CHILDBIRTH AFTER PRESACRAL NEURECTOMY

BY

T. VIBERT PEARCE, M.D., F.R.C.S.

Surgeon, Harrogate and District General Hospital

It is not easy to ascertain the effect on labour of Leriche's operation of resection of the presacral plexus, as the few recorded observations on the subject often contain only bald statements given by the way and without details.

At a discussion at the Royal Society of Medicine Donaldson (1936) reported that three patients out of a series of forty-seven had a child after the operation, but that labour was not altered. Learmonth (1937) in reviewing the surgery of the sympathetic system does not mention labour after presacral neurectomy. Davis (1934) alluded to one case of a primipara of 42 years with precipitate labour after the operation, and in another place (Davis, 1933) mentions a patient in whom labour was both precipitate and painless.

Cotte (1937) reports that many of his patients "married and are now very happy mothers." One of his patients had a normal pregnancy and an interstitial pregnancy subsequently. More than fifty of his patients out of over 300 "have had consecutive pregnancies and no accident was ever noted during parturition." Keene (1935) quotes Cotte as reporting the cases of "two patients who were subjected to this operation during the early months of pregnancy on account of severe uterine pain. In both the pain was relieved, pregnancy was uninterrupted, and they were delivered naturally at term."

Collins (1938) says that some authors claim that the first stage is relatively painless, but in the second stage no difference is noted in the intensity or frequency of the pain as compared with patients who have not had sympathectomy. Reeb (1937) reports in detail one of his own cases, that of a woman of 36 years who had had vaginismus and who became pregnant four months after presacral neurectomy and appendicectomy. Nidation, gestation, and all the stages of labour, lasting six hours, were quite normal. The severity of the pains was apparently unaffected. Another of his cases was that of a woman of 42 who had been married at 27. At 37 presacral neurectomy was performed for dysmenorrhoea. At 40 a large pyonephrosis was removed and thereafter the dysmenorrhoea ceased. She became pregnant. There was a large interstitial fibroid, and three weeks before term the remaining kidney began to fail. She was delivered by Caesarean section. In recording this case he pointed out that, after sympathectomy, nidation and gestation may be quite normal in a fibromyomatous uterus.

Wetherell (1935) describes an interesting case of pregnancy and labour after sympathetic neurectomy in which he is able to correct a previous report. A very obese woman with severe primary dysmenorrhoea also had sclerotic ovaries. The left was removed and the right partially resected. He notes three points: first, the period of sterility during her four years of married life; second, the hypoplastic under-developed uterus; third, the labour pains during the first stage, which were observed by her physician. During the first stage, which lasted eighteen hours, she had no pains in front, but the irregular weak pains were felt in the back. The second stage lasted between four and five hours and was terminated by a mid-forceps operation. There was unusual relaxation of the perineum. Wetherell reports other authors as believ-

ing that a low forceps delivery is required more often than usual. He concludes that "there is no deleterious effect on libido or future pregnancy because of resection of the superior hypogastric plexus."

The following is the history of a case in which quick and easy labour was experienced after presacral neurectomy.

Case Record

In 1932, at the age of 20, the patient's first child, a boy weighing 9½ lb., was born after a very distressing labour lasting six days. Her second child, a girl weighing 8½ lb., was born in 1934 after a labour of four days. Since the birth of the first child she has had frequency of micturition. Since the birth of the second she has had "bad pains in the stomach," and for this reason was examined in November, 1936. She looked ill and pale, with dark rings around her eyes. Her appetite was poor. Her bowels were constipated but yielded to paraffin. There was some vaginal discharge. Menstruation had begun at the age of 12 and had always been irregular and sometimes excessive. The bleeding lasted seven days and recurred at intervals of between three and five weeks. Seven days before each period there was severe spasmodic pain in the hypogastrium, which got worse until the first day of the discharge, when it gradually improved for five days. Twelve days of pain seemed to be the only constant point about her menstrual history. She dared not go out for fear of the pain, which compelled her to sit down until it eased. Twice in the previous year she had fainted from the pain. During the two pregnancies she had had the same hypogastric pain for one day once a month.

She was of slight build and her abdomen was tender all over. The lumbar spine was kyphotic and she complained of back-ache. Her own doctor believed he had observed mild attacks of appendicitis. The cervix was typically multiparous, a little hardened, and pointed downwards and backwards. The uterus seemed tender and there was definite tenderness in both vaginal fornices.

In January, 1937, abdominal exploration was undertaken rather unwillingly. An appendix—not obviously very abnormal—was removed. The ovaries appeared natural. Ligatures were applied to both grossly varicose pampiniform plexuses. The presacral nervous plexus was resected in the surrounding fibrous tissue. She recovered smoothly. The pulse rate varied between 72 and 120, the latter figure on the sixth day. In February, 1937, the patient recovered her appetite and was obviously much fitter. In April, 1937, pains in the knees were troublesome. In June, 1937, she reported that menstrual pains were negligible, but complained of pain in the small of the back and ribs. Her bowels were regular without the use of paraffin.

In April, 1938, she reported missing one menstrual period, the last being on March 6, 1938, but in May she said she did not feel as if she were pregnant. The whole of the right long saphenous vein was enormously dilated from the groin downwards to the dorsum of the foot. There was no cough impulse. Much aching occurred in the leg and she was also complaining of a throbbing in the right wrist and palpitations in the chest. In June, 1938, she was admitted to hospital and under local anaesthesia the right saphena varix was ligated and morrhuate injected below the ligature and again below the level of the knee and ankle. Her pulse rate varied between 80 and 104 during the three days in hospital.

The uterus was now enlarged to about the size of a three-months pregnancy, but still she did not think she was pregnant. She then told us that in August, 1937, she had been fitted at a birth control centre with a cap pessary and had also used jellies. But the second cap pessary she was given was not fitted, though it looked exactly the same. She had continued to use pessaries of "cocoa butter."

On December 9, 1938, at 8 p.m., she went to pay her doctor a bill. She was limping with right-sided sciatica, which she had had for two weeks. She went home to bed and slept, but had some cramp in the right thigh. At 1 a.m. she awoke to find herself "drenched with water." She walked about for

half an hour and "the colours came." About ten minutes later there were three bad pains and a baby boy of 8½ lb. was born. The afterbirth came in ten minutes. There was no great bleeding and there were no after-pains. "Everything was cleared up in one and a half hours and I was back to sleep again."

In September, 1939, she looked very well. There has been only one menstrual discharge since the birth of the last child, and it was not painful. There are no pains in the stomach, the bowels are regular without paraffin, and the varicose veins have disappeared. She still has palpitations and she cannot hold water longer than one hour. The rheumatism has nearly gone, which she ascribes to her new dry council house.

Commentary

Presacral neurectomy is very successful in the cure of a certain type of painful menstruation. The above case history illustrates this. The exploration was not undertaken very willingly because she had all the appearance of becoming a woman with chronic abdominal and pelvic symptoms. She was also liable to an unstable pulse rate and pains which are called rheumatic. In spite of her successive babies being somewhat smaller, it does appear that the neurectomy must have been the factor producing the easy and quick labour for the third child.

The type of dysmenorrhoea cured by presacral neurectomy has been called central plexalgia—a question-begging nomenclature—but there can be little doubt now that the term enshrines experience. One has the impression that it occurs in women who are not likely to marry and if married are not likely to have children. To convert such an impression into an ascertained statistical fact would be laborious and especially difficult, as the indications for the operation are by no means common. A logical difficulty, but not of great importance, is that the operation is often combined with some other surgical procedure. In one of Reeb's cases and in the case reported there was a history of mild appendicitis. It would not be right to associate central plexalgia with appendicitis, but rather with some unsatisfactory state referred to the abdominal organs.

Conclusions

Presacral neurectomy has no bad influence on any part of the process of pregnancy.

In some patients, probably only a small proportion, the first stage of labour is painless and rapid or else unobserved.

REFERENCES

- Collins, C. G. (1938). *New Orleans med. surg. J.*, **91**, 75.
Cotte, G. (1937). *Amer. J. Obstet. Gynec.*, **33**, 1034.
Davis, A. A. (1933). *Trans. North Engl. Obstet. Gynaec. Soc.*, **34**, — (1934). *British Medical Journal*, **2**, 1.
Donaldson, M. (1936). *Proc. roy. Soc. Med.*, **29**, 947.
Keene, F. E. (1935). *Amer. J. Obstet. Gynec.*, **30**, 534.
Learmonth, J. R. (1937). *Brit. J. Surg.*, **25**, 426.
Reeb, M. (1937). *Gynécologie*, **36**, 617.
Wetherell, F. S. (1935). *Amer. J. Obstet. Gynec.*, **29**, 334.

Closed Cerebral Injuries.—Reduction of the intracranial pressure to normal by repeated lumbar punctures is the mainstay in the treatment of closed cerebral injuries, according to Kallius. Several illustrative examples of cases so treated are given, and the results are said to be uniformly good. Systematic re-education in convalescence by graduated exercises must be carried out until the patient returns to his former occupation.—Conservative Treatment of Closed Cerebral Injuries. H. U. Kallius.—*Beitr. klin. Chir.*, May 31, 1939, **169**, 428.

SULPHAPYRIDINE IN THE TREATMENT OF ACUTE URETHRITIS

BY

N. SEDDON TAYLOR, M.B., Ch.B.

Assistant Venereal Diseases Medical Officer to the Central Clinic of the City and Port of Liverpool

Since the introduction of sulphanilamide, uleron, sulphapyridine (M & B 693), etc., into medicine, innumerable articles lauding these preparations in the treatment of all kinds of diseases have appeared in the medical and lay press; one or other of these drugs has even been termed specific for the common cold. There is no doubt, however, that they are of especial value in pneumonia, meningitis, and gonorrhoea. With the last-named of these I am dealing in this paper, and I believe that a short account of 100 consecutive cases of male urethritis treated with sulphapyridine without thought of publication from start to finish might be of interest and value. These cases have not been selected in any way, but have been treated by the method in use at this clinic since sulphapyridine became part of the routine treatment for gonorrhoea.

Treatment

On the patient's first attendance, if the urethral discharge has been present for less than seven days, pil. euflavine 1/2 grain is given thrice daily, and complete lavage with mercury oxycyanide 1 in 8,000 is carried out once daily for a week; then follow fourteen days of sulphapyridine administration (with instructions as to diet and laxatives), 2 grammes a day (four tablets) only being given. During the first seven days of this fortnight mercury oxycyanide irrigations are continued, and for the second week potassium permanganate 1 in 8,000 is substituted; all irrigations are given at a temperature of 105° F. If the infection has been present for more than seven days at the time of the first attendance sulphapyridine is started at once and is given for fourteen days as described above.

Whatever length of time the disease has been present when the patient is first seen, in the absence of acute or subacute posterior urethritis the mode of irrigation remains the same, so that in cases where the condition has existed for more than a week the third week of irrigations—that of potassium permanganate—is not accompanied by chemotherapy. The remainder of the treatment applies equally to all cases.

At the end of the third week an oxycyanide lavage is given, after which prostatic massage is performed (provided always that the urine is clear) and the resultant bead examined. If the bead is negative for pus and gonococci the patient is given complete lavage with silver nitrate 1 in 10,000 for three days, followed by anterior irrigation for a further three days with 1 in 5,000 silver nitrate; he then has a week without any treatment and is advised to take alcohol in moderation.

On his return the gonococcal complement-fixation test is made and he is given an intradermal injection of a 200-million dose of a pure gonococcal vaccine as a provocative. In a further two days the arm is examined for local reaction, and a Béniqué sound is passed and the left vesicle massaged, the resulting bead being microscopically examined. On the next day the right vesicle is similarly treated. If there is no urethral discharge following the silver nitrate or the alcohol, no discharge or local reaction following the vaccine, a negative complement-fixation test, an easy passage of the sound, and pus and gonococci are absent from the vesicular beads, the patient is considered to be cured. It will be seen, therefore, that if a patient