were invited to attend a series of three or four lectures and demonstrations of their own volition. These were made as informal as possible and amply illustrated with diagrams in coloured chalk on a blackboard.

Simple explanations were given of the fertilisation of the ovum and its development, with reference in passing to the part played by the chromosomes and genes in the determination of sex. The anatomy in brief of the nonpregnant and pregnant uterus was followed by an explanation of the physiology of pregnancy and childbirth. A more detailed description of the first stage of childbirth was given, with particular emphasis on the fact that the cervix must relax and be dilated before the child can be born, and that any factors producing contraction of the cervix will automatically produce pain, and that, conversely, elimination of such factors and the cultivation of a generally relaxed attitude will diminish or abolish pain. The second and third stages were briefly defined and the cooperation required of the mother here explained, with the aid of a phantom. The usual routine on admission was also explained, and this was followed by careful instruction in the proper use of the Minnett gas-air machine, with demonstration and practice.

It has been (and always will be, for a long time to come) particularly difficult to assess the results of an experiment such as this in such a manner as to be able to present conclusive evidence of its success.

"One receives ample testimony from the mothers themselves whom one has followed up, almost all of them being positive that they have benefited from the instruction and that relaxation during uterine contractions in the first stage relieved the pain considerably. But one found that few were actually able to relax adequately and required constant coaching during the first stage itself, evidence that the course was too short. . . . The reactions of the trained nursing staff were interesting, and perhaps are of some significance. Sceptical at first, they soon became enthusiastic, as they say they found these mothers much easier to handle during and after delivery. . . . I have analysed the duration of childbirth from the first onset of discomfort with contractions to the birth of the child, firstly of 65 cases who attended the clinic and have been delivered and then of all primiparae who were delivered during the same period. Of the 65 mothers only 48 (73 per cent) were able to attend a full course. The figures for the 65 have been corrected to exclude all those in whom interference of any sort, such as medical or surgical induction, forceps delivery for delayed second stage, either from disproportion or malrotation, and Caesarean section for gross disproportion, was necessary. With regard to this latter correction, one was perhaps unfortunate in those cases who chose to attend the clinic, since 12.3 per cent of these required interference as against only 9.6 per cent for the 272 primiparae delivered during the same period. One cannot unfortunately prove or disprove the contention that education produced abnormality. The average weight of the child in the observed group was 7 lbs. 4½ ozs." 4 references.

J. C. M. C.


"Our use of intravenous sodium pentothal anesthesia for vaginal delivery was instituted during World War II because of the shortage of anesthetists available for routine ward deliveries. . . . Between July 24, 1945,
and October 1, 1946, 350 patients from both ward and private services of the Hermann Hospital [Houston, Texas] were delivered of viable pregnancies under intravenous sodium pentothal anesthesia. Ward patients selected for this type of anesthesia were those in whom there was every reason to believe that delivery of the child could be completed promptly after induction of anesthesia, i.e., before the usual time required for an appreciable amount of the barbiturate to reach the fetal circulation. . . . The great majority of these anesthetics were given by members of the department of obstetrics.

"A 2 per cent solution of pentothal was administered intravenously. . . . Fourteen patients (4.0 per cent) received supplementary anesthesia. . . . Actually, the supplementary anesthesia given was rarely the result of failure of pentothal anesthesia. . . . In the final analysis, intravenous sodium pentothal was seriously or majorly complicated in only 3 instances, an incidence of 0.86 per cent. In the first of these, the drug itself cannot be blamed, for it was administered into the tissues outside the venous system. Moreover, in the other 2, there is reason to suspect that better control of the sodium pentothal anesthetic or of vaginal manipulation might have avoided complications, for in one the patient is said to have been 'hard to manage under pentothal,' in other words, delivery was effected or at least attempted without obstetrical anesthesia, while the other vomited after delivery of the child, a time when the original dose frequently wears off. . . . Two hundred and seventy or 77 per cent of these newborns required no resuscitation whatsoever, i.e., cried or at least breathed regularly and promptly after delivery. Forty-four or 12.5 per cent required little or only slight resuscitation. . . . In no case did sodium pentothal per se appear to play any serious role in resuscitation or in survival of the newborn.

"We are not claiming any outstanding advantages for intravenous sodium pentothal anesthesia even in selected vaginal deliveries and are neither using nor recommending it as a routine obstetrical anesthetic. However, in our hands it admirably solved an embarrassing anesthetic situation." 14 references.

J. C. M. C.


"It shall be my purpose in this paper to present in summary the data from 105 cases of true causalgia seen in the military service and treated by sympathectomy. . . . In the 105 cases upon which this paper is based, a penetrating wound of large peripheral nerves was the causative agent in each case. . . . The outstanding complaint in each case was burning pain. . . . Block of the appropriate sympathetic chain with procaine would produce dramatic relief. As a rule the relief following procaine injection would persist for one to two hours, or approximately the period that a local infiltration is effective. In a few cases the pain remained greatly reduced for prolonged periods after the injection. In none did it remain completely well, though many patients were given six to eight injections. This is in contrast to the experience of certain writers, and indeed the author has observed lasting relief by this procedure in an occasional case of minor causalgia. . . . While periarterial neurectomy unquestionably will provide relief in certain cases of minor causalgia or painful osteoporosis, this operation appears to hold no advantage over removal of the appropriate portion of the sympathetic chain, and it is more likely to fail. The risks and morbidity of the two operations are comparable." 16 references.

J. C. M. C.