

membrane-active non-beta-blocking D-isomer of propranolol has no hypotensive effect. The same is true of angina pectoris,^{4,6} and even of arrhythmias.⁷

It was emphasized in discussion at the sotalol symposium that the cardiac inhibitory effects of beta-blocking drugs at the dosage used in man was a function of beta-blockade and nothing to do with the membrane-stabilizing action of these drugs.^{1,2} This has been amply supported by animal work.⁸ It is quite untrue to say that there is any evidence to suggest that the membrane-stabilizing action of beta-receptor-blocking drugs is concerned in the production of left ventricular failure in susceptible subjects. All effective beta-receptor-inhibiting drugs are likely to precipitate heart failure in patients in whom cardiac function is critically dependent on increased sympathetic activity,² a predictable effect, as such a pharmacological action is interfering with the compensatory tachycardia of cardiac insufficiency. Again experimental work suggests that it is beta-blockade per se—not membrane activity or intrinsic sympathetic activity—that is relevant in producing this action.⁹ This conclusion was not effectively challenged at the sotalol symposium.

Secondly, it is premature and almost certainly untrue to suggest that in hypertension sotalol is independent of plasma renin levels unlike propranolol. While Verniory *et al.*¹⁰ found no correlation between plasma renin and the response of hypertensive patients to sotalol, so others have failed to find such a correlation with other beta-blocking drugs,^{11,12} though this remains very much a matter for debate. While the mode of beta-receptor-blocking drugs in hypertension is still disputed, it is unlikely that there is a difference between one beta-blocking agent and another.—I am, etc.,

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An Easy Death

SIR,—Your leading article on the Church of England's recent contribution to the euthanasia debate (29 March, p. 704) supports the current view that hospice-type care has eliminated any further need for the "arranged dying" for which those who

support voluntary euthanasia have been pressing. That this is not so is evidenced by the continuing occurrence of suicides in those suffering from terminal conditions (18% of "successful" suicides are associated with organic illness).

It is clear that the establishment, as represented by the clergy and the majority of doctors, obstinately refuses to accept the burden society in general is asking them to bear—that is, a direct aiding and expediting of the dying act on request. Other arguments suggested in the report are attempts to rationalize this fundamental refusal, which mirrors a curious hardness of heart out of keeping with the generally more liberal and empathic spirit of contemporary thinking. Surely assisted suicide is better than unassisted when the subject has decided (with reason) against further living, or do we insist that we always know best?—I am, etc.,

S. L. HENDERSON SMITH

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SIR,—None will disagree with your assessment of the report on euthanasia by the Church of England's Board for Social Responsibility (29 March, p. 704). Of course it is right and proper that all those who are dying or likely to die within days or weeks should be helped to do so without suffering, and there is no reason why the appropriate treatment should ever be withheld, given adequate staff with knowledge, sympathy, and compassion and the means to carry this out.

To my mind these are not the difficult cases. Take that of a man who is half-paralysed, perhaps with difficulty of speech or part loss of hearing and sight, and perhaps with some incontinence, but with adequate mental capacity to realize that he cannot really improve, in spite of every attention, to a degree which might be tolerable; also that he might live like this for another 10 years without being able to take part in any worth-while activities. He longs to be out of it all, and suicide is either a messy and lonely affair or it is too difficult to achieve for a person in this situation. To get the pills and find a place where he can consume them without any risk of being discovered and resuscitated is almost impossible. He almost demands "assisted suicide" in a helpful and comfortable atmosphere and is justified in doing so.

Most suicides are tragedies and occur in fits of depression which are curable. They cause anguish in the family and complete loss of a possibly useful future. The type of case I have described—and there must be very many of them—is quite different. This man has completed his life's work for good or ill and deserves to go if he so desires.—I am, etc.,

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Sand Pneumoconiosis in an Egyptian Mummy

SIR,—Your recent leading article on "Negev Desert Lung" (14 December, p. 614) prompts us to record the presence of a histologically similar condition which we have found recently during studies on the Egyptian mummies in the Manchester Museum.

Nekht-Ankh, a 12th dynasty male, appears to have been 60 years of age when he died. His lungs had been removed at mummification and placed in one of the four canopic jars found in the tomb. After rehydration and fixation of the lung in formal saline paraffin sections were cut, which showed brown birefringent particles around blood vessels and in fibrotic areas of the lung (figs. 1 and 2). These areas have been examined electron optically and the particles analysed with a KeveX Si (Li) detector attached to an A.E.I. Corinth 275 electron microscope. The analysis showed that they contain silica and iron and are presumably fine particles of stone or sand.

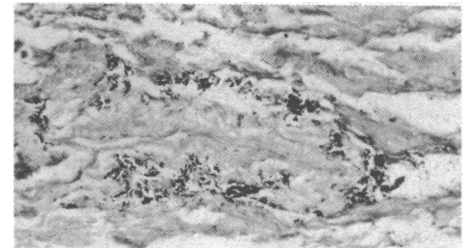


FIG. 1—Prominent particles around blood vessel. (Toluidine blue $\times 200$.)

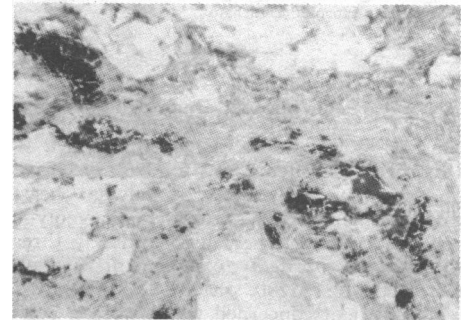


FIG. 2—Particles in fibrous tissue in scarred area. (Toluidine blue $\times 100$.)

We do not know the occupation of this man, but from the type of mummification and entombment it is unlikely that he was a manual worker—that is, a stone mason. We do know, however, that sand storms were a frequent occurrence in ancient Egypt and it is interesting to speculate, therefore, that "sand pneumoconiosis" as described in the Bedouins by Bar-Ziv and Goldberg¹ may be a condition of considerable antiquity.

Our thanks are due to Dr. A. R. David, Assistant Keeper of Archeology, Manchester Museum, for access to this material, and to Miss D. Chescoe and Miss M. Samuels of A.E.I., Trafford Park, Manchester, for the analysis.

—We are, etc.,

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¹ Bar-Ziv, J., and Goldberg, G. M., *Archives of Environmental Health*, 1974, 29, 121.

Imported Sterile Water

SIR,—Like Mr. C. Shaldon (19 April, p. 142), I too have been astounded and perplexed that a country like Great Britain appears to be incapable of sterilizing water. I have heard of Scottish water being exported to America so that Scotch whisky