It would appear that four bodies are concerned, the driver, the public, the insurance companies, and the doctors. The first three might be taken together, for I understand that the insurance companies are no more concerned with the elderly driver as an insurance risk than with anyone else; in fact if the amount of premium required is a criterion he is considered to be less of a risk than the young driver. Again I would ask who has put up the quarry?

As far as the doctors are agreed (and it is about the only matter on which they are agreed) the blind should not be permitted to drive; the State debars epileptics, but here the doctors are at variance.

Who is to be considered unfit to drive: the patient with too high or too low a blood pressure, the hyperglycaemic or the hypoglycaemic, the psychopath, the ill-tempered, the inattentive, or the adventurous? is little difficulty in understanding why the doctors have not come to any conclusion.

I would suggest that unfitness to drive lies not so much in senility or physical deformity as in the realm of Freud, Jung, and Adler .-I am, etc.,

F. E. GRAHAM-BONNALIE. Exeter, Devon.

Atrial Function

SIR,—Dr. W. J. Gillespie and others (14 January, p. 75) conclude that "atrial systole has a powerful augmentative effect on stroke output in the normal heart, while its effect is less valuable when the myocardium is diseased." This is of great interest in relation to the clinical examination of the heart in health and disease. In health the effects of the left atrial contraction are neither audible nor palpable. In such diseases as hypertension, chronic ischaemic heart disease, aortic stenosis, muscular obstruction to the outflow from the left ventricle, and acute cardiac infarction the force of the left atrial contraction amounts to an "explosion." The shock-wave commonly is visible and palpable, and the noise is recognized as the "atrial," or "fourth sound" systolic," gallop.

These clinical findings suggest that the atrial contraction is more powerful when the myocardium is diseased, and I should be most grateful if Dr. Gillespie and his colleagues would explain the paradox.—I am, etc.,

Peter Nixon.

Charing Cross Hospital, London W.C.2.

Obstetrics in Africa

SIR,-I would like to thank Mr. Graham Cole for a thoughtful contribution (28 January, p. 238) on the subject of obstetrics in Africa. I must, however, disagree with his assessment of the operation of symphysiotomy.

He states that in Africa he met mothers "fleeing the nearby hospitals where this was practised. They spoke of the pain immediately afterwards and of the unpleasant sensation on walking for some time afterwards."

In my experience in Nigeria postoperative pain is of little consequence and is certainly

less than after caesarean section. Neither did I find complaints about the sensation on walking. Indeed, they could all walk normally without discomfort when discharged home, which was nearly always on the tenth day. Such "fleeing" as takes place is likely to be away from any hospital where the woman thinks she may get a caesarean section. Generally speaking it is unwise even to suggest the need for an elective section in the antenatal period, as this is likely to result in an attempt to deliver at home.

Mr. Cole quotes another doctor as saving that patients who have had a symphysiotomy refuse to return for a "repeat." A repeat symphysio-Surely not, for the operation usually results in a permanent enlargement of the pelvis so that subsequent deliveries are normal. On the contrary, it is those women who have had a section for disproportion who are most likely to refuse to return and who are therefore in great danger in a subsequent labour. Other things being equal, the symphysiotomy patient is in much less danger if she refuses to return to hospital for her next delivery.

Mr. Cole also advocates the use of induction of labour as the best means of avoiding section for disproportion. He makes out a strong case, though there is much which could be said for a limitation of the procedure. However, it does not matter how many inductions are done, the practitioner in many parts of Africa will still be frequently confronted with the patient in obstructed labour with a live baby and in whom forceps or vacuum extraction has failed. such a situation there is an obligation to consider symphysiotomy as a possible alternative to

There has now been ample evidence to show that symphysiotomy can be a useful procedure in the circumstances which pertain in many parts of Africa. My own somewhat meagre experience has been described elsewhere. Dr. D. A. M. Gebbie has recently (17 December 1966, p. 1490) given his opinion based on experience in Uganda that "symphysiotomy has a definite place in obstetric practice in Africa."

Most impressive of all, however, is the experience of those working in the obstetric departments of the University of Natal. Referring to 1,389 cases Crichton and Clarke² state, "In short, our technique of symphysiotomy appears to be a safe operation with few sequelae, providing that no contraindications exist and that the operation is carefully performed." I have added the italics because it is the neglect of his advice which is sometimes the cause of poor results and consequent unpopularity of the operation.-I am, etc.,

MICHAEL L. COX.

REFERENCES ¹ Cox, M. L., J. Obstet. Gynaec. Brit. Cwlth, 1966, 73, 237. ² Crichton, D., and Clarke, G. C. M., S. Afr. 7. Obstet. Gynaec., 1966, 4, 76.

Population Explosion

SIR,—The gas chambers for the sick, aged, disabled, and mentally handicapped which Dr. D. C. Clark (21 January, p. 174) cited as the logical outcome of planning about population explosion seems to me so farfetched that I can only think he produced it as a red herring to draw attention away from the responsibility doctors should shoulder in combating the results, in developing countries, of the advances in medical sciencefor example, increasing numbers outstripping food supplies. No problem can be solved by

ignoring it or by postulating gas chambers or moral degeneracy from birth control.

The old sex war appears to be raging just now in the field of legalized abortion, State aid for contraception and disputations about the contraceptive pill; all means seem to be fair in love and war.

Women want to control their fertility. Men appear to have an inherent dislike of women being able to do so. I think women will win in the end, but meanwhile millions of children are being born in developing countries with every prospect of starving to death before they reach maturity.

I find this prospect much more real and horrifying than Dr. Clark's gas chambers.-I am, etc.,

MARY N. M. PAULIN.

Belfast, N. Ireland.

Imipramine and Benzhexol

SIR,—The acute toxic psychosis that may follow the administration of benzhexol hydrochloride (Artane) has recently been described and reviewed by Dr. D. A. Stephens. Dr. I. Haider has described similar states following imipramine (Tofranil).2 As they point out, the clinical pictures produced bear a close resemblance to belladonna poisoning as described in the standard texts.

precipitated As I have inadvertently similar states of excitement, confusion, and hallucinations in three elderly patients who were taking imipramine or desipramine (Pertofran) by prescribing benzhexol 2 mg. t.i.d. in addition, I feel that there may be particular dangers in the combined administration of tricyclic antidepressants with antiparkinsonian drugs.-I am, etc.,

S. C. ROGERS.

Rugby.

REFERENCES

¹ Stephens, D. A., Brit. J. Psychiat., 1967, 113, ² Haider, I., Clin. Trials J., 1966, 3, 479.

Poisoning with Mandrax

SIR,-Overdosage with methaqualone has been reported to increase markedly the vascular permeability leading to effusions in serous cavities, frank haemorrhage into the skin, intestinal lumen, etc. A dose of 4-6 g. may cause circulatory collapse.1 Twentyeight cases of Mandrax poisoning have been reported in this country recently, but only one has shown evidence of bleeding tendency (Lawson and Brown, 10 December 1966, p. 1455). We report a case which presented with this feature of generalized haemorrhagic tendency, combined with prolonged unconsciousness and agitated hypertonic movements. This raised the question of possible haemorrhage into the cerebral cortex.

The patient, a girl aged 19, was admitted having taken 20 5-g. tablets of Mandrax about 12 hours prior to admission. She was deeply unconscious and her reflexes were sluggish, with bilateral extensor plantar responses. Pupils were equal and reactive. She had bizarre, agitated, epileptiform movements of both upper and lower The muscle tone was increased at this limbs. time. Owing to this, analeptic drugs were not given. Respiration was normal. Her colour was good, blood pressure 130/80 mm. Hg, and pulse was 110-120 per minute. Her temperature was 95° F., which spontaneously rose to normal in four hours. Closed urinary drainage was established, and with great difficulty (because of restlessness) 500 ml. of 20% mannitol was given to induce forced diuresis. 800 ml. of urine was excreted within the next two hours. Four hours after admission she was first noted to pass blood-stained urine. The movements increased in severity. Frequent heavy sedation with parenteral soluble sodium phenobarbitone, 3 gr., and paraldehyde, 10 ml., was required to control rest-lessness. This state continued for the next four days with no change in the depth of consciousness. Pupils were sluggishly reactive and secretions from the oropharynx were mechanically aspirated.

Thirty hours after admission she was noted to have widespread purpura on her back, buttocks, and front of thighs. There was also a small haemorrhage in the conjunctival vessels in the right eye. Fundoscopy revealed no haemorrhage or papilloedema. Owing to this bleeding tendency, intravenous fluids were withheld and nutrition was maintained by gastric tube. Occasionally blood was aspirated through this tube. Other supportive therapy consisted of highpotency vitamins and vitamin K, 10 mg. intramuscularly daily for four days.

She continued to be very restless, with marked opisthotonos at times. There was no neck rigidity. A lumbar puncture revealed clear fluid at normal pressure with no significant biochemical changes. Urea and electrolytes were normal. On the fifth day after admission the first sign of response was noticed by the opening of her eyes on demand. She asked for a cup of tea. Gradual recovery then occurred. At first she was unable to co-ordinate her hands, but this slowly improved. There has been no residual weakness, incoordination, or peripheral neuritis. Plantar responses had reverted to normal. Haematuria and purpura gradually cleared from the third day onwards. There was euphoria for a couple of days after return of consciousness, but this has since settled and all higher functions are now normal. She confessed having taken the tablets deliberately because of cancerphobia.

A feature of note was that at no stage was respiratory excursion impaired (unlike barbiturates). It is not known whether the effect is primarily due to methaqualone or diphenhydramine or whether this patient was particularly hypersensitive to either of these drugs. Estimation of plasma methaqualone level or its detection in urine as described by Lawson and Brown (above) could not be carried out here. It seems that this estimation may help to assess the severity of the case, and, if indicated, haemodialysis may be undertaken prior to onset of capillary drainage to hasten elimination of the drug. Owing to the epileptiform tendency the temptation to use analeptic drugs must be resisted.-We are, etc.,

H. R. F. MACDONALD. A. D. LAKSHMAN.

Stonehouse Hospital, Stonehouse, Lanarkshire.

REFERENCE

¹ Schmitt, A., Nervenarzt, 1962, 33, 418.

Facial Pain

SIR,—It is surprising that your compendious leader (7 January, p. 4) on facial pain and depression does not mention emotional conflict as a frequent, simple, but often unconscious cause of facial pain.

Fits of laughter, rage, or sobbing have a strong facial motor and sensory aspect. One only needs to watch the contortions of a child trying to inhibit or control strong laughter, rage, or sobbing to realize the degree of pain which may be felt. Eventually, however, this control becomes adequate and

unconscious—he does not laugh or rage or sob so energetically, or even at all. Nevertheless, the tendency to revert to the original type of expression remains, and the unconscious control results in pain. In addition, lack of use results in what we may describe to the patient as "rusty muscles."

During psychotherapy, recovery of the ability or willingness to sob or rage or laugh will mean risking for a time the experience of more complex and intense pain (a) in experiencing consciously the full brunt of the long unconscious conflict between control and expression, and (b) in starting to use again violent muscular action, which has not been shown for years, as part of emotion.—I am, etc..

Montreal, Canada. W. CLIFFORD SCOTT.

SIR,—In Mr. W. R. Henderson's article on trigeminal neuralgia (7 January, p. 7) there is no mention of the use of E.C.T. in this condition, although your leading article (p. 4) mentions it in connexion with "atypical facial pain."

I refer interested readers to two articles on the use of E.C.T. in relieving trigeminal neuralgia by Janjigian¹ and myself.²

One feels perhaps that this method is worth trying if it obviates the need for a complicated and delicate surgical procedure.—I am, etc.,

A. S. Ellis,

Perth, Western Australia. Director, Mental Health Services, Western Australia.

REFERENCES

¹Janjigian, E. R., Amer. J. Psychiat., 1949, **106**, 143. ² Ellis, A. S., Med. J. Aust., 1950, **2**, 864.

Internal Carotid Artery Occlusion

SIR,—The claim that arterial disobliteration improves the outlook for patients with carotid stenosis makes it vital to gather all possible information about the natural history of this condition. The paper of Dr. P. Bradshaw and Dr. E. Casey (28 January, p. 201) was therefore welcome, but we question whether it adds much information strictly relevant to the comparison between surgical treatment and conservative management.

Most surgeons are hopeful only of preventing disability developing in patients who present with a recovered or very mild hemiplegia. This report does not make entirely clear what proportion of patients with stenosis presented without serious disability and remained well during the period of observation. It would be such a figure which surgery would have to better in order to establish the case for operation. patients with carotid stenosis also had middle cerebral occlusion, and in no fewer than 11 of the 24 the stenosis was regarded as slight; it is questionable whether such patients would be considered by most surgeons for operation, and their validity as a control series is therefore in doubt.

The inclusion of patients with complete carotid occlusion tends to obscure the issue, because surgeons are not yet claiming to improve the outcome in such circumstances. It may be that these authors assume that internal carotid occlusion normally represents the end stage of stenosis, and their finding no patient under 35 with stenosis and none under

44 with occlusion might point to this conclusion. Doubtless this is the sequence in many instances, but we believe that complete occlusion quite often develops for other reasons, particularly in younger patients. In our experience of 223 patients with an abnormality in the internal carotid artery in the neck there were 20 under the age of 40 years; 15 of these had complete occlusion and only 5 showed stenosis. It would seem wise therefore to consider these conditions separately, particularly when discussing management and prognosis.—We are, etc.,

BRITISH MEDICAL JOURNAL

W. BRYAN JENNETT. JAMES N. CROSS.

The Institute of
Neurological Sciences,
Killearn Hospital,
Glasgow.

Malaria in Children

SIR,—Dr. H. M. Gilles gives an interesting account of "Malaria in Children" (3 December, p. 1375). However, if the article is to achieve the desired purpose of helping "doctors working in tropical countries, particularly those who are working single-handed or on isolated stations," as well as being "of interest to doctors in Britain who are contemplating work in the developing countries" (5 November, p. 1090), some of Dr. Gilles's statements should not pass without comment.

Dr. Gilles states categorically that the certain diagnosis of malaria depends on the identification of the parasites in the peripheral blood. One wishes very much indeed that it was as simple as that; and, in any case, considering Dr. Gilles's earlier statement that it is not unusual to find children with malarial parasites in their blood playing about in apparently "good health," there must be some contradiction somewhere. In malaria endemic areas in the tropics malaria, with or without complications, is as common in indigenous children as it is difficult of a certain diagnosis. As indicated by the first of Dr. Gilles's two statements, there is undoubtedly a very high incidence of "asymptomatic parasitaemia," which renders of limited value the identification of the parasites in the peripheral blood in the diagnosis of the disease in indigenous children. Furthermore, it is not infrequently the case, for instance, that fever, vomiting, convulsions, and meningism in the presence of falciparum parasitaemiafeatures which would seem to clinch the 'certain diagnosis" of cerebral malariain fact the manifestations of acute tonsillitis and not malaria. The truth therefore is that, besides the identification of the malarial parasites in the blood, nothing short of a therapeutic test with an effective schizonticidal antimalarial, resulting in clinical cure with reduced or absent parasitaemia, approaches a certain means of diagnosis of malaria in indigenous children in malaria endemic areas in the tropics.

Again, Dr. Gilles suggests that in circumstances where follow-up examination of all children is impossible the single-dose treatment with chloroquine at the time of the visit is the only feasible line to follow. My first observation on this statement is that the circumstances where follow-up examination of all children is possible in the tropics must be very exceptional. Further, the rationale for the use of the 4-aminoquinolines in the large single-dose treatment of malaria is not very clear. These antimalarials are known to be