

Cochrane Collaboration of trials in acute stroke where vasoactive drugs were administered and where blood pressure and outcome were measured [2]. We hope that this project will identify whether actively reducing or increasing blood pressure influences outcome, and if beneficial what trial protocol needs to be assessed in a definitive study.

In the meantime, we support the view that blood pressure should not be therapeutically altered for the first week after stroke unless co-existing hypertensive encephalopathy, heart failure or ischaemia, or aortic dissection are present, or continued intracerebral bleeding occurs [3]. However, mechanisms need to be set-up by those caring for stroke patients to ensure that patients who remain hypertensive are adequately treated long-term to prevent further vascular events.

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#### In response

#### Senescence, cancer and endogenous parasites

Editor—Professor Kay-Tee Khaw takes me to task in the Letters column (March/April 1996, page 189) for the alleged 'nihilism' of my article entitled 'Senescence, cancer and endogenous parasites' (January/February 1996, pages 10-2). I had always imagined that

the criterion for judging a scientific hypothesis was its truthfulness, rather than its cheerfulness.

On such a basis we would presumably be required to reject Darwin's theory of natural selection itself, as my own work is based on this. Bernard Shaw famously did so in his preface to *Back to Methuselah*. Shaw declared that Darwin had 'banished mind from the universe', that natural selection was morally repugnant and therefore couldn't be true, and that we should instead subscribe to Shaw's own optimistic and progressive creed of Creative Evolution. Shaw was a dramatist of genius, and his views may be sound metaphysics or politics, but they are bad science nevertheless—natural selection has proved an unmatched source of detailed and counter-intuitive predictions of phenomena at many levels of biological organisation, from the single gene right up to complex forms of social organisation in animals.

I was also vexed by Professor Khaw's statement that my hypothesis of 'endogenous parasitism' was a mere platitude, stating no more than that 'we all have to die of something sometime'. In fact, the theory makes highly specific predictions concerning age-related changes in replicating cells and organelles, which are amenable to test by experiment.

Endogenous parasitism represents the difference between rapid replication and wear and tear, between cancer and degeneration, between parasites and debris. These seem large and significant differences to me, and ones that are readily measurable too; although either or both might be cause of ageing in any given instance.

The issue of 'when, how, and what we can do to improve things' for people suffering the effects of ageing is heavily dependent upon our understanding the nature of the processes of senescence. Endogenous parasitism is a real phenomenon with the potential to be a cause of ageing in humans and other organisms. Whether or

not it turns out to be an *important* cause is a matter to be determined by scientific investigations—not a matter to be pre-decided by an expression of moral disapproval.

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#### Medicine and elderly people: over-investigation or under-treatment

Editor—The surgical management of age-related aortic stenosis is long overdue for decision analysis [1], if only on the basis of the issues raised by Professor Treasure in the above conference [2] (March/April 1996, pages 170-3). Hitherto, operative mortality has been the only consideration [3], despite the fact that this is much less than the two-year mortality risk attributable to the natural history of clinically significant aortic stenosis [2]. It is therefore illogical to argue that co-existing manifestations of aortic valve-related systemic hypo-perfusion, such as mental and physical lassitude, render aortic valve replacement needlessly hazardous, because, as in *Hamlet*, 'disease desperate grown, by desperate appliance are relieved, or not at all' [4]. Contrariwise, the risk of operative intervention is not to be dismissed when the stigmata of systemic hypoperfusion are absent, because the patient who is in otherwise excellent mental and physical condition stands to lose much more when untimely curtailment of life expectancy supervenes. Therefore, in the absence of significant comorbidity (unrelated to aortic valve disease), the indications for aortic valve replacement should apply to all age groups with aortic stenosis, since the two year mortality risk of 80% attributable to conservative management [2] vastly exceeds the current statistics

for operative mortality even in the >80 year old age group, namely, 9.2% for aortic valve replacement, and 20.9% for its combination with coronary bypass surgery [3].

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## Paediatric teaching: Core paediatric conditions

Editor—Dr Cowan raises some interesting points in her audit of medical student teaching in paediatrics (January/February 1996, pages 58-60). In view of the moves towards self learning and non-structured medical school curriculae, I wonder what the implications are for the 54% of medical students who are not keen enough to attend the casualty department during their attachment! I was interested to note the absence of any reference to musculoskeletal or rheumatic disease in the listed core paediatric conditions. Musculoskeletal pain in young people is second only to headache as the most common cause of chronic pain in childhood [1]. Symptoms of arthritis in children occur with the frequency equivalent to those of epilepsy, and are approximately twice as common as those of diabetes mellitus and cerebral palsy [2].

These observations are not meant to detract from the main thrust of Dr Cowan's article, but merely to emphasise the importance of some rheumatological training for medical students during their paediatric course. Such training is provided at very

few medical schools nationally at the present time. This is reflected in the generally poor ability of the medical student, paediatric higher trainee, or (dare I add) the paediatric consultant, to examine the musculoskeletal system of children.

It is hoped that, during the process of restructuring the curriculum that is taking place in many institutions around the country, paediatric rheumatological conditions are included.

## References

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## Health in the NHS

Editor—Ill health is common among all grades of staff working in the NHS and this is manifested in such indices as the rate of sick leave and the number of individuals seeking early retirement. It has been my impression, and that of a number of colleagues with whom I have discussed the matter, that the health of NHS staff has deteriorated more rapidly in the

last two or three years and that the number of applications for ill health retirement has also increased along with the number of applications which are refused.

To try to substantiate this view I have sought information from the NHS Pensions Agency. In particular I wished to know the number of applications for ill health retirement for the past ten years and the number which were successful. I also asked if the data could be broken down by staff grade. Despite verbal assurances that these data could be retrieved from the Agency's records and provided to me, none were forthcoming; instead I was sent a copy of a single page from the Agency's *Annual Report* which gave the total number of retirements for the years 1989 to 1994. It can be seen from the Table that there has been a considerable increase in the number of staff taking early retirement, and this was particularly great in 1992 and 1993 when the increase was well in excess of 10% compared with the previous year. It will be seen from the Table that the crude rate of medical retirement (per thousand employees) has also increased considerably and that the present rate is in excess of eight per thousand.

I hope that the Pensions Agency may be persuaded to provide some figures on the proportion of successful applications at some stage; certainly I have had a number of applications turned

**Table. Number of employees (and rate per thousand) retiring on health grounds from the NHS**

Year	Number retiring	Increase on previous year (%)	Rate per thousand	Rate per thousand (FTE*)
1989	6,627	—	6.11	8.32
1990	7,092	7.02	6.53	8.90
1991	7,323	3.26	6.73	9.14
1992	8,327	13.71	7.71	10.47
1993	9,520	14.33	8.77	11.94
1994	9,030	-5.15	8.32	11.33

\*Full time equivalents

Data from *NHS Pensions Agency Annual Report and Accounts, 1994-5*.