In October, 1947, at a discussion on the renal circulation I pointed out[1] that Brodie had shown that if the ureter be clamped during diuresis the kidney becomes almost bloodless.[2] That during activity of an organ the blood flow through tends to be checked, to be limited, or even stopped is not peculiar to the kidney. Each time the heart contracts, the capillaries in its musculature, permeating the tissues of the ventricles, are clamped, so that no blood goes through at all.—I am, etc.,

Rugby. R. H. PARAMORE.

REFERENCES

1 *Proc. R. Soc. Med.*, 1948, **41**, 342.
2 *Proc. roy. Soc. B.*, 1914, **87**, 571.

Infected Disk after Lumbar Puncture

SIR,—In their article on infected intervertebral disk after lumbar puncture (Jan. 22, p. 132) Mr. L. L. Bromley, Dr. J. Donaldson Craig, and Mr. A. W. Lipmann Kessel do not mention the simplest and most effective precaution against damage. For very many years it has been the standard practice among anaesthetists to tilt the needle towards the patient's head when doing lumbar puncture. If pushed too far the point will impinge on the next higher vertebral body, which may damage the former but not the latter. If, however, the needle is introduced at right angles to the skin over-enthusiasm will force its point into the intervertebral disk. In young patients with flexed spines the disks bulge towards the dura, and puncture of the thin annulus fibrosus may cause seepage of the nucleus pulposus with ultimate collapse of the disk. The unfortunate patient is then all set for a long period of invalidism. —I am, etc.,

St. Albans, Herts. C. LANGTON HEWER.

Cinchocaine

SIR,—I beg to comment on the new official name of that familiar anaesthetic drug "nupercaine." It is now to be called cinchocaine. This name can be justified pharmacologically in that it suggests, rightly, a derivative of cinchoninic acid, but I feel that it is dangerous. Imagine a verbal order given by an impatient or irate anaesthetist (or conceivably a surgeon) in the course of a busy list. How easily the last two syllables might become the operative ones. It is true we put our cocaine in distinctive bottles, and in our hospital we colour the solution, but no precautions can be too great. I suggest that quinocaine would be a safer name and yet have the same pharmacological justification.—I am, etc.,

Birmingham. L. T. CLARKE.

Spinal Anaesthesia for Caesarean Section

SIR,—It is interesting that in the same issue of the *Journal* (Jan. 22) there should be a letter on the evergreen controversy which rages around this subject (p. 153), a report of a calamitous long-term sequel of lumbar puncture (p. 132), and another letter on the question of classical *v.* lower-segment operation (p. 156). It is unfortunate that so many of the disasters following lumbar puncture take so long to mature, because the original operator may be unaware that they have taken place or that his puncture has been anything less than 100% successful. It is also probable that minor disabilities such as backache may result from trauma inflicted at lumbar puncture and never come to light at all, being accepted by the patient as just another load to be borne in these hard times.

Lumbar puncture is often a very difficult operation to perform without touching bone or intervertebral disk, and is certainly not made easier by the presence of a full-term uterus, and I feel that a procedure with so many distant dangers is not justifiable for caesarean section except when the baby is very premature. Babies delivered by caesarean section generally cry immediately, whatever the anaesthetic, if it is chosen and given with reasonable skill. Ether in concentration enough to give plane 1 anaesthesia has remarkably little effect on the baby —far less than that of ¼ gr. (16 mg.) of morphine given two hours before.

But the babies which fail to cry are usually shocked, not anaesthetized. If the shock is not due to sub-oxygenation, which it need never be, it is in my opinion due mainly to trauma, and I think that the baby delivered through a poorly developed lower segment, after a prolonged tussle with Willett's and other forceps, is likely to be feeble for precisely the same reason as if it had been delivered after a difficult high forceps, and the anaesthetic has very little to do with it.

Mr. Percy Malpas (p. 156) tells of a case where extraction was impossible through the lower segment. There are many cases where it is wellnigh so, and in these, where a general anaesthetic has been given and the baby has to be resuscitated, the anaesthetist comes in for more than his fair share of the blame; while babies delivered easily and rapidly by a classical operation hardly ever give anyone a moment's anxiety.

I agree with Mr. Duncan Ballantine and Dr. F. L. Robertshaw (p. 153) that it is desirable to maintain controlled respiration or 100% oxygen inhalation while the uterus is emptied, but surely the first is rather a horrible experience for a conscious patient under spinal anaesthesia; while if she has to be given a whiff during this critical stage, is not the whole object of the spinal defeated ?—I am, etc.,

Colchester, Essex. J. N. FELL.

SIR,—I have followed the recent correspondence on spinal analgesia for caesarean section with considerable interest and some amusement. I entirely agree with Dr. N. Beattie (Jan. 15, p. 114) that most of the hazards which are theoretically put forward against spinal analgesia have not been encountered in practice by those who have had personal experience of this procedure.

Some time ago I wrote to the *Journal* relating my impressions on watching Mr. Rufus Thomas performing lower-segment caesarean section under spinal analgesia. As I said at that time, I was most impressed with his technique and with the results, and I also stressed that I was at that time the only gynaecologist who had taken the trouble to see Mr. Thomas at work, although he had been advocating spinal analgesia for nearly ten years before I visited his clinic. Since then I have personally performed considerably more than one hundred lower-segment caesarean sections under "heavy" spinal analgesia, and I have had no reason to change my opinion as to the excellence of the method.

The uterus contracts usually extremely well after the baby has been removed, and bleeding is minimal. The baby causes no anxiety whatsoever, and frequently cries the moment that its head is delivered and when its body is still in the uterus. Falls of blood pressure do occur occasionally, but are not serious providing the technique described by Mr. Thomas is carried out, and the post-operative recovery has been in my experience uniformly excellent. It allows lower-segment caesarean section to be performed quietly and efficiently, and although I have on several occasions employed local anaesthesia I have not been able to obtain such satisfactory results so far as the actual operation is concerned.

I notice that Dr. Beattie refers to the use of light "nupercaine" anaesthesia and Mr. Duncan Ballantine and Dr. F. L. Robertshaw (Jan. 22, p. 153) to the use of an isobaric solution. About these two methods I cannot personally give any opinion, but I am in entire agreement with Mr. Rufus Thomas that nobody condemns all forms of inhalation anaesthesia simply because chloroform may at times be dangerous. Similarly, it is illogical to condemn all forms of spinal analgesia.

Mr. Rufus Thomas has obtained his excellent results, now amounting to nearly four hundred and fifty caesarean sections without a maternal death, using heavy nupercaine, and my results have been obtained using in the vast majority of cases heavy nupercaine and in other cases some form of "heavy" solution. None of my babies have been stillborn, and I have had no maternal deaths.

—I am, etc.,

London, W.1. D. G. WILSON CLYNE.

Malignant Tumour of the Small Intestine

SIR,—This communication on a case of primary jejunal cancer is prompted by Mr. F. J. C. Matthews's report (Jan. 22, p. 138) of the same type of growth in the ileum.

My patient, a man aged 53, was admitted as a case of perforated duodenal ulcer during Bristol's worst period of blitzing in October, 1940. He gave a three years' history suggestive of ulcer and had been in hospital under Dr. Richard Clarke, then senior physician. Skiagraphy had shown a pre-pyloric ulcer, but in the test meal the maximum rise of HCl was 9 (N/10 NaOH).

On examination he was somewhat flushed, flabby, and inclined to sweat. The only abdominal finding was epigastric tenderness.

Per rectum there was nil amiss. Pending operation he remained very miserable.

At operation (Oct. 11, 1940) I was astonished to find a typical string carcinoma on the jejunum, 10 in. (25 cm.) from the duodeno-jejunal flexure. In the related mesentery was a cluster of glands more or less discrete but suspiciously enlarged. To embrace these in the excision a large wedge of mesentery was excised, based on a 12-in. (30-cm.) resection of jejunum. Biopsy by Dr. A. D. Fraser revealed "columnar-celled adenocarcinoma of jejunum. Mesenteric glands all show subacute inflammatory changes." Two months later he was a "changed man."

On Feb. 12, 1946, when next I saw him, he reported that he had been taking alkaline stomach powders during the previous four months. Dyspepsia persisted, and skiagraphy (September, 1948) disclosed a peptic ulcer of finger-tip size in the lower curve of the stomach. He was transferred to the care of my general surgical colleague, Mr. Melville Capper, who agreed there was no sign of abdominal cancer. Under medical treatment his symptoms abated, and by December, 1948, the ulcer crater was obviously smaller.

The case is reported as an example of jejunal carcinoma apparently free from recurrence eight years after excision.—I am, etc.,

Bristol. A. WILFRID ADAMS.

Arsenical Toxicity

SIR,—Having read your annotation "Arsenical Toxicity" (Jan. 1, p. 25) quoting the work of Sexton and Gowdey[1] on the value of vitamin B_1 in arsenical encephalopathy, I would like to draw your attention to an article by me in the *British Journal of Venereal Diseases*[2] on five cases of this complication which occurred during intensive "mapharside" therapy.

It will be seen that I pointed out the clinical and pathological similarity between arsenical encephalopathy and syndromes resulting from deficiency of vitamin B_1 (i.e., alcoholism, Wernicke's encephalopathy, etc.), and that the use of vitamin B_1 appeared to be of distinct value both in prophylaxis and treatment. Furthermore, I suggested that pyruvic acid estimations might be an added safeguard in patients undergoing intensive arsenic therapy and that in view of the known role of the other members of the vitamin B complex in intracellular metabolism better results may be obtained by using the whole complex rather than vitamin B_1 alone.

Two further points in the annotation call for comment. (1) It is stated that brain haemorrhages occur in fatal cases, but it is well known that on several occasions these have been absent and only cerebral oedema found post mortem. I therefore suggested that the primary pathological change in arsenical encephalopathy is intracellular oedema, which only at a later stage gives rise to haemorrhage and focal necrosis. This conception of the basic pathological change is important not only in emphasizing the difficulties of early diagnosis but also in understanding that the changes are completely reversible. (2) *Hyperglycaemia.* Blood-sugar estimations were carried out in several patients in our series and no significant change in blood values was found. I find it difficult to understand why hyperglycaemia should occur, since the metabolism of glucose is interfered with at the pyruvic acid level and not initially.

Finally, more mature consideration of all the factors involved in arsenical toxicity as a whole has led me to believe that the liver plays some as yet unknown but vital part in the interaction of arsenic, vitamin B, and intracellular metabolism.—I am, etc.,

London, W.1. F. L. LYDON.

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1 *Arch. Derm. Syph., Chicago*, 1947, **56**, 634.
2 *Brit. J. vener. Dis.*, 1944, **20**, 87.

Taking Children's Temperatures

SIR,—We read with great interest the article on rectal temperature-taking by Professor Alan Moncrieff and Dr. B. J. Hussey (Dec. 4, 1948, p. 972) and feel that to many practitioners it will come as a valuable confirmation and contribution in the field of clinical paediatrics.

In our hospital, where most of the patients are Zulus, temperatures are taken rectally in doubtful cases in children up to 5 years of age. Dr. Joan Malleson's timely warning (Dec. 18, p. 1078) comes opportunely, however, more especially as we have recently had misgivings as to the effects of rectal stimulation of this kind in infants—misgivings reinforced by a closer knowledge of the almost universal custom found in Zululand of the daily or even thrice-daily administration of enemas to infants. These enemas may be either medicated or plain, and are given with a hollow reed or stem inserted into the child's anus. The mother is convinced that were this not regularly done the child would not have its bowels opened.

Various effects follow upon this custom: in the simplest cases the mother brings the child with "sores in the rectum" and, everting the anal skin, shows the pink mucosa which to her is the "sore." In the great majority of cases the child shows marked disapproval of this examination, wriggling and crying lustily. We are not yet satisfied as to the more complex effects of such hyperstimulation, but tentatively suggest that it may cause serious emotional imbalance, particularly in the sexual sphere. The gross hysterias found in a very high proportion of adolescent Zulu girls, constipation, vaginismus, etc., may quite possibly have their early origin in severe anal stimulation in infancy.

It is of interest to note that the Zulus themselves seem to have realized some connexion between anal stimulation and sexuality. In *The Social System of the Zulus* Krige writes (p. 67):

> "Every child is supposed to be tainted at birth with a constitutional defect called isigwemba, which is held to be the cause of several ailments such as unusual sexual irritability, causing lecherous inclinations in adults or disposition to eczema, etc. To get rid of this taint the stem of a castor oil or umsenge leaf (*Cussonia spicata*) or a stalk of fibre is thrust by the mother into the rectum of the child and vigorously twirled round between both hands until, by scraping on the membrane of the bowel, blood is copiously drawn. Not infrequently children die from this treatment."

While rectal temperature-taking by the sophisticated physician can hardly be fairly compared with the barbaric practices of the Zulu, we might do well to exercise humility in our judgment when we number among our own scientific advances the development of the atomic bomb.

In view of the possible danger of rectal stimulation, however innocently intended or skilfully accomplished, it might be wise to enter into no fixed routines of rectal temperature-taking, but rather to exercise clinical judgment in each case. A temperature difference between 103° F. (39.4° C.) and 103.5° F. (39.7° C.) would not appear in a case of lobar pneumonia to be of great import in assessing the total pattern of signs, while even in a case of rheumatic fever, where slight deviations from normal are important, we have equally valuable guides in the pulse rate and erythrocyte sedimentation rate.

We have banished the soap stick from the nursery. Should we abolish routine rectal temperature-taking, keeping it only for cases where slight differences are vital?—We are, etc.,

S. G. LEE.
Nqutu, Zululand. E. A. BARKER.

SIR,—Referring to the recent correspondence in the *Journal* on the taking of rectal temperatures, it seems remarkable to me that there has been no letter from psychiatrists supporting the position taken up by Dr. Joan Malleson (Dec. 18, 1948, p. 1078), who calls attention to the psychological dangers that may ensue from interference with the anal parts of infants. She quotes the late Dr. Forsyth's teaching in support of this—namely, "that all interference with the bodily orifices should whenever possible be avoided; for, being erogenous zones, they will quickly become 'conditioned' either positively or negatively to interference, and may later become responsible for various functional disturbances."

As a matter of interest, some six years ago in the *Journal* of Oct. 31, 1942 (p. 528), I published a letter attempting to put forward much the same views as Dr. Forsyth. In that letter I protested against Professor McNeil's recommendation that constipation of infants should be treated by frequent insertion of the doctor's little finger in the baby's anal canal. I gave an account of the psychological disorders of emotion, character, and sexual developments that can ensue from this practice and similar methods of interference.—I am, etc.,

London, W.1. A. CYRIL WILSON.