

cervix, and the general effect on the expulsive action of the uterus is inhibitory. There is some dispute about whether the presacral nerves carry sensory impulses too, but most authorities believe they do, and this is in part at least the basis of the operation of presacral neurectomy for spasmodic dysmenorrhoea. In a letter to this *Journal* (April 10, 1948, p. 706) Dr. J. Donaldson Craig pointed out, on embryological grounds, that the sympathetic nerves to the uterus are derived from segments D11 to L2, but some authorities have put the level at D5 to D8. It is also possible that some of the sympathetic nerves to and from the uterine muscle accompany the ovarian vessels.

(b) The parasympathetic nerves come from S2, S3, and S4 segments, and they reach the uterus by way of the inferior hypogastric plexus. The traditional view is that when stimulated they cause contraction of the detrusor muscles of the upper segment. However, some believe there is no parasympathetic motor supply to the uterus. Sensory impulses, especially those arising in the cervix, also travel through these nerves.

(c) The effect of spinal analgesia varies with the level of the nerve block. It probably has to reach L1 or even D11 or D10 before the sensation of a labour "pain" is abolished. With the level of analgesia sufficiently high to permit caesarean section the uterine muscle contracts strongly, sometimes almost in a tetanic fashion, and the uterine wall becomes blanched. Dilatation of the cervix is said to be hindered. This may represent the unopposed action of motor sympathetic impulses. If so, it suggests that sensory nerves are connected with the spinal cord at a lower level than the motor ones. With very low spinal analgesia this strong uterine contraction may not occur.

Caudal analgesia differs from spinal analgesia only in that the analgesic solution is applied to the nerve fibres extrathecally instead of intrathecally. The effects are similar, except that the contraction of the uterus is perhaps less violent and dilatation of the cervix is not significantly impeded. It is not clear why this should be so. Perhaps the height and completeness of the block are less constant, and in any case some observers hold that spinal analgesia does not interfere with cervical dilatation. With either spinal or caudal analgesia the pelvic floor reflex is lost and the patient finds it difficult, if not impossible, to "bear down" in the second stage and to effect delivery.

#### Varicocele

**Q.**—*Is there a satisfactory cure or treatment for a male patient of 30 suffering from varicocele, which is causing considerable discomfort? Is operation recommended? If so, what operation, and what are the late results?*

**A.**—In the ordinary course of events operation for varicocele should be avoided for as long as possible, the condition often being symptomless and the patients introspective in type. If it is causing definite discomfort, presumably from a dragging pain, surgery is advisable. Varicocele can be cured by injection, but the technique is a difficult one and reactions are apt to be severe.

The operation is performed through a small inguinal incision, the cord being exposed as it emerges from the external abdominal ring. The varicose veins of the pampiniform plexus are dissected out. It is wise to leave one or two radicles, as the chances of producing a secondary hydrocele are thereby considerably lessened. Apart from these radicles a length of the pampiniform plexus is excised, and by drawing the cut ends together the testicle is raised to the required extent. The actual length of veins excised will vary from patient to patient and approximately between two and four inches. A scrotal support for the immediate post-operative month is advisable. Late results in well-selected cases are entirely satisfactory.

#### Risk of Inherited Defects

**Q.**—*Of three offspring born to normal healthy parents, with no relevant family history, the second had a spina bifida and the third was a mongol. Is there any recognized association between these conditions? Is there any reason for expecting defects in the offspring of the remaining healthy child?*

**A.**—It is very unlikely that the occurrence of spina bifida and mongolism in this sibship is anything more than a coincidence. Both conditions have some hereditary basis, but other factors, presumably environmental, are relatively much more

important, so that familial incidences are very low. Hence the chance that the healthy child will have defective offspring is little if at all greater than would be the case with any random person with no such family history. If the mother is still of child-bearing age, the chance that another child will be deformed is undoubtedly somewhat greater than in a random pregnancy; even if she is elderly, however, it should be no worse than, say, 1 in 10.

#### Deafness and Tinnitus

**Q.**—*A patient has had gradually increasing conductive (middle-ear) deafness, due to otosclerosis, for 17 years, and a hearing-aid has been used for the last six years. Would a fenestration operation help her, as there are no obvious changes in the internal ear? What is the prognosis after the operation? She also suffers from severe noises in the head: would the operation relieve this condition?*

**A.**—If bone conduction for the frequencies 512, 1,024, and 2,048 double vibrations is good, fenestration should help. But the patient should be told that not even the (theoretically) most suitable case can be guaranteed any improvement. In many cases the restored hearing is lost from closure of the new fenestra or from serous labyrinthitis. Tinnitus is relieved in only a minority of these cases, and bromides or barbiturates may be required.

#### NOTES AND COMMENTS

**Ammoniacal Dermatitis in Infants.**—Dr. N. R. CARLSON (Pevensey Bay, Sussex) writes: In "Any Questions?" (Jan. 22, p. 164) there is an excellent account of ammoniacal dermatitis in infants. I would like to remark on the success I have had in using acid sodium phosphate (5 gr.) instead of alkalis such as citrate. The ammoniacal smell rapidly disappears, but soon returns if the acid phos. is withdrawn without first correcting the diet. It is a little difficult to explain why the acid phos. works so well. It may be that there is excessive loss of acid in the faeces (as these are always frequent and acid in reaction in this condition), thereby leading to a tendency to alkalaemia and an alkaline urine which cannot neutralize the ammonia being formed by the urea-splitting organisms or ferment. The acid phos. would give a slightly acid urine which could neutralize or buffer the ammonia. As regards the local treatment, I have found that a "sheet" of tulle gras laid over the excoriated area and dusted with boric powder protects the raw area and allows it to heal rapidly.

**Fat Intolerance.**—Dr. M. D. WRIGHT (London, W.6) writes: Answering a question on fat intolerance in "Any Questions?" (Jan. 22, p. 164) you recommend for vitamin A two tablets daily of carotene, each containing 4,500 units—a total of 9,000 units of carotene, of which rather over half is equivalent in units to vitamin A. In 1945 the vitamin A Subcommittee of the Medical Research Council published in *Nature* (156, 11) records of experiments on man in which it was shown that defective night vision and low plasma-vitamin-A values—arising through experimental deprivation of carotene and of all sources of preformed vitamin A—improved in one case promptly on a daily dose of 2,600 i.u. of carotene. In another case the improvement required about five months of the same dose. Too little precise experimental work is recorded on man, but the authors consider that even in the presence of deficiency symptoms 2,600 i.u. carotene is sufficient to cure and 5,000 i.u. enough to provide a reasonable margin of safety. The world shortage of vitamin A sources is still such as to make over-usage undesirable, and the work quoted above gives useful guidance based on critical observations.

**Correction.**—Mr. E. R. BRANSBY, Ph.D., writes: In our paper on the diet, haemoglobin values, and blood pressures of Olympic athletes (Feb. 19, p. 300) an error inadvertently crept in. It is stated (p. 303) that the average calorie intake of 3,350 daily is about the average need of a man engaged on light work. This should, of course, be moderately heavy work.

All communications with regard to editorial business should be addressed to THE EDITOR, BRITISH MEDICAL JOURNAL, B.M.A. HOUSE, TAVISTOCK SQUARE, LONDON, W.C.1. TELEPHONE: EUSTON 2111. TELEGRAMS: *Aitiology, Westcent, London.* ORIGINAL ARTICLES AND LETTERS forwarded for publication are understood to be offered to the *British Medical Journal* alone. Authors desiring REPRINTS should communicate with the Publishing Manager, B.M.A. House, Tavistock Square, W.C.1, on receipt of proofs. ADVERTISEMENTS should be addressed to the Advertisement Manager, B.M.A. House, Tavistock Square, London, W.C.1 (hours 9 a.m. to 5 p.m.). TELEPHONE: EUSTON 2111. TELEGRAMS: *Br.Med.Jads, Westcent, London.* MEMBERS' SUBSCRIPTIONS should be sent to the SECRETARY of the Association, EUSTON 2111. TELEGRAMS: *Medisecra, Westcent, London.* B.M.A. SCOTTISH OFFICE: 7, Drumsheugh Gardens, Edinburgh.