- ¹ Bynoe, M. L., Tyrrell, D. A. J., and Walker, Georgina H., British Medical Journal, 1967, 1, 603.
- 1, 603.
 Anderson, T. W., Beaton, G. H., and Reid, D. B. W., Canadian Medical Association *Journal*, 1972, 107, 503.
 Loh, H. S., and Wilson, C. W. M., Lancet, 1973, 1, 1, 632
- Li, 73. Gill, Walder M. Lunberk, H., Acta Pathologica et Microbiologica Scandinavica, 1955, 37, 493.
 Wilson, C. W. M., British Medical Journal, 1971, 1, 669.
 Loh, H. S., and Wilson, C. W. M., Acta Allergologica, 1969, 24, 367.
 Foster, F. G., Loh, H. S., and Wilson, C. W. M., European Journal of Clinical Pharmacology. In Dress 1. 638.

- press. 8 Foster, F. G., Loh, H. S., and Wilson, C. W. M., European Journal of Clinical Pharmacology. In
- press.
 9 Loh, H. S., and Wilson, C. W. M., Lancet, 1973, 1, 1058.
 10 Greene, M., Loh, H. S., and Wilson, C. W. M., European Nutritional Conference, Cambridge, Comm. 49, British Journal of Nutrition. In

- European Nutritional Conference, Cambridge, Comm. 49, British Journal of Nutrition. In press.
 Loh, H. S., and Wilson, C. W. M., European Journal of Clinical Pharmacology, 1973, 6, in press.
 Loh, H. S., Watters, K., Wilson, C. W. M., Irish Journal of Medical Science, 1973, 142, 217.
 Barnes, M. J., and Kodicek, E., Vitamins and Hormones, 1972, 30, 1.
 Crandon, J. H., Lennihan, R., Mikal, S., and Reif, A. E., Annals of the New York Academy of Science, 1961, 92, 246.
 Bartley, W. H., Krebs, A., and O'Brien, J. R. P., Medical Research Council Special Report Series, No. 280. London, H.M.S.O., 1953.
 Reports on Public Health and Medical Subjects, No. 120. London H.M.S.O., 1969.
 Korner, W. F., and Weber, F., International Journal of Vitamin and Nutritional Research, 1972, 42, 528.
 Chrystowski, G. A., and Lamden, M. P.. Pro-ceedings of the Society for Experimental Biology and Medicine, 1954, 85, 190.
 Briggs, M. H., Davis, P., and Wilson, C. W. M., Journal of Clinical Pharmacology and New Drugs, 1973, in press.

- Clinical Pharmacology and New Drugs, 1973, in press.
 ²² Loh, H. S., and Wilson, C. W. M., Nutrition Reports International, 1971, 4, 371.
 ²³ Loh, H. S., European Nutritional Conference. Cambridge, Comm. 61, British Journal of Nutrition. In press.
 ²⁴ Cox, E. V., Vitamins and Hormones. Advances in research and applications. Vol. 26, p. 635. London. Academic Press, 1968.
 ²⁵ Loh, H. S., and Wilson, C. W. M. European.
 ²⁶ Odymou, A. and Wilson, C. W. M. European.

- 110.
 Odumosu, A., and Wilson, C. W. M., European Nutritional Conference Cambridge, Comm. 62. British Journal of Nutrition. In press.
 Odumosu, A., and Wilson, C. W. M., British Journal of Pharmacology, 1973, 48, 326P.
 Rhead, W. J., and Schranzer, G. N. International Journal of Vitamin and Nutritional Research, 1973, 43, 201.
 Briors, M., and Briggs, M., Nature, 1972, 238. 277.

- 277. Marken and Physics 114, Matter, 1972, 256.
 277. McLeroy, V. I., and Schendel, H. E., American Journal of Clinical Nutrition, 1973, 26. 191.
 28 Remmer, H., European Journal of Clinical Pharmacology, 1972, 5, 116.
 29 Harris, A. B., Hartley, J., and Moor, A., Lancet, 1973, 2, 201.
 30 Chalooin. H., Mouton, M., and Ratsimanga, A. R., World Review of Nutrition and Dieterics, 1966, 6, 165.
 34 Johansson, G., Acta Physiologica Scandinavica, 1972, 85, 569.
 35 Lob. H. S., International Journal of Viermin and
- 35 Loh oh, H. S., International Journal of Vitamin and Nutritional Research, 1972, 42, 86.

Oral Contraceptives and Myocardial Infarction

SIR,-With reference to the paper by Drs. Dorothy J. Radford and M. F. Oliver (25 August, p. 428), establishing a relationship between the use of oral contraceptives and the development of illness is clearly important. Some women are at special risk during pregnancy and the risk is sometimes identified during a first or subsequent pregnancy. Further pregnancy may then be avoided by utilization of effective birth control.

Three of the five women aged 31-40 years reported by Drs. Radford and Oliver who had been taking oral contraceptives had hypertension (systolic pressure > 100 mm Hg). It is not possible from the paper to

identify the probable level of hypertension for these patients before they began taking the pill, though records of previous pregnancy should have been not too difficult to find. The prevalence of coronary thrombosis in the patients taking the pill as represented by this paper is misleading for the very obvious reason that these patients may well have been using oral contraceptives by reason of their hypertension and were unable to accept other methods of birth control. While it must be very important to draw attention to the findings, it is probably equally important to resist the temptation either to draw conclusions or to make recommendations from a small amount of inadequate information .--- I am, etc.,

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Surgery for Coronary Occlusion

SIR,-Your leading article (25 August, p. 420) implies that there is a large number of patients who require operation for the relief of intractable cardiac pain. I believe that such patients are, or should be, few and their condition reflects more often inadequacy of medical management than severity of the underlying disease.

Over 10 years ago Dr. J. A. Strong and I, in an article on "Radioiodine for Refractory Cardiac Pain," wrote, "In our experience 'intractable' cardiac pain is an uncommon condition and a diagnosis which need rarely be made if this presumptive conclusion is postponed for a few months. The patient should be told that, if pain continues or increases, more strenuous methods will be indicated, but it is surprising how often pain becomes less 'intractable' if extra attention is paid to every detail of management." This was before the introduction of beta-blocking drugs.

Today many patients are being referred for surgical treatment not having had anything approaching adequate medical management-that is to say, they are still obese, continue to smoke, have not been advised to take their trinitrate prophylactically, and have been given beta-blocking drugs in inadequate dosage. Sufficient attention has not always been paid to emotional factors. In particular, very few have had it explained, in so many words, that exercise, started gently and gradually and progressively increased, should be the cornerstone of management, except in the few with obvious contraindications. Exercise is facilitated by the invariable use of prophylactic trinitrate and a beta-blocking drug in full dosage-that is to say, if necessary and if tolerated, up to at least 480 mg/day of oxprenolol or propranolol. There is little or no risk in beta-blockade if the usual precautions are taken and the patient kept under observation. Exertion should be avoided after meals, in cold air, against the wind, or when emotionally upset, but otherwise pushed to the maximum which can be tolerated without pain, dyspnoea, or undue fatigue. Great confidence is engendered by this positive approach, and capacity for exercise usually improves steadily.

Bypass grafting carries a significant mortality and morbidity,23 pain is not always relieved or relief is incomplete,4 and as yet there is no evidence that life in survivors will be prolonged. The present time would not seem opportune for the proposed 15centre European trial in which it is hoped that a definitive answer will be given within five years. The trial bristles with difficulties and it is improbable, to say the least, that a definitive answer will be obtained by the present design. In the United States alone, the total number of patients treated by coronary bypass procedures in 1971 was about 25,0005 and since, except in a few cases, its value is doubtful, ideally it would be best to call a halt and observe the effects of what has been done.

Surely now maximum efforts and resources should be turned to the problems of primary prevention. There are ample grounds for optimism and the time has come greatly to extend work on methodology and feasibility in pilot studies on the necessary screening of the apparently healthy population. Our experience has shown that, far from inducing anxiety or neurosis, as some have feared, confidence is engendered, and there is an increasing demand.-I am, etc.,

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- Strong. J. A., and Turner, R. W. D., Quarterly Journal of Medicine, 1962, 31, 221.
 Ross, R. S., and Gorlin, R., Circulation, 1968, 37, suppl. 3, 67.
 Hulteren, H. M., and Abrams, H. L., American Heart Journal, 1967, 74, 737.
 Koutchoukos, N. T., and Kirklin, J. W., Modern Concepts of Cardiovascular Disease. 1972, 41, 47.
 Friedberg, C., Circulation, 1972, 45, 727.

Infection of Peritoneum during Dialysis

SIR,-Dr D. G. Oreopoulos and Mr. S. Izatt (15 September, p. 592), in commenting on my description of the use of lysozyme assay for detection of peritonitis during dialysis, do not, I believe, question the usefulness of the assay but whether it distinguishes between "chemical" and infective peritonitis.

I can only say that a much larger body of experience will have to be accumulated in order to tell whether lysozyme levels are different in the two conditions. In fact, since making a change in the dialysis fluid three years ago we have not recognized "chemical" peritonitis which, as Dr. Oreopoulos and Mr. Izatt point out, should affect groups of patients. Our cases of peritonitis have been sporadic, they occur always in patients on weekly maintenance dialysis, and the fact that organisms are not always grown is due firstly to the accepted unit policy of giving intraperitoneal antibiotics early and secondly to the fact that acetate fluid is inimical to prolific growth of the organisms. As the figures in my article show, most of our cases respond rapidly to kanamycin; this would not be the case with chemical peritonitis .--- I am, etc.,

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Anaesthetic Safety Devices

SIR,--We agree entirely with Dr. R. Parfit's desire (22 September, p. 635) to see oxygen fail-safe devices widely used. We would also accept his five essentials for an ideal safety