Safety of medical gas cylinders with finger control valves

To the Editor: Oxygen cylinders fitted with a new plastic finger control valve have recently been introduced at Groote Schuur Hospital. We wish to report a serious incident relating to these finger control knobs.

A finger control knob of one of the cylinders broke, resulting in the user being unable to open the oxygen cylinder (Fig. 1). Once the knob was broken there was no back-up mechanism to open the cylinder. Because oxygen is often used in life-saving situations, such a malfunction could have had serious implications for patient safety.

![FIG. 1. A potentially lethal situation — see text.](image)

The incident was reported to the South African Bureau of Standards (SABS), which examined the cylinder and the finger control knob. The knob is apparently manufactured out of polycarbonate, normally a very strong plastic. On exposure to organic solvents the plastic changes its physical characteristics and becomes very brittle (a few drops of Tippex thinners applied to two finger control valves and the plastic broke and fell to pieces within 2 minutes). Use of solvents in hospitals is common (cleaners, anaesthetic agents, etc.) and might well have been the cause of the finger knob on our cylinder breaking.

It is our opinion that all such cylinders should be withdrawn from use until such time as SABS-approved finger control knobs can be fitted. We would also like to see a back-up mechanism available to open the cylinder in the event of a finger control knob breaking.

PETER GORDON
J. OZINSKY
R. BURGER
Department of Anaesthetics and Engineers Department
University of Cape Town and Groote Schuur Hospital
Cape Town

Centenaries

To the Editor: I had hoped that there might appear in the *Journal* this year some recognition of the fact that Galen, of medical eminence, died 1800 years ago; or something to mark the quincentenary of the birth of Paracelsus, who was at the centre of Renaissance medicine; or the bicentenary of the demise of John Hunter, who is among the few greatest surgeons of all time — lest they be forgot; but nothing of the kind has been published. So, before the year ends, will you let it be recorded that this year, 1993, is the centenary of the first issue of the Medical and Pharmacy Register for the Colony of the Cape of Good Hope which accorded with the Report of the Colonial Medical Council for the year 1892?

The Register contains the names of 498 medical practitioners whose last known residences ranged from Cape Town in the far south to as far as Canterbury, England, in the far north and taking in Namaqualand, British Bechuanaland, Mashonaland and Matabeleland. Among them are the names of practitioners well known in their day for various medical activities and some still recalled today for their pioneering efforts.

There was one man of the cloth, the Rev. William Beste in Stutterheim, who had been licensed to practise there 'under proviso to Section 18 of Act 24 of 1891'. There were three Harrleys of whom two achieved additional distinction. Edmund Baron Hartley, VC, of King William's Town, was born in Ivybridge in Devon, England, on 6 May 1847 and served as surgeon-major (later colonel) in the Cape Mounted Rifles. Already decorated with the CMG he was awarded the supreme recognition for valour for his conspicuous bravery in the Basuto War. The other distinguished Hartley was William Darley, the founder of the *South African Medical Journal* by changing the name of his journal, the *South African Medical Record*, and selling it as the *South African Medical Journal* to the MASA. May his name, also, ne'er be forgot.

THEODORE JAMES
16 Spring Gardens
Pinelands, CP
LETTERS / BRIEWE

Certification of occupational asthma and the submitting doctor

To the Editor: A recent letter in the SAMJ informed readers of the scheduling of occupational asthma as a compensable disease and briefly described the report which medical practitioners should compile in submitting cases. The contents of the report will be used by a certification panel to confirm the diagnosis (certify the case) and determine the level of disability. Since objective measurements are usually required to certify occupational asthma and determining disability is problematic, in part because of the variable and exposure-specific nature of the condition, the report will have to be detailed and appropriate if the panel is to work reliably and quickly.

Exactly what constitutes such a report will become clear as the panel gains experience, but in the meantime the National Centre for Occupational Health (NCOH) and the Chief Medical Officer of the Workmen’s Compensation Commissioner (WCC) have produced a description of a report we consider may serve its needs. Table I is a summary of this report; a more complete version is available from the Chief Medical Officer, WCC, Pretoria. A method for obtaining prolonged measurements of peak expiratory flow rates is available from the Occupational Medicine Department, NCOH, Johannesburg. The panel’s task is likely to be easier if the report is written by a medical practitioner with interest and experience in occupational asthma, and we therefore recommend that, where possible, patients be referred to these practitioners.

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* The actual test results (e.g. flow volume loops) should be submitted.
* If unavailable submit case anyway.

Missing information should be explained (e.g. test of sensitisation unavailable).

In passing, it is worth noting that if a worker is booked off work on medical grounds, monthly progress medical reports (W.C.L.5) are required by the WCC to provide temporary disablement payments (partial payment of wages) to the worker. This means that workers unable to work because of occupational asthma can claim temporary disablement provided a medical practitioner submits the claim and completes a progress medical report each month that the worker is medically unable to work.

We all know how time-consuming and tedious it can be to submit cases for compensation. In the long run, though, the effort will be rewarded by better and quicker decisions by the panel - we hope this realisation will relieve some of the frustration inherent in complex medicolegal procedures.

D. REES
C. PANTER
National Centre for Occupational Health
Johannesburg

B. RAUTENBACH
Office of the Workmen’s Compensation Commissioner
Pretoria


Discontinuation of tetanus plain toxoid vaccine

To the Editor: For many years the South African Institute for Medical Research has produced two forms of tetanus vaccine for use in this country, Tetanus formol-toxoid (FT) vaccine (also called plain toxoid), and Tetanus adsorbed (Ads) vaccine.

The Tetanus (FT) (licence No. T527) was developed early this century and was used extensively during World War II, where it afforded excellent protection to troops receiving it. However, it has long been recognised that the adsorbed vaccine has a more reliable and longer-lasting immunising ability.1,2

The Tetanus (Ads) vaccine (licence No. T528) contains purified toxoid and aluminium phosphate adjuvant. It is ideal for primary immunisation, and has been in routine use throughout the world for at least 20 years.3 It has supplant ed the Tetanus (FT) plain toxoid in all developed countries. It can also be used as a booster dose after injury, or at intervals of 10 years to maintain adult immunity.4

There was some controversy during the 1960s regarding the incidence of adverse reactions with the two products.5 Although this was never fully resolved, it appears that the differences were marginal, and that the relative advantage of the FT vaccine was difficult to prove.6 High levels of specific and nonspecific inhaled dust/toxoid are associated with adverse reactions of moderate severity.7

In September 1993 a team of World Health Organisation experts, invited by the Department of National Health and Population Development and supported by UNICEF and the Children’s Vaccination Initiative, inspected the vaccine-producing facilities in South Africa. They have produced a report which, among other things, recommends discontinuation of Tetanus (FT) vaccine.

For the above reasons, and prompted by the WHO team’s recommendations, the SAIRM has decided to discontinue Tetanus (FT) vaccine at the end of 1993. The vaccine will still be suitable for use within the expiry date, and stocks need not be returned.

The production and distribution of Tetanus (Ads) vaccine will be continued. This adsorbed vaccine is as effective as the plain toxoid, and this decision will end the confusion inherent in having two such similar products available.

Clostridium tetani is always with us, and active immunisation is most effective in preventing clinical tetanus.8 Regular 10-yearly boosters for adults will result in life-long protection, and effective immunisation of pregnant women removes the threat of neonatal tetanus, which can be a major killer in rural areas.9

J. VAN DEN ENDE
J. SOUTHERN
South African Institute for Medical Research
Johannesburg


Godlastingering
Aan die Redakteur: Dit blyk uit die hoofartikel' van Oktober 1993 se SAMJ dat een van die redes hoekom ek my onnau voel om amptelik lid van die MVSA te wees, steeds teenwoordig is. Dit ten spyte van sg. 'geen diskriminatie teen godsdiens .. .' nie.
'I have heard it alleged that the reason Bethlehem, OFS, missed out on the honour that eventually went to Bethlehem, Palestine, was the fact that, despite an intensive search, there were simply not three wise men to be found in the Orange Free State!'
Dit is om die minste te se oneenwoorlik en eintlik Godslasterlik om so om te gaan met die Heilige Skrif (Bybel) en spesifiek met die sponende verwysing na die menswoordingsgebeurtenis van God-die-Seun, Jesus Christus ons enigste Verlosser en Salgmaker.
Daar is niets so onverdraagsaam as die liberalisme nie. Indien so'n opmerking enigsins gemaak was ten opsigte van enige ander godsdiens of geskrif, soos bv. die Koran, sou ek u u pos kwyt wees en sou die SAMJ verbode verklaar geweet het.
A. G. BURGER
Beaam Pretoriusstraat 134
Wonderboom
Pretoria


Cholera outbreak, Hlabisa health ward, Zululand
To the Editor: Since February this year there has been a sizeable cholera outbreak in the Hlabisa health ward. The experience of the first 46 cases (up to June) has been reported. However, the epidemic continues. To date a total of 77 cases have been proved by culture (Fig. 1) and more than 600 patients with presumed cholera have been treated at a residential clinic and in the hospital outpatient department. It is not known how many have been treated at home or by general practitioners. A small number of cases have been reported from neighbouring hospitals.
The male/female ratio was equal, and patients' ages ranged from a few months to 78 years, confirming that this is an outbreak in a previously uninfected area. Only 4 patients have died, but relatives have reported other deaths at home.
Recently a third, and geographically distinct, part of the health ward has become affected, and this is a cause for great concern.
The Health Inspectorate has co-operated with the hospital very effectively in responding to the epidemic. While most of the population of this health ward have no access to safe water or human waste disposal, epidemics of this type will continue and may spread.

Colleagues are alerted to the possibility of cholera in the differential diagnosis of patients with diarrhoea. The vibrio was typed at the Department of Medical Microbiology, University of Natal, as Vibrio cholerae El Tor.

DAVID WILKINSON
Hlabisa Hospital
Hlabisa, Zululand


Foreign-trained doctors
To the Editor: The editorial on foreign-trained doctors is unfortunately superficial and does not correspond with the facts.
Transkei is quoted as an example, mentioning Ugandan, Ghanaian and Kenyan doctors there. I have practised in this area for more than 25 years and claim a little insight into local circumstances. Before 1980 there were at least 14 hospitals in Transkei with South African-trained staff, which provided medical services well known to be excellent. By 1980 the shortcomings of the Transkeian civil administration and the lack of security of person and property had become glaringly obvious despite funding of billions of rands. The spate of recent murders and robberies is absolute confirmation. Many doctors therefore understandably relocated elsewhere and some were forced to leave, as has happened in rural hospitals in the Transvaal. These could not be replaced.

Because circumstances in Ghana, Uganda and Kenya are presumably so much worse than in Transkei, at least 200 graduates from these countries (of whom it cannot be said that their services are not required there) have moved to Transkei.

What is happening now is that every day considerable numbers of Transkeian patients are presenting at Cape hospitals through the Transvaal. These could not be replaced.
hospitals. I need not detail what their complaints or objections are as I do not specifically enquire. Similar complaints have appeared in the media, emanating from the public and patients, concerning other hospitals in this area staffed by expatriates.

Doctoring is doctoring and has nothing to do with rural settings or specific training. No doctor can be forced to locate himself at the behest of the administration. Patients and doctors indicate the prevailing circumstances with their feet and will ignore SAMJ editorial comment.

W. M. P. FENNELL
24 Elton Street
Southernwood
East London, CP


Clearly Dr Fennell completely missed the point of my mini-editorial, which was not to defend the political developments, the civil administration or the "space of recent murders and robberies" in Transkei (although it bears pointing out that doctors have not been dissuaded from setting up shop in locations such as Johannesburg, where crime is more prevalent and more vicious). The purpose was simply to reiterate incontrovertible facts. It does not do to rule out or ignore clearly palpable preconceptions against Transkei, and visit hospitals such as Riebeek and see for himself the good and caring medicine that is being practised there under the most difficult of circumstances. South African-trained doctors do not have an exclusive monopoly on competence and compassion, as some would have us believe. On the other hand, 200 doctors operating within a deteriorating system cannot adequately serve 3,5 million people. Therefore, East London and the rest of the Cape and Natal can expect to continue to receive Transkeiian patients (whom Dr Fennell seems to regard as alien intruders) seeking less crowded, better maintained and better equipped health care facilities — and why not? They are no less entitled to national resources in East London than Dr Fennell's immediate neighbours, and the sooner we all get used to that fact, the better. — Editor

Morality and AIDS

To the Editor: I would like to make some comments in response to the many articles, opinions and letters concerning AIDS in the SAMJ of September 1993. Broadly speaking, these articles come to the following two conclusions: (i) society has a responsibility not to blame or arouse guilt in anyone whose lifestyle may place them at risk of acquiring AIDS, since such an attitude lacks compassion and is judgemental, indeed political, and other factors giving rise to poverty and inequalities are more worthy of blame and attention; and (ii) the major objective of AIDS education is to distribute condoms widely and effectively and to promote a culture of condom acceptance, since although monogamy and abstinence from extramarital sexual intercourse are the most effective answers such a regime is impractical and unrealistic given the short time available to counter such a rapidly escalating threat.

I object to these two conclusions on the following grounds. Firstly, in spite of purporting to eschew moralising, the view summarised in point (i) above is the conclusion of a particular moral belief, and this belief therefore undergirds and is the starting point of most of our AIDS policies. This moral premise can be stated as follows. Everyone has an invariable and absolute right to choose their own personal morality. Nobody else is entitled to impose an alternative morality or outlaw a person's moral behaviour unless it is clearly antisocial. The absolute starting point is of course people themselves, human beings and their own right to choose, which in a nutshell is the religion of humanism (religion being the world-view by which a person shapes his understanding of origins, destiny and purpose).

However, another religion, Christianity, states that it has a different absolute starting point, namely God and his right to choose (by virtue of being Creator) how human beings should behave.

So there is a problem. My religion of Christianity calls for arousal of an individual's responsibility, accountability and guilt, not its diminution. This may be called prejudice, but as I have shown this depends on our moral starting point and what is prejudice to one person is only a logical outworking for another. Non-judgemental tolerance of a multitude of lifestyles and behaviour starts with a humanist absolute. Compassion and care are not associated with our starting moral positions but with the resulting personal commitment to see other people of whatever persuasion helped to true health. The routes may be very different but both moral starting points outlined above, humanist and Christian, can give rise to compassion.

Secondly, with regard to point (ii) above I object to the current AIDS education policies because in spite of acceptance of the validity of abstinence and monogamy this solution is discounted for pragmatic reasons. Surely, once the effective answer is known all our finance and energies should be channelled into overcoming pragmatic obstacles rather than ruling it out or getting it miniaturised. I believe this happens because the overriding moral starting position does not accept an exclusive behavioural lifestyle on an a priori moral basis, in spite of its being clearly demonstrated as the best.

The challenge for all doctors involved with AIDS policies is firstly to know their moral starting position — is it subjective humanism or objective theistic revelation? It just will not do to say we have no religion, or no moral position, as I hope I have shown that our pre-suppositions are overwhelmingly moral and religious. There is always an absolute starting point — the question is, is it man or God?

N. R. BEATSON
Montebello Hospital
Dalton, Natal

Dr Beatson should not have a problem, since there is no law forbidding him to use Christian conversion as a device to sway his moral and religious. There is always an absolute starting point — the question is, is it man or God? — Editor

Consent to HIV testing

To the Editor: The letter from Dr Fennell is disturbing and somewhat revolting and needs an informed reply. Dr Fennell argues that informed consent for HIV testing is 'utter rubbish', asks why informed testing should only apply to this test, and suggests that it is a result of 'vociferous and strident clamour from homosexual groups'. I failed to understand how he sees consent for HIV testing as being 'part of a frantiec endeavour to minimise their [homo-sexual] association to eschew moralising', or why it 'has racial overtones on account of the incidence of the disease among blacks'. He further justifies his position by stating 'I simply tell the patient I intend doing a rectal examination, for example ... Elaborate counselling or "informed consent" is irrelevant.'

I would rather not hear any more of his 'examples'.

He concludes: 'The whole sorry charade is simply another rotten example of positivist legal activity, i.e. legal activity to achieve a specific social goal and trying to negate natural law.'
Dr Fennell is clearly ill informed, misled and urgently in need of some education in basic human and patient rights.

Firstly, informed consent is a patient’s right for any procedure. That it is often overlooked, especially in testing for apparently socially and physically ‘benign’ conditions, does not mean that this is acceptable and that there is an abnor-

mally lofty or fuss made about HIV tests as stated above. It means that an important and essential component of the proper and required doctor-patient contract is generally being overlooked.

Secondly, the need for informed consent is especially highlighted when doing procedures or tests the results of which can fundamentally change the course of a patient’s life. In this regard I am not specifically referring to medical or physical prognosis but to emotional, psychological, social, economic and marital wellbeing. Does any doctor have the right or the audacity to potentially assault or seri-

ously infringe on these aspects of a patient’s well-being, and potentially create terrible psychosocial harm, without the minimum consent to proceed with the offending tests or procedures?

As doctors, we need to put aside our set sexual and racial prejudices, and come to understand the profound implications that a positive HIV test can have on a person’s life. This pertains as much to Dr Fennell’s ‘tribal nomadic peasant’ as to the educated and privileged urban executive or the professor of science at a university.

It is true that obtaining proper informed consent may be difficult, and in some patients it may prove to be impossible; however, it is the duty and responsibility of the health worker to make an honest and sincere attempt to obtain informed consent and all that it implies.

A patient has the right to understand the nature of the (HIV) test and the potential implications of the result of the test on his or her life. It is also the patient’s right thereafter to agree and proceed with or disagree and decline from having the test. There are countless examples of the terrible consequences that befal patients after learning of their HIV status. These include marital breakdown, relationship dis-

asters, pregnant women being left destitute and alone, sui-

cides, job losses, community ostracisation, rejection by family and friends, economic ruin, refusal of medical aids to honour their responsibilities, depression, sadness, anxiety, fear, guilt, shame, embarrassment and sleeplessness, to mention a few.

Obtaining informed consent is merely a process whereby these issues are explained and discussed and the patient is given the right to decide whether he or she wants to go ahead with the procedure. I fail to understand how anyone can argue that this should not be a compulsory aspect of medical practice.

It should also be stated that many patients do not automati-

cally proceed to safer sexual practices or to informing their partners after learning of their positive HIV status. In many circumstances the patient chooses to keep his or her HIV status a secret for fear of the repercussions. Basic pre-

and post-test counselling helps to overcome some of these issues. The counselling also helps patients decide on whether to proceed and have the test in the first place.

We in South Africa have become too used to the abuse of human rights in general, and, in this context, to the abuse of patients in particular. In countries with better records and practices of human rights it would be unthinkable to do an HIV test without proper informed consent.

It is to be hoped that in the new South Africa we will all become more respectful of general human and patients’ rights and that HIV/AIDS will help to challenge and correct previous abuses of these rights.

Informed consent is one of these challenges.

Cost of bilharzia treatment

To the Editor: I write in response to a letter in a recent SAMJ.

MIMS (June 1993) gives the following prices for the two forms of praziquantel available on the South African market: Biltricide — R311,95 for 10 x 600 mg tablets; Cysticide — R657,87 for 100 x 500 mg tablets. Biltricide therefore costs 5,2 and Cysticide 1,3 cents per milligram.

I cannot accept that there is any fundamental difference between the costs of manufacture of these two products. It is my stated policy to provide my patients with the most cost-effective solutions to their health problems. I am deeply disturbed by what I perceive to be blatant profiteering. This naturally casts doubt on other products marketed by Bayer and will definitely flavour my therapeutic decisions when acting in my role as gate-

keeper and health broker.

I have written a similar letter to Bayer and look forward to their reply.

J. R. MORTON
10 Levy Street
Pietermaritzburg


Bayer (Pty) Ltd, Pharmaceutical Division, comments: The co-development of praziquantel by Bayer and Merck, in conjunction with the World Health Organisation, provided a much-needed treatment for schistosomiasis and neurocysticercosis in South Africa.

The dosage regimen for each indication differs significantly, and the Biltricide tablet (600 mg) recommended for schistosomiasis was designed in 150 mg segments for ease of administration in a once-daily dose. The pack size is 10 tablets and in Bayer’s case is subject to the increased cost related to specialised packaging. The treatment of neurocysticercosis requires a three-times-daily dosage regimen for 14 days and therefore economies of scale may be applicable to larger pack sizes currently available. However, the two companies are completely independent of each other and we are not in a position to comment on Merck’s cost or pricing policy.

Bayer is committed to the development of cost-effective medicine for the benefit of the community and constantly strives to provide the highest standards of health for all. The clinical opportunity that Biltricide offers for the eradication of these endemic diseases reflects this commitment.

Payment for insurance work

To the Editor: As Dr Lison’ notes in his letter, the Life Offices’ Association (LOA) enjoys a working relationship with the Medical Association of South Africa, resulting in agreement on medical fees and payment of accounts. We value this harmonious relationship and have found that close co-operation between the two associations has enabled resolution of several difficult problems affecting the medical profession as well as the life insurance industry.

It is important to note that the LOA can only represent the interests of its members, which are most of the registered long-term insurance companies operating in South Africa. It cannot speak for other insurance com-

panies, medical aid schemes, or other insurance consultan-

cies. A list of the LOA member offices has been sent to the MASA and is always available upon request from this office.

We are concerned by the implication that a doctor might resort to manipulation of the information provided, to the benefit of his patient; this would seriously undermine the medical underwriting efforts of the life insurance indus-

try. To this end, we rely on the integrity of the medical pro-

fession to provide full medical information in respect of the


CLIVE EVIAN
28 10th Avenue
Highlands North
Johannesburg

To the Editor: I report similar difficulties to those experienced by Dr Lison in dealing with the AI Insurance Company. After having been promised by the company's Johannesburg office that payment would be made for a medical report at the LOA rate for a personal medical attendant's report, payment was never received. On subsequent occasions when AI has requested a report from my practice I have insisted on providing it on a COD basis only. AI's staff are confused about their own company's policy, or somebody is not telling the truth. My experience has been that AI has succumbed and paid for reports COD when I have been insistent, and I suggest other practitioners follow my and Dr Lison's example in dealing with them on a COD basis only.

S. TOOVEY
PO Box 432
Halfway House, Tvl

Biological effects of a high-voltage electric field

To the Editor: The Department of Anatomy and Cell Morphology, University of the Orange Free State, has completed a project on the above topic funded by the Energy Branch, Department of Mineral and Energy Affairs. The long-term study evaluated the possible effects of a 50 Hz unperturbed electric field of 10 kV/m on mice (in dwellings the maximum field strength is more than tenfold lower).

Several consecutive generations of both an experimental and a control group of mice were housed in an exposure room under controlled conditions. The experimental group was exposed to an electric field of 10 kV/m from conception until they were sacrificed. Generations 1, 2, 4 and 5 were sacrificed at the age of 5 months and generations 3 and 6 at 18 months, while generation 7 was left to die naturally. A wide spectrum of biological variables was studied: fertility, growth, histological appearance of certain organs, haematological measurements, longevity, deaths and external congenital malformations.

Negative results (where no effect was shown) were fertility, incidence of external congenital malformations and structure of thyroid gland, jejunum and cerebellum. Positive results (an effect was shown) included retarded growth, deaths occurring before the age of weaning, shortened lifespan and signs of stress-related response in the adrenal glands.

The results indicate that the electric field of 10 kV/m did not produce an acute response in the mice. Effects noted occurred because of physiological responses which, on a long-term basis, led to a shortened lifespan in the mice.

Copies of the final report, entitled 'A study of the biological effects of a high voltage 50 Hz electric field', are available from the library, Department of Mineral and Energy Affairs, Private Bag X59, Pretoria, 0001, at a price of R45.00 each.

P. J. HUGO
Director-General
Department of Mineral and Energy Affairs
Pretoria
Ethnicity and primary angle-closure glaucoma

To the Editor: The editorial comment aroused by my recent article raises interesting and pertinent issues.

While it is not possible to speculate on the ethnic background of individual patients in this study, the histocompatibility profile of a group of 97 coloured patients with primary angle-closure glaucoma at Groote Schuur Hospital was statistically similar to that of a control group. The study showed that so-called 'coloured' patients residing in the Cape Peninsula were more likely to present with chronic angle-closure glaucoma than with acute angle-closure glaucoma. While a similar pattern has been reported in blacks and orientals, the opposite situation is found in whites, who are more likely to present with acute rather than chronic angle-closure glaucoma. It has been shown that ethnic differences in the anatomical structure of the ocular anterior segment are responsible for these different presenting features.

In our glaucoma clinic at Groote Schuur Hospital the ratio of primary angle-closure glaucoma to primary open-angle glaucoma in coloureds is 1:1, whereas in blacks the ratio is 1:6 and in whites 1:4. It is only in South-East and East Asia that primary angle-closure glaucoma has been reported to be more common than primary open-angle glaucoma. The predisposition to primary angle-closure glaucoma in coloureds therefore appears to have been inherited from their South-East Asian (Malaysian/ Indonesian) ancestors.

A recent population-based study undertaken in the village of Mamre, near Cape Town, demonstrated that the prevalence of primary angle-closure glaucoma in people over the age of 40 years was 2.3%, significantly higher than that reported in Wales (0.1%) and in South African blacks (0.25%). The disease affected this community across the entire socio-economic spectrum.

While socio-economic status is an important determinant of visual impairment and blindness, this is not the case when the type of primary angle-closure glaucoma or the prevalence of chronic angle-closure glaucoma is considered. The differences are related to inherited anatomical differences in ocular structure, and this reason one cannot fail to stress the ethnic background of the patients studied when discussing primary angle-closure glaucoma.

JOHN SALMON
Department of Ophthalmology
University of Cape Town


I thank Dr Salmon for this illuminating explanation. — Editor

Alternative medicine

To the Editor: In discussing what he calls alternative medicine (AM) as opposed to orthodox medicine (OM), Professor Pantanowitz lists seven factors which maintain the popularity of AM. His fourth factor is 'the powerful "belief system" effect'.

In my opinion this is not simply one factor among several but by far the most significant one. Magic in medicine and faith healing are far older than rational medicine, than OM committed to the scientific method, even if much of OM today is still guesswork, unpredictable, even magical and based on faith in the physician and his methods, but in principle is grounded in the scientific method.

Sickness, suffering, crippling and death is the very stuff of religion. In the valley of the shadow of death religion is there; so it has been and so it will continue to be. Why life, where suffering, what is death, are, after all, the core enigmas of religion, all religions. Where crippled life and looming death present, religion must also speak; it cannot be otherwise.

It is idle to suppose that the influence of ancient magic, faith, and religion can be separated and banished as an accompaniment to the attentions of the orthodox physician — hence the wish of AM practitioners to call their products complementary medicine, holistic medicine. But AM is complementary and holistic only in the sense that it continues to provide the impetus to and from ancient magical healing attitudes. I call these attitudes medical religion or the religions of medicine. These religions, like all religions, and like OM, change with the passage of time, so that nowadays we do not hear much from those skilled at reversing the malign effects of the evil eye, for example, or casting out demons.
But other medical religions there are in abundance. They try to be modern and to think in paramedical terms, just as ‘creation-science’ invokes geophysical and astronomical concepts. Thus homeopathy and naturopathy utilise vitamins and minerals in supposedly boosting natural resistance to disease. Acupuncture tries to protect itself within a coating of gate theory of pain plus endorphins. Such would be more impressive if there was evidence that pin pricks in ear lobes are more effective than the witch doctor’s scratch marks over the liver. Anthroposophy (Rudolf Steiner) tries to ground itself in physiology. Reflexology does not even try. Some medical religions are very close to OM and physiotherapy: osteopathy and chiropractic.

An intriguing phenomenon is the espousing of one or other medical religion by scientifically trained physicians, but perhaps this is not so odd; after all, a medical training does not immunise one against the irrational or religious impulse.

These medical religions are indeed complementary and holistic in the ancient sense, and they are inseparably part of the company of the sick, the suffering and the dying. Their historical momentum is far too powerful to be dismissed as irrational nonsense. In one form or another the religions of medicine will continue to accompany us and people will find comfort in them and supply anecdotal evidence of their value. But the religions of medicine must remain on the outside; they have no place in a medicine committed to the scientific method.

Another personal note is in order: my mother died at the age of 67 years from Parkinson’s disease, immobility and cardiac failure. At the time my father suggested the attentions of a healer he had heard about, and whose hands, or herbs (or was it some gadget?) supposedly worked wonders; and finding it, preferring with her further complementary and holistic distress and disappointments. She died at home, in my presence, and with peace of mind.

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Impact of a rapid antenatal RH test on laboratory testing

To the Editor: Prevention of haemolytic disease of the newborn by administering anti-D immunoglobulin to rhesus (Rh)-negative women is part of standard antenatal care. Until a convenient and rapid test for Rh was introduced in 1993, samples of blood from approximately 175,000 pregnant women were submitted each year to the Natal Blood Transfusion Service (NBTS) for Rh typing and red cell antibody screening. Many patients were from rural areas, making transport of samples, collation of reports and follow-up difficult. Rh antibodies (anti-D) were detected in 173 patients during 1992; delivery samples were only received from 59 of them.

The RAPIDTEST Rh kit (available from the NBTS, PO Box 32356, Durban, 4000) was introduced to offer a cost-effective Rh antenatal service at the primary health care level. The test is carried out at the clinic on a finger-prick sample, and the Rh type of the patient can be determined immediately. It is recommended that venous samples be taken from all patients with a poor history and those who test Rh-negative by the RAPIDTEST Rh method. Samples should be sent to an appropriate laboratory for red cell antibody tests.

The RAPIDTEST Rh was introduced throughout the Natal Blood Transfusion Service area during January - March 1993. By June 1993, the number of samples submitted to the NBTS for Rh typing and antibody tests had fallen from a monthly average of 14,583 in 1992 to 1,392 (Fig. 1). During the 3 months April - June 1993, 27 cases of anti-D were identi-

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Autogenous vaccination against Helicobacter pylori

To the Editor: Evidence for a major pathogenic role for Helicobacter pylori, formerly known as Campylobacter pylori, is mounting slowly. It has been established that the organism is the main cause of chronic active gastritis. It is also associated with peptic ulceration, particularly duodenal ulceration, where it undoubtedly plays a part in the chronicity of the condition. It is generally accepted that eradication of the organism reduces the relapse rate in duodenal ulceration. Through causing gastritis, which in turn may cause atrophy of the gastric mucosa, the organism may be implicated indirectly in the causation of carcinoma. It also allegedly causes halitosis.

H. pylori itself is Gram-negative, micro-aerophilic and can survive in low-pH secretions. It is infectious; volunteers exposed to it develop gastritis. Once established within the gastric mucosa it is known to persist for many years, even a lifetime.

Treatment: it is almost impossible to eradicate the organism by antibiotics. Combined therapy, with the aim of eradication of the organism, consists of bismuth in varying combinations with amoxycillin, metronidazole or tetracycline for 2 - 4 weeks. However, the organism appears to be becoming more resistant to these drugs; at the Boksburg-Benoni Hospital.

branch laboratory of the South African Institute for Medical Research, for example, in 3 cultures grown recently appeared to be completely resistant to metronidazole.

This increasing resistance and the difficulty in eradicating the organism completely led to the concept of vaccination against H. pylori.

Vaccination treatment was considered for a patient with active chronic gastritis of very long standing which did not respond adequately to treatment including a 3-week course of bismuth and amoxicillin; the patient, who happened to be a medical practitioner, gave his full and enthusiastic co-operation.

The patient, in his 70s, had suffered pain and discomfort intermittently for approximately 45 years, during which time various investigations revealed no significant abnormality and no specific treatment was given.

In 1987 the patient consulted me, and gastroscopy on 30 December revealed gastritis with increased inflammatory change in the antrum and on the gastric surface of the pyloric ring. Histological examination of biopsy specimens taken from the antrum revealed chronic active gastritis with micro-organisms resembling H. pylori. The urease test was immediately positive for H. pylori. The patient was put on amoxicillin together with amoxicillin for 3 weeks with some improvement of his symptoms, but his discomfort soon returned.

Findings on repeat gastroscopy on 18 November 1991 were similar to those of the first examination except that the rim of the pyloric ring appeared to be even more inflamed. The urease test was again positive and H. pylori was easily identified histologically. Biopsy specimens were taken for culture and H. pylori was grown on chocolate agar at 37°C under micro-aerophilic conditions for 5 days.

Ten plates were harvested for vaccine production. The suspension was treated at 60°C for 6 hours to inactivate the organism. It was checked for sterility. Phenol was added to 0.5%. It was then standardised to obtain 0.5 x 10⁶ organisms per millilitre in the 0.5% phenol in saline. It was finally checked for purity and sterility.

The course of vaccination commenced on 25 May 1992, starting with 0.05 ml of this autogenous vaccine given subcutaneously. The injection was administered every 5 days in increasing dosage. There was a slight skin reaction initially, but generally the patient experienced no discomfort on injection. The course of injections lasted approximately 2 months, at the end of which the patient reported improvement of his gastric symptoms. A gastroscopic examination taken for culture and biopsy became negative (cultures were not done)..

In experiments in which mice were given an oral vaccine, a positive immunoglobulin response was recorded.° A 'mild gastritis with mild activity' was reported, however, and a few organisms resembling H. pylori were seen histologically. The patient's immunoglobulin values remained normal throughout, no response being recorded after vaccination. In experiments in which mice were given an oral vaccine, a positive immunoglobulin response was recorded.° Serological tests such as the enzyme-linked immunosorbent assay (ELISA) would have confirmed active H. pylori infection and possibly shown an increased immunoglobulin response after vaccination. However, this test was not available at our laboratory. Since the degree of immunity induced by the vaccine was unknown, the patient was given 4 booster doses of vaccine at 3-monthly intervals, receiving the last one on 31 July 1993. Follow-up gastroscopy on 26 August revealed very mild gastritis and no congestion of the pyloric region. The urease test was again negative (cultures were not done).

In conclusion, vaccination appeared to improve the patient's clinical condition as well as the gastroscopic appearance, while the urease test and culture became negative. The feasibility of this vaccine to be used in clinical practice is difficult to assess, but I would postulate that their pathogenicity has been inhibited. Further follow-up of this case is of utmost importance to evaluate the efficacy of the vaccine more fully, as is a further study involving a large number of cases in a therapeutic trial by vaccination.

With H. pylori showing increasing resistance to antibacterials, the frequency of relapses even after antibacterial treatment and the general difficulty in eradicating the organism once it is established, vaccination may become the treatment of choice for this infection and its effects on the gastro-intestinal tract.

I thank Professor K. Klugman for his kind assistance with the culture media, Dr J. Southern for producing and supplying the autogenous vaccine, and for his friendly co-operation, and Denise Clough and Pia Duffy of the Boksburg-Beni Hospital branch laboratory of the South African Institute for Medical Research for their enthusiastic and skilful technical assistance with the bacterial cultures and various tests.

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Minimally invasive thoracic surgery

To the Editor: Over the last 2-3 years endoscopic abdominal surgery and in particular endoscopic cholecystectomies have increased significantly, with endoscopic cholecystectomy being the operation of choice for acute cholecystitis. Minimally invasive thoracic surgery has now become a reality with numerous procedures being successfully performed in the chest.

Over the last year 76 endoscopic thoracic procedures have been performed in my unit. These include 26 bulbar ligation and pleurodesis, 14 pleural biopsies, 15 lung biopsies, 11 pleural biopsies, 2 hilar gland biopsies, 7 bilateral transthoracic sympathectomies, and 1 division of an anomalous subclavian artery.

All these patients would otherwise have required a full thoracotomy. Subsequent thoracotomy was avoided in 57 of the first 60 cases. During the learning phase 3 patients required thoracotomy because of difficulties in performing the procedure.

Thoroscopic treatment used as a first-line measure in various thoracic diseases is a safe and relativelyatraumatic procedure which does not exclude subsequent more invasive surgical procedures and in many cases avoids the morbidity and trauma associated with a full thoracotomy. The benefits to the patient are an early return to work and a significant decrease in long-term pain. Experimental work on endoscopic oesophagectomies and lobectomies has been reported. This is an exciting field of research.

Minimally invasive surgery is an important adjunct to the armamentarium of the modern surgeon and as such has a distinct place in thoracic surgery.

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LETTERS / BRIEWE

‘Rep’ of betaal is die wet van Transvaal!

Aan die Redakteur: Na vemeem word, is daar iller en daar 'n kollega wat 'n konsultasiefooi verwag en beraal word, wanneer 'n mediese veneenwoordiger besoek afle. Moomlik kan die Mediese Vereniging van Suid-Afrika sulke kollegas van hulp wees met 'n ekstra bylae tot die 'Leidraad tot Gelde'. 'n Gedifferensieerde fooieskaal mag handig te pas kom om voorsiening te maak vir die generiese maatskappe. Indien daar versmde konsultante is wat ook wil deelneem, moet die Vereniging tog hier ook maar help. Dier wenslikheid van BTW moet asseblief ook help. Die wenslikheid van BTW moet asseblief weereens aan die minister voorgele word. Wanneer 'n takbestuurder saamkom is dit natuurlik 'n dubbele konsultasie.

Tee of koffie aan veneenwoordigers het 'n spesiale afdeling nodig in so 'n bylae. Die Vereniging moet onsgeblief onthou dat die heersende koffiepryse van 'n vyfsterhotel nie noodwendig by die gewone plandelandse praktyk as rigly gebruik kan word nie, alhoewel moerkoffie waarskynlik sy eie pryse sal maak.

Dit sal waarder word as die Kollege van Geneeskunde 'n toepaslike kursus kan aanbied oor hoe om veneenwoordigers professioneel te omvang en so te verseker dat farmaseutiese maatskappe waarde vir hul geld ontvang. Moontlik kan die MVSA dan 'n beter fooi vir diesulkes bedinge.

Expressions of interest are also wanted from the Collegiate Members of the MVSA in the case of the extra by-laws required in such meetings. The Association should as a matter of course not forget that the prevailing coffee prices for a five-star hotel need not be used in the usual practice, although mocha coffee might make its own price.

It will be appreciated if the Colleagues of Medicine could offer a course on how to handle such meetings professionally to ensure that pharmaceutical companies receive value for their money.

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Errata

In the article entitled ‘National strategy for serological diagnosis of HIV infection’ by A. F. Fleming and D. J. Martin, which appeared on pp. 685-687 of the September 1993 SAMJ, there were two printer’s errors in Fig. 2, the correct version of which appears below.

TABLE I.
Reported HTLV-I seroprevalence rates in South Africa

<table>
<thead>
<tr>
<th>Area</th>
<th>Seroprevalence (%)</th>
<th>No. tested</th>
<th>Reference</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Durban</td>
<td>5</td>
<td>20</td>
<td>9</td>
<td>Black adults</td>
</tr>
<tr>
<td>Johannesburg</td>
<td>0</td>
<td>104</td>
<td>10</td>
<td>Black blood donors</td>
</tr>
<tr>
<td>Cape Town</td>
<td>5,3</td>
<td>283</td>
<td>10</td>
<td>Black and white blood donors</td>
</tr>
<tr>
<td>Natal and Cape</td>
<td>3,5</td>
<td>543</td>
<td>16</td>
<td>Black blood donors</td>
</tr>
<tr>
<td>Kruger Park</td>
<td>3,2</td>
<td>668</td>
<td>17</td>
<td>Black staff</td>
</tr>
<tr>
<td>Male</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>5,2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Natal</td>
<td>0</td>
<td>5 603</td>
<td>18</td>
<td>Blood donors — all races</td>
</tr>
</tbody>
</table>

* Discrepant results, i.e. positive on test 1, negative on test 2; the clinician must counsel and retest the patient. † For the confirmation of seropositivity in an asymptomatic subject from a population where the seroprevalence is < 10%, a third test of high specificity should be applied to the second blood sample (strategy III).

FIG. 2. Diagnosis: all symptomatic subjects and asymptomatic subjects in populations where seroprevalence is > 10% (strategy II).

In the article entitled ‘Prevalence and transmission of HTLV-I infection in Natal/KwaZulu’ by A. I. Bhigjee et al., which appeared on pp. 665-667 of the September SAMJ, the references were renumbered in the text and in the reference list but unfortunately not in Table I, the correct version of which appears below.

In the article entitled ‘Prevalence and transmission of HTLV-I infection in Natal/KwaZulu’ by A. I. Bhigjee et al., which appeared on pp. 665-667 of the September SAMJ, the references were renumbered in the text and in the reference list but unfortunately not in Table I, the correct version of which appears below.