on her part at all, the miraculous occurs and a new life comes into being. How does she have the right to destroy this new life?

The argument is usually to the effect that it belongs to her and could not survive without her: "It's mine and I can do what I like with it." Of course, it is true that a fetus cannot survive without the support of its mother; no more could Professor Hungerford or I survive without the support of our fellow men who provide us with food, drink, and clothing, but that does not give them the right to kill us.

The claim to possession, the assumption that the fetus is owned by its mother involves, I believe, a semantic error. In a sense, the fetus is "hers" in that it is growing inside her, even though she did not create it. Likewise, her husband is hers because joined to her by marriage and her country is hers because she lives there, although she does not own either of them and certainly has no right to destroy them. The life growing inside the mother is not hers in the same way that a cardigan she has bought or knitted for herself is hers.

It is the consideration of semantics that protects us from the "realities" of such as Professor Hungerford.

C P RICE-OXLEY

Battle, Sussex TN33 0EA

SIR,—Dr J R Sampson's letter (25 August, p 496) is confused. Like me, he takes the view that the law ought to aim at "keeping public order and preserving freedom" and then rather oddly accuses me of "callousness" for supporting the side of the abortion controversy that is consistent with this position.

The anti-abortionist position that Dr Sampson espouses aims at the restriction or destruction of the 1967 Abortion Act. In so far as this succeeds, it will increase illegal abortion, dragging into a criminal underworld a substantial minority of the normally law-abiding sex. (In 1978, the daily prison population in England and Wales comprised 42 000, of whom only 1500 were female.) Police investigations would have to increase to try to suppress illegal abortion, and inevitably possibilities of police corruption would once more open up, thereby affecting public order. In 1967, to which Dr Sampson harks back, 314 "offences of procuring illegal abortion" were recorded as known to the police. In 1977 the total was 11. At the same time the freedom and privacy of women patients would be dramatically restricted, as would their ability to make intelligent and rational decisions about the very important question of whether to have a baby.

The real and long-term issue is that if the numbers of legal abortions are substantially restricted, as intended by Mr John Corrie in his Bill before parliament, it is the poorest, least educated, and most inadequate women who will be caught in the trap. The well-off, the well-educated, and the well-informed will simply revert to buying their abortions semi-legally and more expensively in the commercial sector of medicine as they did before 1967. Or they will fly to Holland or other West European countries for their safe abortions, possibilities that were not open to them then.

The poor, inadequate, and passive will be the ones to be deterred by the law and will reluctantly give birth to unwanted children.

From then on, society will have to carry the additional burden of a new group of unloved and deprived children born into unpromising circumstances. This will be the real legacy of the anti-abortion campaign if it succeeds, and no amount of glib talk about the possibilities of adoption will alter this.

MADELEINE SIMMS

London NW11 8AE

SIR,—I refer for termination anyone who requests it for—pace Mr V Tunkel, (28 July, p 253)—the law is generally regarded as being one of "abortion on demand." I have some misgivings as I do not believe that women in early pregnancy are always in a fit state to make a considered decision, and they cannot in the nature of things be given time.

I have, however, become increasingly worried about the morbidity arising from the procedure, and it is interesting that letters on the subject (25 August, pp 495 and 496) should be followed by one reporting rupture of the uterus during prostaglandin-induced abortion—yet another complication to add to those of cervical incompetence, pelvic sepsis, and permanent neurological damage. In so far as these tragedies usually follow late terminations Mr John Corrie's Bill is to be welcomed.

A few further points. I am not so cynical as to think that every impregnation is the result of a thoughtless act of male lust. Unlike Professor Peter Huntingford (25 August, p 496), I listen to men as well as women, and many of them are deeply involved emotionally in the pregnancy they have helped to produce. Certainly I think a man should have the right to be consulted if his wife is to undergo a procedure that might damage her health.

It is unfair contemptuously to dismiss as "whims" opinions that differ from ones own. These may result from genuine conscientious doubts or inability to cope from overwork and understaffing.

Abortion is quite the most expensive form of contraception, and perhaps in these days of financial stringency this should be taken into account.

"Bigotry" is defined in my dictionary as "blind zeal." This could be said of those who enthusiastically promote a course of action without regard to circumstances, safety, or cost.

ANNE SAVAGE

London NW11 6TU

SIR,—I would like to take issue with Dr Colin Brewer's statements concerning intrauterine contraceptive devices and abortion (11 August, p 389).

I agree that logically there is no distinction between IUCDs, and other abortifacients used early in pregnancy, and abortion methods used later in pregnancy. However, I disagree with his statement that to make illegal IUCDs and similar methods out of an "obsessive concern for microscopic forms of life" would be "absurd." Firstly, size has never been a criterion for the presence or absence of life, or of its importance. Surely Dr Brewer, MPs, and the public would be outraged by anything less than obsessively careful handling of, say, rabies or smallpox viruses in laboratories. Do not the products of conception, with the full potential of a human being unless actively interfered with by other men (neglecting normal fetal wastage), deserve any less concern?

Secondly, morality should not be determined by practicalities; rather morality should determine one's actions. The question of whether IUCDs and other such procedures should remain legal or be made illegal should not be determined by their efficacy, popularity, or economy.

I agree fully with Dr Brewer—abortion is a moral issue and it is a pity that the *BMJ* has not raised the moral issues at stake. Particularly so, as Lord Denning put it "... without morality there can be no law." I personally subscribe to the Hippocratic Oath.

MARK CHURCHILL

Guy's Hospital,
London SE1 9RT

*.*This correspondence is now closed.—ED, *BMJ*.

Exophthalmos and pretibial myxoedema not responding to plasmapheresis

SIR,—In view of the absence of response to plasmapheresis of exophthalmos and pretibial myxoedema in a case reported by Dr R A Lewis and others (11 August, p 390), it is only necessary that we should state in brief our own experience with the procedure in the treatment of Graves's disease.

We have to date treated seven cases of Graves's disease with exophthalmos; one of these—the one already reported in detail (10 February, p 374)—had pretibial myxoedema. Four out of these seven patients had rapidly developing exophthalmos of less than three months' duration, with marked periorbital oedema, chemosis, and conjunctival injection in addition to exophthalmos. Three out of these four were unable to close their lids and one had corneal oedema with abrasions; two had unilateral papilloedema in the eye with more marked exophthalmos. In three out of the seven patients there was no evidence of rapidly developing exophthalmos; two had established exophthalmos of over two years' duration and the third had had gradually developing exophthalmos for six months without any acute changes such as conjunctival injection, chemosis, and periorbital oedema.

All seven patients underwent plasmapheresis and immunosuppression in a similar fashion—three or four exchanges of two to three litres each, the plasma being replaced by fresh frozen plasma, plasma protein fraction, and saline. Immunosuppression with a combination of prednisolone and azathioprine was started after the last plasmapheresis session in all patients except the first, the one reported already. In this patient immunosuppression was carried out only during the second plasmapheresis when a clinical and immunological rebound had occurred. The four patients with acute changes responded with a reduction in periorbital oedema, conjunctival injection, chemosis, and exophthalmos within two days of the start of plasmapheresis. Changes which began clearly before immunosuppression continued during the phase of immunosuppression. In both cases with papilloedema the swelling of the optic disc diminished and the visual acuity (which was down to distinguishing light from dark in one patient) was improved. In the other patient with papilloedema a regression of exophthalmos of over 6 mm occurred. In the three patients with more slowly developing exophthalmos, no significant response occurred following either plasmapheresis or immunosuppression.

Our experience would suggest that in rapidly developing acute exophthalmos due to Graves's disease plasmapheresis is potentially a useful measure, for in three out of four of our acutely exophthalmic patients an emergency orbital decompression was avoided and in two of these a significant loss of visual acuity was reversed.

As far as the case report of Dr Lewis and others is concerned, it would be useful to know if the patient had acute or fulminant changes of exophthalmos, for without these changes their patient would be similar to one of our own who did not respond. The lack of response in such patients is probably due to permanent fibrotic changes in extraocular muscles. In this regard it would be extremely useful to have a simply measured biochemical marker which would predict potential responders. For the moment, however, it appears that one would have to depend on the clinical indications such as those described above; this is not necessarily a compromise since it is mostly in association with these features that the threat to visual acuity occurs. Plasmapheresis is not a treatment for cosmetic discomfort but a possible alternative to orbital decompression. We agree that this procedure needs further assessment.

P DANDONA
N MARSHALL
S BIDEY
A W NATHAN
C W H HAVARD

Metabolic Unit,
Royal Free Hospital,
London NW3 2QG

Autonomic neuropathy in the Guillain-Barré syndrome

SIR,—Further to your correspondence regarding heart rate variation in diabetes mellitus and in tetraplegic patients (19 May, p 1353) we would like to report a case of Guillain-Barré syndrome in which serial tests showed the presence and then resolution of an autonomic neuropathy.

A 30-year-old man presented to the casualty department with a seven-day history of numbness paraesthesiae of both legs and hands and a left facial weakness which had been present for two days. On examination, his temperature was 37.2°C; pulse rate 124 beats/min, regular; and blood pressure 120/80 mm Hg lying down, 110/80 mm Hg standing. There was a left lower motor neurone facial palsy, a proximal weakness of all four limbs, and sensory loss of a glove and stocking distribution with absent deep tendon reflexes. Investigations: haemoglobin concentration 15.9 g/dl, white blood cells (WBC) $10.5 \times 10^9/l$; cerebrospinal fluid WBC $< 1 \times 10^6/l$; protein 2.3 g/l. Electromyography showed slowing of sensory and motor conduction.

A diagnosis of Guillain-Barré syndrome was made and corticosteroid therapy started. In view of the marked resting tachycardia serial tests for autonomic neuropathy were performed. The heart rate response to standing was conducted as described by Ewing *et al*¹ and the "30:15 ratio" derived. The variation in heart rate during respiration was recorded by continuous electrocardiographic monitoring during deep breathing (six deep breathing manoeuvres in one minute) and the E:I ratio of the mean of the longest R-R interval during maximal expiration to the mean of the shortest during maximal inspiration was calculated as described by Sundkvist *et al*.² For the first three days of his admission there was a persistent tachycardia and both the "30:15" and the E:I ratios were compatible with vagal neuropathy and autonomic dysfunction. His neurological signs were unchanged. On the fourth day, however, these ratios returned to within the normal range. This was followed by a gradual resolution of the neurological deficit.

The Guillain-Barré syndrome has been associated with a variety of circulatory abnormalities³ and vasomotor disturbances have been accepted as a sudden cause of death.⁴ Thus autonomic function should be

monitored closely in this syndrome, both to assess progress and to provide objective parameters with which to assess therapy.

M E EDMONDS
R D STURROCK

Department of Therapeutics,
Westminster Medical School,
London SW10 9TH

- ¹ Ewing, D J, *et al*, *British Medical Journal*, 1978, **1**, 145.
² Sundkvist, G, *et al*, *British Medical Journal*, 1979, **1**, 924.
³ Birchfield, R I, and Shaw, C-M, *Archives of Neurology*, 1964, **10**, 149.
⁴ Appenzeller, O, and Marshall, J, *Archives of Neurology*, 1963, **9**, 368.

Diving and hypothermia

SIR,—Another two divers in the North Sea have died from hypothermia and I should like to add to the recent contributions on this subject (5 May, p 1182; 9 June, p 1566; 25 August, p 494).

Divers under water lose heat from the body surface and through respiration, the latter in two parts—(a) the humidification of dry inspired gas and (b) absolute warming of the cold inspired gas. With a helium-oxygen respiratory mixture the absolute warming part of the respiratory heat loss becomes much more important than in air. Under normal circumstances heat supplied from the support ship to the diving bell via the umbilical cord counteracts the heat loss; but in any accident normal sources of power and heat will almost certainly be lost, as happened in the Thistle field, or at best reduced. When this happens the men are in trouble and emergency equipment should therefore be effective without requiring any outside source of power.

Respiratory heat loss could be reduced by means of a heat exchanger which also acts as a condenser humidifier. A soda-lime-filled canister, as used in anaesthetics but with the addition of insulation, could fulfil this need. The soda-lime granules would initially act as a passive-condenser humidifier and heat exchanger, but as the expired carbon dioxide reacted with the soda lime to produce heat and moisture the system would gradually change to one providing a positive heating effect. Of course, as the soda-lime became exhausted the canister would revert to a passive heat and moisture conserver. A single canister should nevertheless provide about six hours of positive heating and CO₂ absorption.

The provision of the insulated canisters would encroach on the space in the diving bell but a space of 30 × 15 cm diameter per man might not seem excessive for an emergency. The other problems would be (a) fitting the canister into the diver's breathing system; (b) a slight increase in resistance to breathing; and (c) a gradual increase in dead space as the soda lime became exhausted.

E LL LLOYD

Department of Anaesthetics,
Royal Infirmary,
Edinburgh EH3 9YW

"Herbal" medicines and rheumatoid arthritis

SIR,—Dr P G J Forster and others (4 August, p 308) rightly warn against the use of Chuei-Fong-Tou-Geu-Wan pills apparently imported from Holland, for the treatment of

rheumatoid disorders. However, they did not need to refer to a newspaper as a source of reference, since the matter has received wide publicity in the Dutch medical press.

After the first warning that analysis of such pills had shown the presence of indomethacin and dexamethasone, and that cases of Cushing's syndrome and withdrawal symptoms after stopping treatment had been reported,¹ a case similar to Dr Forster's was published,² involving a patient who had been using 12 pills daily containing an average of 75 mg indomethacin, 112 µg dexamethasone, and small quantities of diazepam and hydrochlorothiazide. These pills had been manufactured by the Nan Lien Pharmaceutical Co Ltd in Hong Kong. Similar pills from the Singapore subsidiary of the same firm were shown to be composed of prednisone 0.4 mg, hydrochlorothiazide 4 mg, chlorthalidone 0.5 mg, chlorpheniramine maleate 1.3 mg, and thiamine disulphide 5 mg; whereas the pills marketed by the Shou Sing Pharmaceutical Co Ltd in Taiwan contain varying (0.6–6 mg) amounts of phenylbutazone, about 8 mg of aminopyrine, and some thiamine. Moreover, the Yi Chung Tai Medical Manufacturing Co Ltd in Taiwan markets Chi-Shi-Ton pills containing 8.1 mg paracetamol, 0.26 mg ethaverine hydrochloride, 2 mg chlorzoxazone, 0.55 mg diazepam, 1.9 mg caffeine, and some thiamine.³ In none of these cases was the presence of these drugs mentioned on the package or the directions folder. Obviously patients suffering from rheumatoid arthritis run great risks in the unauthorised use of such adulterated pills.

Though marketing—mostly by small Chinese dealers—of these pills in the Netherlands is alleged, and since October 1978 has been officially condemned, a total embargo on this dangerous practice seems almost impossible to enforce. Patients should therefore be clearly warned against the use of any Chinese so-called herbal pills. This is not the only example of its type; similar instances (Amborum Spezial F, Tsai-Tsao-Wan, "nose pills," and Swasahar) have been reported from Germany, Australia, and the United States.⁴

L OFFERHAUS
M N G DUKES

Division of Pharmacotherapy,
Central Drug Inspectorate,
Ministry of Public Health and
Environmental Hygiene,
Leidschendam, The Netherlands

H M SMITS

State Institute for Drug Research,
Leiden, The Netherlands

¹ Offerhaus, L, *Nederlandsch Tijdschrift voor Geneeskunde*, 1978, **122**, 1633.

² Uitdehaag, C M J, *Nederlandsch Tijdschrift voor Geneeskunde*, 1979, **123**, 1009.

³ Central Drug Inspectorate, *Nederlandsch Tijdschrift voor Geneeskunde*, 1979, **123**, 1347.

⁴ Dukes, N M G, (editor), *Side Effects of Drugs Annual* 3, Amsterdam, Excerpta Medica, 1979.

SIR,—It might be of interest to your readers that in addition to the Chinese herbal medicine Chuei-Fong-Tou-Geu-Wan, on which Dr P J G Forster and others report (4 August, p 308), four more exotic drugs—Amborum spesial F, Tsaitsoan, Nose Pill, and Swasahar—claimed to be pure herbal remedies, were found by the German Medicines Inspection Institute (Deutsches Arzneiprüfungsinstitut, DAPI), an independent laboratory of the pharmaceutical profession, to contain dexamethasone or prednisolone or both. The