infection from the bowel operation. I have not used any preoperative preparation of the bowel for the past 12 years and I have had no cause to regret it. I would like to inquire whether there are any other surgeons who do not inflict preoperative therapy upon their patients.—I am, etc.,

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Ghastly Abbreviations

SIR,—I recently received a hospital discharge summary which stated "Diagnosis=? M.I., ? P.E.," and another one which said "Operation=B.A.W.O., S.M.D.I.T." I also had a letter from a house physician which finished: "she was T.T.O.'ed on. . . ." *

May I make a plea to stop the use of these ghastly abbreviations, which are meaningless outside the hospitals concerned?—I am, etc.,

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* M.I.=myocardial infarction; P.E.=pulmonary embolus; B.A.W.O.=bilateral antral washout; S.M.D.I.T.=submucous diathermy to inferior turbinates; T.T.O.=to take out.

Multiple Sclerosis and Malignant Gliomas

SIR,—The association of malignant gliomas with multiple sclerosis is exceptional. Such instances have been reported by Munch-Petersen,[1] Brihaye *et al.*,[2] and Russell Rubinstein.[3]

I am currently studying post-mortem material from a 44-year-old woman who had suffered from multiple sclerosis for 17 years and who died from a massive intracerebral glioblastoma. Preliminary examination confirms the clinical diagnosis of multiple sclerosis and numerous old plaques can be seen throughout the brain and spinal cord. Several of the intracerebral plaques contain tumour, and it is interesting to note that where this has occurred the outlines of the original plaques are preserved. No perivascular cellular infiltrates can be seen either in relation to the plaques or to the tumour.

In only two of the four previously recorded cases has a topographical relationship been established between the zones of demyelination and tumour, and though the association may be purely fortuitous it is nevertheless intriguing and thought provoking.—I am, etc.,

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1 Munch-Petersen, C. J., *Acta Psychiatrica et Neurologica Scandinavica*, 1949, **24**, 599.
2 Brihaye, J., Périer, O., and Sténuit, J., *Journal of Neuropathology and Experimental Neurology*, 1963, **22**, 128.
3 Russell, D. S., Rubinstein, L. J., and Lumsden, S. E., *Pathology of Tumours of the Nervous System*, 3rd edn., p. 179. London, Edward Arnold, 1971.

Standardization of the E.S.R.

SIR,—The measurement of the E.S.R. by the classical Westergren technique[1] is a simple, universally accepted method with defined limits of normality, but it is useful only as an index of disease or its progressions when measured under standard conditions. E.S.R. is known to vary with room temperature,[2] dilution,[3 4] and other factors[5]—in particular, the anticoagulant used.

E.S.R. at 65°F measured by Modified Westergren and Unorthodox† Method*

Volunteers		Male Patients		Female Patients	
EDTA Blood	Modified Westergren	EDTA Blood	Modified Westergren	EDTA Blood	Modified Westergren
3	2	7	2	86	35
6	3	18	47	58	25
5	2	4	3	52	35
7	5	5	2	60	14
11	9	86	38	48	26
7	5	53	29	25	13
		56	31	18	10
		102	89	80	53
		1	3	43	30
		45	48	20	17
		33	16	2	1
		60	27	73	38
		0	0	17	5
		16	4	101	98
		35	91	24	5
		2	7	5	2
		60	25	40	15
		35	39	127	75

*2 ml whole blood and EDTA 1 mg/ml + Sodium Citrate 3·8% 1:4 parts blood.
†As above without addition of citrate.

Melville and Rifkind[6] introduced a now widely-used modification in which the blood is anticoagulated with Sequestrene (sodium edetate) before dilution with citrate. In practice, however, this technique has slowly been altered so that the E.S.R. is often read direct from the sequestrenized sample without further dilution. This method is unorthodox and has, as yet, no defined normal range. Unfortunately, patients are being monitored by both methods during their illness and we have often noted striking changes in the E.S.R. when measured on separate occasions by different people. We therefore measured the E.S.R. by both methods on a small number of volunteers and 18 male and 18 female medical admissions. The results are shown in the table.

Clearly, though the difference is minimal in the normal controls, large exaggerations in E.S.R. readings can occur using the unorthodox method.—We are, etc.,

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G. V. GILL

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1 Westergren, A., *Ergebnisse der Inneren Medizin und Kinderheikunde*, 1924, **26**, 577.
2 Manley, R. W., *Journal of Clinical Pathology*, 1957, **10**, 354.
3 Wintrobe, M. M., and Landsberg, J. W., *American Journal of the Medical Sciences*, 1935, **189**, 102.
4 Rourke, D. M., and Ernstene, C. A., *Journal of Clinical Investigation*, 1930, **8**, 545.
5 Dawson, J. B., *British Medical Journal*, 1960, **1**, 1697.
6 Melville, I. D., and Rifkind, B. M., *British Medical Journal*, 1960, **1**, 107.

Demand and the N.H.S.

SIR,—In your leading article (10 August, p. 376) you say: "Each year sees new technological advances in medical care, so that common conditions become more expensive to treat. Compare the cost of treating a coronary or osteoarthritis of the hip now with a decade ago; and the same pattern is being repeated over the whole range of medicine. Children with haemophilia, for example, could now be given prophylactic treatment with factor VIII and so be protected against the pain and misery of haemorrhage into their joints. . . ."

Of course total hip replacement for osteoarthritis of the hip is a great advance and should be carried out, whatever the expense, on the badly afflicted. Of course £2m. a year should be found for the prophylactic treatment of haemophiliacs. But to equate a "coronary" with hip disease is astonishing. A decade ago many of us, in our folly, kept every single "coronary" in hospital for over six weeks, and for the first week or two the wretched victim was at "absolute rest." At least most of us now discharge patients after a week or two and we could well reduce the time further.

What are these "technological advances" in treating coronaries? I am aware of one—a machine to deliver a D.C. shock if ventricular fibrillation occurs, which is not particularly expensive. In a very few cases with gross heart block internal pacing also is possibly lifesaving. Another "technological advance" here is monitoring, which is most expensive but I know of no evidence that it is superior to ordinary close observation by nurses (which is in any case needed to watch the monitor screens). The same applies to monitoring in most other circumstances. I am also unaware of these technological advances "over the whole range of medicine." I suggest, on the contrary, that these advances are over a quite narrow range.

Nowhere in your leading article is there any indication that we doctors have it in our own power to improve the situation. May I suggest a few ways in which we can do so? If we are hospital physicians we can stop admitting walking patients for investigation; stop admitting diabetics for so-called "stabilization" and fat women for months on end to be reduced (when we know that nearly all will later put all the lost weight back); confine our admissions almost exclusively to emergencies; and discharge patients as soon as they can reasonably be looked after at home, not according to some arbitrary rule. If we are surgeons we can stop removing "chronic appendixes" from nervous young women with dragging pain in the right iliac fossa and almost stop removing tonsils from children; exercise restraint in operating on varicose veins; do many more operations on a day-bed basis; and abolish the rule that patients must stay in hospital till their stitches are out. If we are general practitioners we can use aspirin, ferrous sulphate, and aluminium hydroxide tablets rather than equivalent preparations costing up to 50 times as much; exercise severe restraint in prescribing antibiotics; and stop referring every patient to hospital who "demands" to see a specialist. And we can all