

		Treatment group	Controls
Katz index of independence in the activities of daily living:			
Before fracture $\bar{v}$ at discharge from orthopaedic inpatient care* $\chi^2$ (with continuity correction)=3.88, df=1, p=0.048	{ Better or no change Worse	15 34	6 43
Before fracture $\bar{v}$ 1 year after fracture† $\chi^2$ (with continuity correction)=5.78, df=1, p=0.016	{ Better or no change Worse	21 22	7 28
Residence:			
Before fracture $\bar{v}$ at discharge from orthopaedic inpatient care $\chi^2$ (with continuity correction)=8.49, df=1, p=0.004	{ Better or no change Worse	40 9	26 24
Before fracture $\bar{v}$ 1 year after fracture $\chi^2$ (with continuity correction)=6.65, df=1, p=0.010	{ Better or no change Worse	38 6	21 15
Caregiver strain index <sup>‡</sup> 1 year after fracture (n=30; no family carer=50) Wilcoxon rank sum test (correction for tied ranks) T=206.5, p=0.83	{ Median Range	1 0-11	1 0-9
Life satisfaction index <sup>‡</sup> 1 year after fracture (n=65; not testable‡=15) Wilcoxon rank sum test (correction for tied ranks) T=976, p=0.85	{ Median Range	17 6-22	18 6-21

\*N=98; data missing=1. †N=78; data missing=2. ‡Subjects with severe communication problems.

at each patient's current residence. Records were kept of all periods of institutional care during the year and, where appropriate, the date of death.

Postoperative randomisation yielded two study groups of 54 patients after 36 others had been excluded.<sup>1</sup> Five patients in the treatment group and four in the control group died between entry into the trial and discharge from orthopaedic inpatient care. One year after the fracture 67% (95% confidence interval 60% to 75%) of the control group, 81% (71% to 92%) of the treatment group, and 67% (54% to 79%) of all 144 patients survived. One patient in the treatment group was alive but was otherwise lost to follow up.

Significantly more women were less independent in the control group than in the treatment group after one year compared with their prefracture state (table). Even with walking aids only 37% of the 79 patients assessed at one year had achieved their prefracture mobility. At the follow up 69% of the treatment group and 39% of the control group were living in the same place as before the fracture; 6% and 13%, respectively, had moved into institutional nursing care. The survivors in the group given rehabilitative care spent more of the follow up year living at home than the control group (median difference 20 days, 95% confidence interval 0 to 48 days). No differences were found between the groups in life satisfaction or strain on carers.

## Comment

Survival rates of 75-81% one year after proximal femoral fractures have recently been reported.<sup>4</sup> We found 74% of subjects alive at one year; this proportion is 67% if the patients excluded from the study are also taken into account. The higher rate of survival after discharge in the group cared for by the rehabilitation team is consistent with other reports of improvements in both quality and length of life after similar interventions in elderly patients.<sup>5</sup>

Few studies relate the functional outcomes after hip fracture to the patient's circumstances before the fracture. Although comparison with outcomes achieved in other health care systems is complex, our findings are broadly consistent with previous studies. The better outcomes in the treatment group could not be explained satisfactorily by age, cognitive function, or any other variable that we measured. The earlier and greater numbers of hospital discharges in this group were not detrimental to either the patients' quality of life or the stress perceived by family members who cared for them; as we assessed subjective attitudes, however, these results may merely reflect the ability of most elderly people to adapt to chronic disability.

These outcomes challenge the conventional practice of keeping elderly patients with femoral fractures in orthopaedic wards for their postoperative rehabilitation. For optimal long term results more detailed attention needs to be paid to the ward environment, the enabling role of the nurse, the treatment provided, and the leadership of the rehabilitation team.

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## Plasma cholesterol concentration and primary brain tumours

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Two previous studies have shown a relation between raised blood cholesterol concentration and primary brain malignancies in men.<sup>1,2</sup> In both studies the selection of controls was seriously flawed. Furthermore, in such retrospective studies the disease itself may have produced behavioural or physiological changes that resulted in raised cholesterol concentrations. We therefore examined the association between plasma cholesterol concentration and mortality from brain cancer in a large cohort study.

### Subjects, methods, and results

In the Whitehall study of London civil servants' plasma cholesterol concentrations were measured in 17718 men aged 40-64 from 1967 to 1969. During

follow up until 31 January 1985, 33 deaths due to malignant neoplasms of the brain (International Classification of Disease (eighth revision) code 191) occurred; 21 of these occurred more than five years after screening. Death certificates were reviewed, and one case was excluded because of inadequate diagnostic information.

The table shows mortality from brain cancer standardised for age by fifths of cholesterol concentration. The analyses were repeated after excluding the deaths from brain cancers that occurred within five years after screening. As most brain cancers prove fatal within five

*Mortality from brain cancer per million person years by fifths of plasma cholesterol concentration. Figures in parentheses are actual numbers of deaths*

	Plasma cholesterol (mmol/l)				
	≤4.11	-4.73	-5.27	-6.05	>6.05
Total mortality	42 (2)	73 (4)	156 (8)	183 (10)	145 (8)
Mortality excluding deaths in first five years	30 (1)	84 (3)	115 (4)	219 (8)	127 (5)

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years this reduced the possibility of a spurious association due to cancers that existed at the time of screening. In both analyses the rates tended to increase with increasing cholesterol concentration.

In this study age was not significantly related to mortality from brain cancer ( $\chi^2=0.02$ ) or to plasma cholesterol concentration (correlation coefficient  $-0.005$ ;  $p>0.5$ ). Age was, however, included in further analyses to remove any possible residual confounding. Other potential confounders were socioeconomic state and obesity. Proportional hazards analyses were done with age, body mass index, and cholesterol concentrations as continuous variables and socioeconomic state (based on the civil service's employment grades (administrative, professional, and executive versus clerical, manual, and others), as a dichotomous variable. Age, body mass index, and socioeconomic state were not significantly related to mortality from brain cancer. Plasma cholesterol concentrations, however, were ( $p<0.05$ ), and controlling for age, socioeconomic state, and body mass index did not alter this relation. When all deaths were included an increase in cholesterol concentration of 1 mmol/l was associated with an increase in mortality from brain cancer of 32% (95% confidence interval 3 to 70%); this increased to 45% (8 to 94%) after the deaths in the first five years were excluded.

### Comment

A raised plasma cholesterol concentration indicates an increased risk of death from brain cancer. The only prospective study comparable to ours is the multiple risk factor intervention trial, in which serum cholesterol concentration was unrelated to mortality from all malignancies of the nervous system over the full follow up period but a positive association, of borderline

significance, was seen when deaths in the first five years were excluded.<sup>4</sup> Unfortunately, in that study analyses were not reported for brain cancers alone, and a stronger relation may have been diluted by the inclusion of other malignancies of the nervous system unrelated to serum cholesterol concentration.

In contrast with the idea that pre-existing brain cancer may have caused a spurious increase in cholesterol concentration in retrospective studies, the exclusion of deaths in the first five years in our analysis tended to strengthen the relation between plasma cholesterol concentration and mortality from brain cancer. This agrees with the hypothesis that cancers lower cholesterol concentrations, which has been advanced to account for the inverse relation between cholesterol concentration and total mortality from cancer in prospective studies.<sup>3,5</sup>

The association between cholesterol concentration and mortality from brain cancer is consistent in a number of studies. The relation may be causal or may reflect environmental or physiological factors influencing plasma cholesterol concentrations, such as diet, stress, or hormones.

We thank Professor Geoffrey Rose for allowing us to analyse data from the Whitehall study.

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## ONE HUNDRED YEARS AGO

Public speaking, we are told, was among the Romans an art in which it was not so much a glory to excel as a disgrace to fail. Precisely the opposite condition notoriously prevails among ourselves and especially is the art of after-dinner speaking rare or non-existent among the "English of to-day." It seems to be a racial defect—a post-prandial fault which we shall probably never outgrow. Other nations are not so afflicted. An American has generally something pointed, pleasant, and often witty to say and he says it easily and neatly. A Frenchman is generally systematic, lucid, and graceful in his speech; even a German after dinner knows how to be brief and jolly in his utterance, or sentimental and sententious, but short. Nothing seems to have surprised our American brethren at the International Congress so much as the faltering and stumbling sentences and the inartistic delivery of the English doctors, and humorous squibs circulated in the medical papers for some time afterwards. But we do not need to be told of this defect, we recognise it, and probably secretly take some delight in it. A certain dumbness seems to fit the English character; we have chosen neither the crowing cock nor the screaming and soaring eagle as our symbolic animal, and *facta non verba* is a favourite device of Englishmen. But having recognised our verbal incompetency, why parade it with long-drawn pride on all festive occasions? Everybody confesses that where speeches are long and numerous after dinner, they do not exhilarate the feast of reason and only obstruct the flow of soul. Blessed is the man, says, I think, George Eliot, who having nothing to say does not feel it necessary to afford lengthened evidence of his inability to say it. But few after-dinner speakers are blessed—by those who hear them; while we know, from their own frequent confession, that the oppressive consciousness of their coming doom has, all through dinner, been a source of uneasiness, and therefore a presage of dyspepsia and an index of indigestion, which possibly explains the vacant gloom which often darkens their speech and depresses their auditors.

Can we not emancipate ourselves from this traditional tyranny at medical dinners? A liberal profession need not be perpetually bound by civic superstitions. There are, too, signs of grace. At the Army Medical Department dinner there were only three toasts which were spoken to, and

those briefly. Our devotion to the institutions of our country is on ordinary occasions sufficiently expressed by announcing the toasts from the chair in due succession, and honouring them by acclamation and by the customary and solemn imbibition of a sip of wine thereafter. It is surely unnecessary on every such occasion for each speaker, either in proposing or in responding, to deliver a feeble string of faltering platitudes. Military mess dinners and royal banquets afford a brilliant example, which might well be followed by loyal subjects. After pledging with joyful and loyal but speechless acclamation the institutions of the country, there remain always, at most of our medical dinners, those toasts which constitute the business of the evening. As to these, it should be remembered that it is a cruelty to call upon the most practised speaker to deliver himself "without previous notice;" and those least liable to inflict the pains of empty verbosity and rambling but vapid rhetoric on their hearers are least likely to accept the challenge. An after-dinner speech should at least contain a new thought or a new application, some vestige of humour, some trace of eloquence, the point of an epigram, the flavour of a joke, or the grace of a well-turned compliment. Looking to the short hour at disposal, I think it might be fair to say that no speech should exceed five minutes, except those connected with the toast of the evening, and that every speaker should have long enough notice given him to enable him to be brief.

Want of preparation is a great cause of diffuseness. If medical after-dinner speakers would write out beforehand what they are going to say, and remorselessly cut it down, they would soon discover how often their speeches are nothing more than the pointless repetition in long-drawn-out phrases of worn out and empty commonplaces, expressed in stilted but unpicturesque phrases, such as they would ridicule and condemn in others. We must all frequently dine together with each other in public; it is a hospitable and a cheering institution, and a commendable function; it aids charity, promotes good fellowship, dissolves enmities, and brings into public life the amenities of private friendship. Deprived of this particular drawback which is a relatively recent excrescence, it would be an altogether admirable institution, and there is no reason why it should not be. (*British Medical Journal* 1889;ii:31)