

suffer from pavor nocturnus. If the night terrors are associated with some other nervous affection, such as epilepsy, the prognosis will, of course, depend on that. Pavor nocturnus probably does not occur in the healthy child, and, in conclusion, it should be borne in mind that the condition is not one that should be neglected. As Dr. Still very aptly

points out, the affection is the "slacken speed" to the engine-driver, which must never pass unheeded. Therefore thoroughly investigate every case and promptly treat the condition. Recollect also that prevention is better than cure, and in the case of neurotic children much can be done by proper care and training.

GYNÆCOLOGY.

THE BLOOD-PRESSURE DURING PREGNANCY AND THE PUERPERIUM.

FROM the point of view of a case suffering from cardiac affection whether of valvular or of myocardial origin, it is of interest to know what additional work is thrown upon the heart by alterations in the blood-pressure during pregnancy and puerperium.

When the Riva-Rocci method of determining the blood-pressure is employed it has been found that under normal conditions the blood-pressure during pregnancy may vary within comparatively wide limits, though it should never be higher than 150 millimetres of mercury, or lower than 100. Upon the whole there is no difference between primiparæ and multiparæ in this respect, nor does age make any material difference; generally speaking it may be said that during the earliest months of pregnancy the pressure is about normal, gradually rising during the last eight weeks, and reaching the maximum at the beginning of the week before delivery, after which there is a slight gradual decline.

Soon after labour sets in there is a rise, increasing with each labour pain, but falling slightly in the intervals between the pains. The increase reaches its highest point just before the birth of the child, and soon after delivery there is a rapid drop, unless there has to be any intrauterine manipulation, in which case there will probably be a return to a higher level of blood-pressure. There is no doubt that the more severe the pain, and the greater the struggling and the arm movements, the greater is the blood-pressure likely to be; but even

under an anæsthetic the curve of blood-pressure is very similar to that which follows when no anæsthetic is given, so that the rise is an essential part of labour. After delivery the falling pressure continues for some hours, reaching its lowest point about the eighth hour, and thereafter remaining low, with a tendency to rise gradually again, until it returns to normal in from ten to fifteen days.

The only cases of extreme hypertension are those of eclampsia, the high blood-pressure sometimes anteceding the convulsions and thus affording an early indication of the danger of the case. It is noteworthy that the blood-pressure is by no means necessarily abnormal whenever albumin is present in the urine, and as far as can be judged from most of the cases hitherto recorded determinations of the blood-pressure in cases of pregnancy with albuminuria, especially in those that are near full term, enable one to distinguish those which are not in danger from those which are, according as the blood-pressure is below 150 millimetres of mercury upon the one hand, and above 150 millimetres of mercury on the other. The occurrence of pyrexia during the puerperium does not materially affect the pressure, though one might have expected perhaps that the readings would have fallen as the result of the toxæmia. As a matter of fact marked hypotension, that is to say a falling of the blood-pressure below 100 millimetres of mercury, is to be noticed chiefly as the result of hæmorrhage.

PREGNANCY AND DIABETES.

THE occurrence of reducing substances in the urine of pregnant women is not uncommon, but very often the reducing substance is lactose and not glucose. Occasionally, however, actual glycosuria does occur in association with pregnancy, and the question arises as to what the prognosis is and how the patient should be dealt with. The cases may be grouped into two main classes—namely, first, pregnant women who pass sugar in their urine when their diet contains a full amount of sugar or starch, but not when these articles are even slightly limited, and, secondly, those suffering from true and persistent diabetic glycosuria. It is very probable that these two groups of cases merely merge into one another without any actual distinction in kind; the difference in degree, however, is so marked that they need to

be put into separate categories for clinical purposes. The discovery of the sugar in the urine in the first class is generally accidental, but in the second there are usually symptoms affecting either the nervous system or the body generally. As a matter of fact, the occurrence of any important amount of fermentable sugar in the urine of pregnant women is remarkably rare, and it is still rarer for the combined conditions to prove fatal. The age period at which diabetes is most fatal is between twenty and forty, and this is just the age when pregnancy is apt to occur, so that most of the cases of fatal diabetes in pregnant women might readily have proved fatal had the diabetes occurred without pregnancy coinciding with it. Nevertheless, there are a certain number of cases of pregnancy in which acidosis and the symptoms associated with the latter occur, and lead to

symptoms of poisoning of which one of the best examples perhaps is the intractable vomiting of pregnancy; the serious symptoms of diabetes are also due to acidosis, that is to say, to the effects of an abnormal kind of metabolism which leads to the production of acid substances, especially oxybutyric acid, diacetic acid, and acetone. If both pregnancy by itself and also diabetes tend to cause acidosis there must be cases when these tendencies coincide and lead to graver results than either would separately. Hence it is clear that if one were confronted with the question as to whether an unmarried girl suffering from diabetes should get married, the advice should most emphatically be no. If a woman is already married when diabetes sets in, conception should certainly be avoided if possible. Should a diabetic woman become pregnant, there is no immediate necessity for terminating the pregnancy if no symptoms or signs of serious acidosis exist; but the treatment should be such as to limit the tendency to acidosis to the very greatest extent possible, and to

this end it is most important that the best dietary for the case should be ascertained as soon as possible, the maximum amount of carbo-hydrate being allowed, the patient being permitted plenty of exercise short of fatigue, and she should in all respects live as healthy an open-air life as may be. It is a great mistake in these cases to rely upon the total amount of sugar in the urine as a guide as to whether the patient is better or worse. A strict reduction in the amount of carbo-hydrate in the dietary may serve to reduce the sugar in the urine very considerably, but it may at the very same time greatly increase the amount of acetone and diacetic acid. The patient is often in less danger of coma from acidosis with a larger amount of sugar being passed than with a smaller, and far more important than the sugar is the amount of acetone present, the best measure of the degree of acidosis being the estimation of the amount of ammonia in the urine. The less the ammonia the less the acidosis, and the less the danger to the patient.

ORTHOPÆDICS.

SOME COMMON CAUSES OF PAIN IN THE FOOT.—I.

THE deformities which the orthopædist is called upon to treat are not usually looked upon as being painful lesions. In fact, most text-books and the majority of teachers entirely ignore the fact that it is sometimes as important to treat the pain of a simple deformity as it is to correct the deformity itself. The reason for this general silence upon the subject of pain is probably that the majority of cases which come into hospital or reach the specialist are advanced cases. In such the pain, whatever there is of it, is entirely overshadowed by the deformity. Objective symptoms are treated and the subjective ones disregarded, except when the patient insists upon being relieved of what may be a constant inconvenience to him. In early cases, however, subjective sensations are by no means uncommon, and pain, in some instances sharp, worrying, and excruciating may make the patient's life a misery. As the deformity advances the ligaments and tissues get stretched, relax, and accustomed to the change of relations with nerves or vessels, and in consequence the pain becomes less and less aggravating. But it is highly desirable to control the lesions before that stage is reached. The practitioner who attempts to treat orthopædic cases must ever bear in mind that the best results are obtained by early interference and early attention. Such interference need not necessarily be operative, but it should be thorough and systematic.

With this preliminary introduction we may proceed directly to deal with the more common types of pain that the practitioner has to deal with in cases of tarsal and metatarsal lesions. By far the most common variety is the pain resulting from flat-foot.

PAIN IN FLAT-FOOT.

This is especially well marked in the early stages, and, indeed, it may be the only sign to lead the ex-

aminating practitioner to suspect a flattening of the tarsal arch. The pain is of varying intensity and character. Probably the most common form is a dull ache which is felt chiefly in the calf muscles when the patient is standing, but which may be complained of even when the limb is in a resting condition. Equally common is radiating pain in the foot itself, more commonly felt on the dorsal aspect. Both types may be very severe, and, in young subjects, are apt to be classed as rheumatic or "growing pains." In all cases where pains in the foot or leg are complained of a careful examination of the arches should be made, and a ferric chloride print of the soles of the feet should be obtained at the first examination and compared with one taken later on. By that means very slight flattening is easily to be detected, and can be summarily treated. In rare cases the pain of flat-foot is felt in the ankle joint, and may be so severe as to cause a suspicion of tubercular disease. The diagnosis, however, is readily made with care, since the pain in such instances is only complained of when the patient has been standing or walking about, is never experienced when the patient is resting, and is easily subdued by appropriate treatment.

Still a further variety is knee pain, which usually, rightly enough, attracts attention to the hip-joint, but rarely leads to a close examination of the foot. Pain above the knee is very rarely experienced as a result in uncomplicated flat-foot cases, and, when present, is usually due to scoliosis or sacroiliac changes, with which we will deal later. The pain in a typical flat-foot case is more or less constant, and diffused over a wide area. It is only rarely that one comes across a case in which it is strictly localised to the medio-tarsal joints or to the dorsum. In a few cases there is associated tenderness to pressure over the painful areas, especially along the course of the internal plantar nerve.