the rash I had some considerable smarting and constant pain all along the course of the subsequent site of the rash, especially at night, and during that period I was convalescing from a rather heavy nasal catarrh.

On February 14th my wife developed varicella, at which time she was convalescing from a severe nasal catarrh. The symptoms and course of this ailment were typical, and I think that it is almost the severest attack of varicella I have seen in my thirty-eight years of medical practice. The rash was profuse and covered practically every part of the body, including the soft palate and pharynx. Thus my wife contracted the varicella sixteen days after I developed herpes, which agrees with Dr. Carver's statement.

Years ago Hilton Fagge stated that varicella rarely occurred in children over the age of 10, and that most writers stated that they had never seen it in adults. It seems to me that the chief point of interest in these cases hovers round the question as to whether this disorder really is varicella, or whether it is not some modified form of herpes zoster. Can anyone tell me if any such cases of herpes-varicella infections have been recorded as occurring in children? We know that herpes zoster is not uncommon in children, and although I have seen a good many cases of varicella in my time, I do not recollect having ever seen a herpes-varicella infection in childhood, and but one other case in adults.

It is, I think, agreed that whereas the fluid from even the mildest eruption of variola is capable of conveying the disorder by inoculation, all, or almost all, attempts to inoculate varicella in the same way have failed. Has any attempt in this direction been made with the fluid of herpetic eruption, and if so, what has been the result? Has it produced herpes or varicella, or has the result been nil?

I may say, in conclusion, that I had not attended or been in contact with a case of herpes or varicella for a considerable time, and my wife, so far as she is aware, had not been in contact with any case of varicella, nor had she varicella during childhood.

Torquay.

G. YOUNG EALES, L.R.C.P., M.R.C.S.

THE following cases have just come under my care, and in view of recent memoranda on the subject in the JOURNAL, I send particulars:

On January 8th last Mrs. B., aged 44, consulted me. She complained of pain in the right arm of a sharp, shooting character, which commenced about the middle of the upper arm, and radiated into the axilla and back of the shoulder. On examination I found a widely distributed and well-marked rash of herpes zoster with clusters of vesicles on the back of the shoulder, inner aspect of upper arm, into the axilla, and on to the chest. On January 22nd her son, aged 13 years, developed typical chicken-pox of a somewhat severe character. The following day the other boy, aged 14½ years, also showed marked chicken-pox.

There was no chicken-pox in the district, none reported from the school attended for two years past, and no trace of contact whatever.

This occurrence would appear to strengthen the contention that there is a common infective agency in herpes and varicella. Another observation common to both is that seldom or never is there intercurrent affection or complications in either disease, and any fatality *per se* I should think does not exist. In passing, it is of a little interest to note that both the boys above referred to, now strong sturdy youths, were born in Guy's Hospital by Caesarean section.

J. GORDON McDOUGALL, M.B., Ch.B. Edin.

Chadwell Heath.

From time to time cases have been reported in which an eruption of herpes was followed within a few days by varicella. Such a case occurred here some weeks ago, and in view of the discussion at present proceeding as to whether there is an etiological connexion between these conditions, it may be pertinent to publish it:

On January 24th a little boy, W. J., was brought to the out-patient department of this hospital for circumcision; when his clothes were removed a typical group of herpes zoster vesicles was found on the left side of the thorax about the sixth intercostal space; the rest of his body was carefully examined for spots, but none were found. His temperature was taken and found to be 98.4° F. Two days later a varicella rash appeared on his chest and back, and his temperature was then 100° F. The eruption was moderately abundant, and the case subsequently ran the ordinary course of varicella.

Inquiry from the mother revealed the fact that a younger brother had had chicken-pox three weeks before; no person in the household was known to have had herpes.

J. P. MARTIN, M.A., M.B., B.Ch.

Royal Southern Hospital, Liverpool.