been published¹ which shows a higher incidence in females and children, and in clean homes than in untidy or dirty.—I am, etc.,

Writtle, Essex.

J. C. GRAVES.

REFERENCE

¹ *J. Coll. gen. Practit.*, 1958, 1, 83.

Post-influenzal Depression

SIR,—A few months ago I replied to correspondence in your columns concerning the use of methylpentynol ("oblivon") in premedication (*Journal*, September 14, 1957, p. 642). I have since had some experience of a derivative of this drug, methylpentynol carbamate ("oblivon-C"), used to combat depression. During the past months when cases of influenza have been pandemic, symptoms of depression and debility have often developed. A current advertisement in the press declares that a beverage containing ethyl alcohol "works wonders," but methylpentynol in these winter months can be the physician's choice to hasten recovery and maintain employment. Methylpentynol, according to Trotter,¹ can increase concentration and confidence and relieve tension.

The majority of my cases of influenza developed similar convalescent complications: lack of confidence; tiredness; loss of appetite; and, in two to three cases out of every ten, a degree of depression. Of these, a series of 37 cases of depression following influenza have been listed, and all were treated with methylpentynol carbamate. They were classified as "established" (mild and moderate) cases and severe cases. There were 21 males, of which 18 were "established" and 3 severe cases, and 16 females, of which 14 were "established" and 2 severe.

With the onset of convalescence, depression was apparent and symptoms were those of lack of concentration, vertigo, irritability, and fear of inability to work. Methylpentynol carbamate was prescribed in doses of 200 to 300 mg. three times daily. In the mild cases response was rapid, 200 mg. twice daily only was needed and the patient requested to return to work in three or four days. In the moderate cases 200 to 300 mg. was required two to three times daily. Response was immediate but required longer therapy—one to two weeks. The five severe cases considered received similar treatment, 300 mg. three times a day, reducing to 200 mg. twice a day, but these cases were seen more frequently and rehabilitation required from three to four weeks. Again it was interesting to note that in these advanced cases definite progress towards recovery was evident immediately following administration of methylpentynol carbamate. (One case, a female still absent from work after six weeks, now elects to return next week: two other cases not listed and believed to be established cases of depression following influenza did not respond, but both were found to have past histories of psychosis.)

There were no disturbing side-effects. Methylpentynol carbamate is slightly excreted through the lungs and occasionally an unpleasant after-taste may occur in a minority of cases. Patients forewarned of this possibility complained little, and any distaste was overshadowed by grateful appreciation for relief already being obtained. Other cases of established depression (not following influenza) are also being treated with success—e.g., menopausal cases with or without hormone therapy, shock following bereavement, and cases of varied degrees of depression arising from social problems in the home.

In my opinion, in all the above cases timely and adequate therapy with methylpentynol carbamate definitely shortened the recovery time. The patients are at once more relaxed and hopeful, they shed their fears, and with a little encouragement pick up their tools and are glad to find themselves back at work.—I am, etc.,

Orpington, Kent.

R. M. HARRISON.

REFERENCE

¹ Trotter, P., *Lancet*, 1954, 2, 1302.

Artificial Insemination

SIR,—A.I.D. has had a big write-up in the past few months, both in the lay and, to a lesser degree, in the medical press. A lot of abuse has been directed at the donors, while little or nothing has been said in their favour. Since the donors cannot speak for themselves I feel that a few facts should be put on record about these much-maligned men. As I meet them they are married men with families of their own, who donate with the knowledge and

consent of their wives; moreover, they do this for no financial reward whatever and often at considerable trouble and inconvenience to themselves. They are not sexual perverts commanding huge fees for their services. They do not regard themselves as a race of supermen, but on the other hand they are not prepared lightheartedly to cast their seed to the wind; they need to trust the doctor who deals with the matter and be assured that the couples asking for A.I.D. are meticulously vetted before being accepted, and are indeed childworthy. The couples for their part must be able to expect good health and sound mentality in the donors. It is no easy task to build up a suitable panel of donors of suitably varied types, and the sort of cheap abuse that has been thrown about recently does nothing to help but may well deter some who want to help—men who genuinely feel distressed for those couples who are denied children and who agree that it may be better for the wife to bear her own child rather than adopt one of completely unrelated parentage.—I am, etc.,

Credition, Devon.

MARGARET C. N. JACKSON.

Preparation of Skin for Electrocardiography

SIR,—I have been following with interest the scientific discussions in your correspondence column arising from Dr. James Maxwell's letter (*Journal*, October 19, 1957, p. 942) on the preparation of skin for electrocardiography. A year ago while setting up for a cardiogram in the depths of the country I found that this time it was the electrode jelly I had left in the office. So I used "vaseline," with excellent results, and, to quote an advertisement of my youth, "since then I have used no other," or rather had not until a detail man sold me something in a "squeeze bottle" for a dollar and a quarter which is almost as good.

However, what I think is not appreciated by people taking cardiograms is the great difference in skin resistance between individuals. On some patients one can obtain low electrode resistance using almost anything; on others (the minority) the most careful skin preparations still leave a residual 60 cycle (50 to you). This is best appreciated when trying to read really low voltages as in an electroencephalogram. By the way, I know vaseline is an excellent insulator. That is why we use it on wet battery terminals.—I am, etc.,

Freeport, Nova Scotia.

EDWARD LLEWELLYN-THOMAS.

SIR,—I have read with interest the letters by Dr. James Maxwell (*Journal*, October 19, 1957, p. 942), Dr. D. D. Vora (*Journal*, November 30, 1957, p. 1307), and Dr. Donald Whitfield (*Journal*, December 7, 1957, p. 1369) under the above heading. I, for one, was under the impression that the use of any special jelly in the preparation of the skin is now obsolete. When I had my "cardiopon," manufactured by Phillips-Liechti (Switzerland) in 1951, the electrodes supplied with the instrument were encased in a piece of flannel, and the manufacturers' instructions were to soak the electrodes in ordinary tap-water and apply straight on to the patient's extremities. The chest piece also was encased in flannel, and I have never had to use either special jelly or "K-Y jelly" on any of my patients. Needless to say, I have always had excellent results.—I am, etc.,

Nairobi.

B. P. ARYA.

Tetanus

SIR,—I was interested to read Dr. D. D. Johnstone's account of tetanus in Nigeria (*Journal*, January 4, p. 12). It is not often a paper based on such a large series of personally treated cases appears in a home journal. A summary of some observations made in another comparatively large series of 77 cases of tetanus treated in India¹ may serve to emphasize some of the points made by Dr. Johnstone.

Excluding cases which gave no definite history of injury or other source of infection, our series showed a slightly closer relationship between a short incubation period and mortality than did Dr. Johnstone's series. However, his analysis, correlating incubation period and period of onset, is a timely and striking, if silent, reminder that such prognostic

criteria should be seriously assessed when considering the institution of relaxant therapy. Such treatment may still carry with it a considerable risk, though it undoubtedly has heralded in an era of hope for the hitherto hopeless case.

Dr. Johnstone questioned the value of antitoxic serum in treatment, and showed from his series that the mortality rate was not seriously affected when antitoxin was withheld. The figures of our series are perhaps even more striking: though in no case was antitoxin completely withheld, the standard dose was considerably reduced in the later cases. Of 25 cases given 100,000 I.U. A.T.S. only 9 recovered, while 1 improved case left against advice. Nineteen out of 37 consecutive cases which received only 20,000 I.U. A.T.S. recovered. The next 15 cases were given only 20,000 I.U. and of these 12 recovered, but other variations on routine treatment invalidate any strict comparison between this and the other groups. We concluded that antitoxin is not the most important single factor in the treatment of established tetanus, but we did make the reservation that in cases with grave prognostic criteria, or where a raw dirty wound may still be a source of exotoxin formation and liberation, a larger dose should perhaps be given. On the other hand, Dr. Herbert Stelling in a personal communication mentions good results using no antitoxin in another mission hospital series in India.

In one respect only do our figures not agree closely with those of Dr. Johnstone. In his series 47 patients died as a direct result of tetanus, though in 2 of these exhaustion and age may have been largely responsible for death. Only 5 cases died of bronchopneumonia and 2 of urinary infection. We concluded from our series that about 66% of deaths were directly related to the spasms, and up to 33% died as the result of superadded infection or exhaustion. These differences may be accounted for as follows:

(a) The lower percentage of deaths directly the result of tetanus may have been due to more intensive treatment with sedatives. If spasms cannot be controlled the outlook is serious. Dr. Stelling gave heavy sedation with excellent results in his unpublished series. The danger, of course, is that respiration may be depressed, thus predisposing to chest complications; but these may be prevented in many cases where special nursing can be given.

(b) While the higher incidence of secondary infection in our series may have been due to excessive sedation in some cases, it may also have been due to lack of special nursing. Though all possible attention was paid to this aspect of treatment, we were unable, in a small mission hospital with limited facilities and staff, to detail a special nurse to any case of tetanus. Dr. Johnstone was in a more fortunate position in this respect, and the difference in our figures would emphasize the importance of this point. The report of Drs. R. S. Packard, T. B. Cartmill, and J. G. Henry (*Journal*, January 4, p. 16) on the use of large doses of chlorpromazine by continuous infusion, supplemented by intermittent amylobarbitone, which suppressed spasms without depressing respiration, is very encouraging.

Dr. Johnstone states that intragastric intubation was abandoned because the passage of the tube sometimes caused laryngeal spasm. Spraying of the larynx with local anaesthetic will sometimes enable a tube to be passed in difficult cases. However, when the patient will not tolerate a nasal tube, or one cannot be passed, gastrostomy may be of value. It is easily effected under thiopentone, and we have used it recently. In this way fluid and calorie intake may be conveniently maintained, oral hygiene simplified, and the dangers of feeding by mouth reduced.—I am, etc.,

Edinburgh.

WILLIAM A. HANNA.

REFERENCE

- ¹ Hanna, W. A., and Hanna, P. R., *J. Christian med. Ass. India*, 1957, 32, 5.

Neuropsychiatric Sequelae of Lightning Stroke

SIR,—Dr. James Margerison's mention of focal epilepsy following lightning stroke (*Journal*, December 7, 1957, p. 1370) recalls an interesting case seen in Colombo many years ago. During a monsoon thunderstorm a wayside tree, under which a cow had been sheltering, was struck by lightning just as two men who were sharing an umbrella had reached it. Large splinters of wood flew up into the air

"as if from a giant woodcutter's axe." The cow was hurled violently to the ground. The man who was holding the umbrella (in his right hand) collapsed and lay curled up on his side motionless, with his right hand and forearm burned and his shirt sleeve scorched. All this was witnessed by his companion, who had escaped unscathed. With the help of others he revived his friend, who was unconscious, and carried him into a hut near by; he was dazed, trembling, and breathing noisily, but uttered no word. Meanwhile flames had arisen through the rain-sodden crown of the tree and the cow was found to be dead.

The victim of the thunderbolt was referred to me several months later by Dr. G. Amaratunge with an interesting neurological history. For a few days following this mishap the patient had remained dazed, dizzy, and speechless, with stiffness of his neck, twitching, and pins-and-needles sensations in his right upper limb. Under treatment with herbal plasters, decoctions, and inunctions by an Ayurvedhic practitioner, the patient's burns had healed and he had recovered his power of speech and free movement of his neck; but his myoclonic symptoms had persisted and had spread to his right leg. A few months later the case came under the care of my colleague, who had succeeded in controlling the symptoms with bromide and phenobarbitone.

There was no neuropathic history, personal or familial, in this case. The patient was a healthy-looking man in his middle thirties. He had experienced a moderately strong electric shock, several years previously, from a 110-volt A.C. mains circuit, but with no ill effects. He had remunerative employment as a motor mechanic and showed no evidence, past or present, of psychiatric disturbance. He remembered the blinding flash of lightning but nothing else of his mishap as described by his companion. He had experienced a sudden sensation as of having been hit on the root of the right side of the neck with a heavy cudgel—a sensation unlike that felt when he received the electric shock. He was unaware of his burns until he had been revived. Clinical examination revealed no objective signs besides the healed burns. There was no impairment of motor or sensory functions, nor any asymmetry of reflex responses. Retinoscopy was negative. Lumbar puncture was not done. No facilities existed in those days in Ceylon for E.E.G. investigation.

This case would appear to suggest focal cortical disturbance possibly initiated by the effects of electrostatic shock. The patient continued treatment with satisfactory symptomatic relief, and Dr. Amaratunge ceased to hear of him after some months.

During the last war I was asked by the Archdeacon of Colombo to see a teacher in a mission school who had been unsuccessfully treated for epilepsy following a lightning stroke and who was being urged by friends to undergo a "bali" ceremony for exorcism of evil spirits. A radio set that the patient was about to switch off during a thunderstorm had been suddenly hurled from its stand during a flash of lightning without hitting him; but he had experienced a severe shock which had jerked him off his feet away from where the radio set had been, while two others at the opposite end of the room felt themselves being drawn towards the set. A vivid blue flame had been seen flashing along the copper aerial wire, which was suspended between tall masts opposite the window. The victim of the stroke was picked up trembling with fear, incoherent in speech, and in a state of extreme agitation; he had a burn on his right hand, a gash on his occiput, which had struck the cement floor, and a sprained ankle. He was treated for headache, giddiness, and blurred vision with a sedative mixture by a local doctor. He remained shaky and unsteady for several days and his original symptoms were replaced by insomnia, photophobia, and ataxia. He was apparently cured of these disabilities by Ayurvedhic remedies, but after an interval of good health he developed fits which had persisted.

He presented no history of personal or familial predisposition to fits or nervous disease, but he had over-reacted to an enemy air raid on Colombo on Easter Day, 1943, though he was well outside the danger zone. There was an element of emotional instability in his reactions. His wife, who was a voluble virago and a nursing attendant at a government hospital, seemed to dominate his personality. She answered questions put to him and sharply corrected some of his answers concerning his subjective sensations. He was evidently a mother-fixated individual who was now leaning heavily on his wife as an emotional prop. She recited with much gusto a list of drugs which she had administered to the invalid, the names of which she had obtained