Towards the end of the procedure the target concentration was set to 0 µg ml⁻¹ so that the reduction in calculated propofol concentration could be followed. The patient did not commence spontaneous respiration until the calculated propofol concentration decreased to less than 2 µg ml⁻¹. Respiration was slow and shallow initially but improved with time. There were no signs of awakening or response to voice even when the predicted propofol concentration was less than 1 µg ml⁻¹. He was observed for a further 30 min with no change. He was then transferred to the intensive care unit where he was observed while still breathing spontaneously through the tracheal tube, attached to a 7-piece. Arterial oxygen saturation and end-tidal carbon dioxide remained satisfactory throughout. Approximately 1 h after the end of surgery, he began to show signs of awakening and extubated his own trachea. His subsequent postoperative course was uneventful and the following morning he was discharged to the general ward.

Recommnded settings for target-controlled propofol infusion systems are 3-4 µg ml⁻¹ for induction and 2-6 µg ml⁻¹ for maintenance of anaesthesia, depending on age, patient fitness, degree of surgical stimulation and use of nitrous oxide [4]. In the absence of other guidelines, we decided on values appropriate for a young, reasonably healthy male with a moderate degree of surgical stimulation. Although this anaesthetic technique was successful in our patient, the prolonged recovery time would seem to indicate that target concentrations at the lower end of the range should be used in patients with myotonic dystrophy.

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Sir,—The uneventful use of a propofol infusion in a patient with myotonic dystrophy has been described previously [1], albeit without the use of a computer-controlled infusion. Prolonged recovery after an induction dose of the drug has also been reported without the use of a computer-controlled infusion. Prolonged recovery after an infusion has also been reported [2, 3], and the occurrence of prolonged recovery after an infusion is therefore not surprising. In one of the references quoted [4], the injection of propofol appeared to induce an episode of myotonia, so the assertion that it was "used successfully" might be viewed with some reservations.

The phenomenon of delayed recovery has been reported with myotonic dystrophy, and the occurrence of prolonged recovery after an infusion is therefore not surprising. In one of the references quoted [4], the injection of propofol appeared to induce an episode of myotonia, so the assertion that it was "used successfully" might be viewed with some reservations.

The cited case is very similar to the description of one which was renotated to me by Ernesto Frias, senior anaesthetist, as having occurred shortly before I visited Santiago, Chile in 1964. Again there were two operating tables in the room with two patients and two surgical teams. The resulting explosion caused several deaths and multiple injuries as well as destroying the operating theatre itself. The circumstances were set up by an operating room orderly who transfused oxygen into a cyclopropane tank and even put it back on the anaesthesia machine.

A similar situation occurred at the Kupat Cholim Hospital in Israel shortly before my visit there in 1951. According to Hans Wold, chief anaesthetist, in that instance a static spark ignited a leaking slow flow from that tank with a resulting detonation back into the explosive mixture in the tank. The nurse died as a result of shrapnel from the exploding tank.

Both of these incidents were caused by transfusing oxygen from a larger supply into small tanks and by less knowledgeable individuals who did not fully appreciate the dangers involved in mixing gases.

Cyclopropane had been used at the University of Wisconsin for more than 15 yr after its introduction without any accident relating to ignition and explosion. As its general use spread to other parts of the world however, there were some dramatic episodes which dampened the enthusiasm for this otherwise valuable and versatile agent.

L. E. MORRIS
Bainbridge Island
Western Australia


Sir,—Professor Morris is correct in saying that there was also oxygen in the cyclopropane cylinder. Limitation of space prevented the inclusion of much detail in the review. Dr Walter, writing in 1964, described the incident as follows:

"Upon opening the valve on one of the cylinders supposedly containing only cyclopropane, the cylinder exploded... This explosion dislodged the second cyclopropane cylinder from its machine and the cylinder valve broke off releasing cyclopropane which ignited and burned as a torch... The valves of the remainder of the cylinders were broken, but only one cylinder of oxygen was dislodged from the machine... Three ether containers became involved... with a resulting intense fire... Subsequent investigation revealed that the cylinder had been partially filled with oxygen by error and subsequently charged with cyclopropane. The cylinder valve, regulators, hoses, etc, were not suitable for oxygen. It is also likely that the cyclopropane apparatus was not kept as clean of grease, dust, etc, as is necessary for oxygen service. In addition, it is possible that the accidental mixture of cyclopropane and oxygen was in the explosive range. Evidence indicates that the cylinder valve was opened more rapidly than usual. This was possibly a factor in ignition either by producing heat from adiabatic compression or friction or possibly by creating a static spark."

No reference is given for this incident, nor is the year in which it occurred stated. The article does not state to what extent the cylinder may have been filled with oxygen before the error was realized or whether an attempt was made to rid the cylinder of...
Impressions of British anaesthesia

Sir,—The impressions of British anaesthesia written by Dr E. Carden, an anaesthetist from Romania and published in your journal [1], serve as a reminder of the significant contribution that British anaesthetists have given to world medicine in general and to Commonwealth countries in particular.

Many, and for the wrong reasons, do not acknowledge how the standards set and practised in Britain directly influenced the progress of anaesthesia in those countries. The days of Empire have gone but certain good effects persist. The reasons for the reluctance to give credit where credit is due vary from misguided extreme nationalism, to fear of irritating political nations with anti-British rallying cries and to some lack of awareness of history.

Some Commonwealth countries now have their own training schemes and examinations which are of an extremely high standard and are second to none. It is wise and honest to remember that the centres of excellence on which these depend were set up, at least in part, by clinicians who had their specialist training in Britain.

Some might cynically insist that Commonwealth doctors working in Britain in decades past often provided the backbone and labour for National Health Service hospitals at relatively low salaries, and that in the vast majority “foreign” doctors specializing in Britain presented no real threat to British medical graduates aspiring to senior positions because most of us planned to, and in fact did, return to our own countries.

I believe that the system worked to the mutual advantage of both sides. Britain with its very high standard of medicine, with an advanced system of training and examinations requiring “uncompromisingly high levels of knowledge”, served as a focus for Commonwealth doctors, most of whom had basic medical degrees recognized in Britain. The National Health Service which was set up just after the war ensured that excellent expertise was available even in less well known hospitals. Our British consultants, who were all aware of our aims (i.e. to train in our chosen specialty, to gain experience and to pass examinations), were in the vast majority excellent teachers, gentlemen (and gentlewomen), and good bosses.

An indirect but very tangible overflow to the old dominions and colonies was the insistence of the health authorities of those countries that applicants for consultant posts should hold a higher qualification or its equivalent which in practice implied membership or fellowship of one of the Royal Colleges in Britain.

I am firmly convinced, and grateful, that many senior British doctors felt a duty towards their Commonwealth registrars, house officers and senior house officers. A duty, that is, to ensure that they passed on their skills, knowledge (and ethics) so that their young doctors would pass their examinations and consequently be of benefit to their own people. One other positive aspect of great importance was the great ease the Commonwealth doctors felt in each other’s company and the sense of belonging we felt in British hospitals. We felt at home!

Talking of that time, the epoch of the twilight of Empire, one often remembers the contrast between the almost apologetic tone of some of our teachers and the self-assured feeling we had when we went to Britain not as intruders but as another home. A home away from home; a place we went to by right of birth, that is the other side of the coin of colonialism.

Yet the missionary zeal of British anaesthetists was not confined to the British Commonwealth. Some years ago I attended the meeting of the British Association of Anaesthetists, which was held in Sheffield. There I met a senior Italian anaesthetist who, in reply to my question of what had brought him there, described to me how, with the war hardly over, he and other bright young Italian doctors had been offered anaesthetic training in Britain, which they accepted!

A similar story was repeated by the President of the German Anaesthetists’ Association at the closing ceremony of the combined anaesthetic meeting held in Bonn some years ago. He also described how young German doctors had received their anaesthetic training in Britain just after the war. Examples of real statesmanship!

Therefore, it is not only Commonwealth countries who owe much of their development in anaesthesia to those pioneers who had trained in Britain and returned to their countries highly enriched and qualified to build a system of service, training, and serious and respected examinations and qualifications.

At the worst time of the war when we were on our knees, when the only free lights in Europe were Britain and Malta GC, my country of birth, a message had flashed from the youth of Malta to the youth of Britain, which said “we salute you worthy sons of an un conquered nation”. The time for such emotional (even if deserved) phraseology is gone. However, I feel strongly that it is just and fitting that our debt should be acknowledged and put on record before some politicians manage to rewrite and falsify history completely.

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Australia

Mishap or negligence

Sir,—We read with interest the “Symposium on mishap or negligence”, particularly the article by Davies and Robson outlining the situation in Australasia.

The decision in the case of Rogers v. Whitaker [1] indicated that doctors have a duty to warn. This was defined as “disclosing adequate information” about the “material risk” of the proposed treatment. A risk was considered “material” if a “reasonable person” would attach “significance” to the risk. In the case cited, the judge held that the doctor should have warned the patient of the risk of sympathetic ophthalmia (estimated as having an incidence of 1 in 14000) which resulted in the patient becoming totally blind.

Six months after this judgment we decided to survey all the fellows of the Australia and New Zealand College of Anaesthetists to find out how many of our colleagues warn patients before operation about “material risks” directly related to anaesthesia. Our results are shown in table 1. The response rate was 68% (out of 1694).

It would appear that the majority of Australasian fellows are not yet incorporating the Rogers v. Whitaker judgment into their practice.

<table>
<thead>
<tr>
<th></th>
<th>Not discussed</th>
<th>Discussed not documented</th>
<th>Discussed and documented</th>
</tr>
</thead>
<tbody>
<tr>
<td>Death</td>
<td>88%</td>
<td>8%</td>
<td>3%</td>
</tr>
<tr>
<td>Neurological injury</td>
<td>96%</td>
<td>3%</td>
<td>1%</td>
</tr>
<tr>
<td>Awareness</td>
<td>92%</td>
<td>6%</td>
<td>1%</td>
</tr>
<tr>
<td>Anaphylaxis</td>
<td>91%</td>
<td>7%</td>
<td>2%</td>
</tr>
<tr>
<td>Aspiration</td>
<td>90%</td>
<td>7%</td>
<td>2%</td>
</tr>
<tr>
<td>Dental damage</td>
<td>75%</td>
<td>16%</td>
<td>9%</td>
</tr>
<tr>
<td>Failed</td>
<td>97%</td>
<td>2%</td>
<td>1%</td>
</tr>
<tr>
<td>Intubation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extravasation</td>
<td>95%</td>
<td>3%</td>
<td>1%</td>
</tr>
<tr>
<td>Failed block</td>
<td>36%</td>
<td>55%</td>
<td>8%</td>
</tr>
<tr>
<td>Neural damage</td>
<td>71%</td>
<td>22%</td>
<td>6%</td>
</tr>
<tr>
<td>Seizures</td>
<td>94%</td>
<td>4%</td>
<td>1%</td>
</tr>
<tr>
<td>Arrhythmia</td>
<td>97%</td>
<td>2%</td>
<td>1%</td>
</tr>
<tr>
<td>Hypotension</td>
<td>57%</td>
<td>30%</td>
<td>4%</td>
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</table>


Table I Percentage of fellows of the Australia and New Zealand College of Anaesthetists who warn patients before operation about “material risks” directly related to anaesthesia.