ptoms were only developed contemporaneously with the cerebral disturbances, and I believe they are but the mechanical expression of increased intracranial pressure. I have, on more than one occasion, seen patients who were suffering from acute symptoms of lead-poisoning, whose discs I had examined in the morning and found normal, the same evening became the victims of the most acute cerebral symptoms. Violent epileptiform convulsions, dilated pupils, blindness, exhibit a well marked "Stauungs-papilla," or choked disc. I have known these patients pass into a semi-comatose condition, and remain so for several days, and then gradually recover, with impaired mental faculties and different degrees of blindness.

The pathology of these cases, as far as vision is concerned, I believe to be entirely due to mechanical causes; and the amount of impairment of sight is exactly in proportion to the duration of the intra-ocular pressure, and the amount of secondary neuritis which the strangulation of the disc may bring about. The extremely short time in which, in these cases, a normal disc may be observed to pass into a condition of the most intense congestive oedema, to my mind, excludes the idea of a specific neuritis, and is a convincing argument in favour of Mang's theory of the production of optic neuritis by distension of the intravaginal sheath space.

I think, then, that most of the so-called cases of lead-neuritis may be accounted for upon other grounds than the specific action of lead; and that, at all events before this cause is admitted, other more common causes must be excluded. In the notes of the cases detailed by Mr. Hutchinson, the question of renal disease and menstrual suppression is not touched upon. One, the case of Kate M., was known and seen by me in its earliest stage, and it was undoubtedly one in which the eye-symptoms were due to rapid intracranial effusion.

I regret that I have no time to enter more fully into this question; but I hope this note may lead to an expression of opinion from others who have had special opportunities of seeing large numbers of cases.

EMBOLUS OF THE BASILAR ARTERY.

By CHARLES M. CHADWICK, M.B., M.R.C.P.,
Physician to the Leeds Public Dispensary.

THE following case appears to be worthy of record, as one which is rarely seen in practice, and perhaps of still further interest from the fact that the *post mortem* examination revealed no signs which would lead to any definite conclusion as to the origin of the lesion.

W. E., aged 21, a collier, was first seen by Mr. Stericker, Senior Resident Medical Officer at the Leeds Public Dispensary, on the morning of December 8th. He was a pale, fairly nourished young man. At one time, he was somewhat intemperate; since marriage, nine months ago, he was said to have been quite steady. There was a history of marked loss of hair about two years ago; otherwise, no history pointing to specific disease. There had been no miscarriage, and no child. Two brothers and two sisters were alive and well. He had always had good health.

The patient was quite well, and at work, till two days before the attack, when he was said to have complained of pain at the back of the head. It being Saturday night, the patient took a strong purge of senna, salts, and liquorice. On the following day, he got up; he appeared much better, and his appetite was good. Towards evening, his wife went out for a few minutes, and, when she came back, he was "all of a heap" in the arm-chair, and could neither speak nor walk. He signed to her that he wanted to go to bed. He was carried upstairs, and never moved his position, spoke, or showed any further signs of consciousness, till his death, which occurred fifty-six hours later. It was said that he once drew up his legs and slightly moved his right arm.

When seen, the patient was lying on his back in bed. The skin was covered with a copious sour-smelling perspiration; the eyes were semi-closed, and the pupils (partially dilated) reacted well to light. The deep reflexes were increased, the superficial well marked. There was well-marked ankle-clonus. The right arm was semi-flexed over the chest; the legs and left arm were extended. The temperature was 100.2; pulse, 98; respiration, 20. The patient was continually uttering a wailing sound, tears running down his cheeks; and the facial muscles were contorted as in ordinary crying. Any irritation, such as pricking, or twisting the hair about the temple, would produce this at once; and, in the latter case, the head was turned towards the side where this was done; the facial muscles of the same side were contorted. The mouth could not be opened; the tongue was motionless; the lips and mouth were covered with sordes. Any attempt to allow fluids to run down was followed by coughing and choking.

The patient remained in the same state; the breathing became more laboured, the pulse more rapid and feeble, and he died "quite quietly" fifty-six hours after the attack.

Post Mortem Examination, conducted eight hours after death.—All the organs were found to be healthy. The heart was not enlarged; the valves were entirely free from vegetations; the left ventricle was contracted. The veins in the meninges were congested, and at the anterior extremity of the basilar artery was a small rounded clot, increasing its calibre at this point to the size of a small pea, and plainly visible before opening the vessel. On opening the vessel a round clot, black internally and colourless externally, was seen.

REMARKS.—The *post mortem* appearance, the age of the patient, and the sudden onset, would lead to the determination that this was a case of embolism; while the reported pain in the back of the head, and the absence of signs in the heart indicating embolus, would lead to the supposition that thrombus was the cause of the occlusion. Had the occlusion occurred at the proximal instead of the distal extremity of the vessel, death would have been either immediate, or much more rapid, from asphyxia.

NOTE ON VIBURNUM PRUNIFOLIUM IN ABORTION.

By W. MACFIE CAMPBELL, M.D., Liverpool.

SINCE the publication of Dr. Wilson's paper in the *Liverpool Medico-Chirurgical Journal* of January, 1885, I have had the opportunity of testing the use of viburnum prunifolium, so much vaunted in America, in several cases of threatened miscarriage, and I can entirely endorse the good opinion he has formed of it. Nothing, probably, in midwifery is more disappointing than the ordinary routine-treatment of miscarriage by opium or Indian hemp on the one hand, or ergot on the other. For these drugs as often act in the way contrary to the prescriber's intention as in accordance with it. How often has a dose of Battley's solution, administered to arrest uterine action, and give rest and ease from pain, been followed by immediate and severe expulsive pains, while the attempt to empty the uterus by a dose of ergot has resulted in a perfect calm, and a disappearance of symptoms.

It is a comfort thus to have some hope of success in dealing with such a condition as miscarriage; and although I have so far only the notes of six cases, of which five were successful, yet, these five being consecutive, and the effect exactly following the administration of the remedy, I have no hesitation in my own mind in giving the credit to the viburnum. The case of failure was my first.

CASE I.—Mrs. B., two months pregnant, had discharge of blood, with uterine action. She was treated in the usual manner, with opium and rest for two days, when extract of viburnum, in two-grain doses, three times a day, was ordered. There seemed no effect upon the pains, the os continued to dilate, and the uterus was soon empty. Perhaps the dose was too small; at any rate, I had lost two days, which I take to be the reason of the failure.

CASE II.—Mrs. H., pregnant for the seventh time, two months and a half, was awakened by a gush of water early one morning, followed by a bloody discharge. On examination, the os was soft and dilatable. She was kept in bed, and given at once three grains of extract of viburnum every four hours. There was no return of bright blood, and the discharge gradually ceased. The relief to the pain after the first dose was in this case very marked.

CASE III.—Mrs. B., in her sixth pregnancy, one night during the fifth month was awakened by the "breaking of the waters," the escape being sufficient to saturate her night-dress and bedclothes. This was followed by pains. I saw her in the early forenoon, and gave three grains of the extract three times a day, and there were no further symptoms.

CASE IV.—Mrs. G., in the fifth month of her second pregnancy, had a bloody discharge, with uterine pains. The same dose was used, and with the same good result.

CASE V.—Mrs. W., in the second month of her sixth pregnancy, had already had two miscarriages. Two grains of extract of viburnum, three times a day, gave relief, as also a month afterwards, when the same threatening symptoms appeared.

CASE VI.—Mrs. S., first pregnancy, fourth month. This case was particularly interesting from the fact that miscarriage had been imminent in her case at each monthly period. The first and second attacks occurred in America, when she was given viburnum, and her medical man provided her with a large store of the liquid extract, which he told her was unknown in England. She had an attack at sea, and in due time in Liverpool, and was pleased to discover that

¹ In repeated large doses it is apt to give rise to headache.