Correspondence


Surgical treatment of acute coronary insufficiency

Sir:

In their paper ‘acute coronary insufficiency—an urgent surgical condition’ (British Heart Journal, 37, 1053) Lawson and his colleagues state that it seemed natural to offer bypass surgery to their patients with acute coronary insufficiency because such patients appeared to have a relatively poor prognosis on medical treatment. It is implicit in their article, bearing in mind their excellent results with 41 cases, that surgery is the treatment of choice in this condition.

However, in concluding that acute coronary insufficiency has a relatively poor prognosis on medical treatment the authors base their opinions on a selective review of the literature and on papers which have defects of consistency, design, and methodology which make them unrealiable and hardly comparable guides to the natural history of the condition. They quote papers which report a high morbidity and mortality for acute coronary insufficiency during the acute stage and at long-term follow-up.

We would like to refer to other publications where the immediate and long-term outlook for these patients are very much more favourable on conservative treatment. In 1972, Krauss, Hutter, and DeSanctis reported only one death in the acute stage in 100 patients with acute coronary insufficiency. Their findings are not mentioned by the authors though their publication is alluded to in another context. In 1970 (Murnaghan, Hurley, and Mulcahy) we reported 4 deaths during the acute stage among 43 such patients (9.3%) admitted to our coronary care unit. In 1970 (Mulcahy, Murnaghan, and Hickey) we reported a 4-year mortality of 11 per cent among 52 patients with acute coronary insufficiency, but in 1975 (Mulcahy et al.), in a more detailed, better-designed study, we reported a 6 per cent 4-year mortality among 66 patients. All our patients were subjected to a vigorous rehabilitation, exercise, and risk factor intervention programme. If our results are confirmed by other workers, using the same conservative treatment, we shall require a very clear definition of the type of case which may benefit immediately and over the long term from bypass surgery.

It is acknowledged that we do not yet have sufficient information about the natural history of acute coronary insufficiency, whatever form of treatment is adopted (Fowler, 1971). Several pleas have been made to avoid properly designed randomized control trials before embarking on uncontrolled and potentially hazardous methods of treatment, whether medical or surgical (Fowler, 1971; Krauss et al., 1972). With such a well-defined condition and with a large number of cases available to us, such a project should not be too difficult to undertake.

Despite the inadequate data about the natural history of acute coronary insufficiency, whatever its treatment, we feel that there may be certain subgroups of patients who may best be treated by surgical means but we believe that clear indications of treatment methods will not emerge until appropriate control trials are arranged. It is right that, as individual physicians and surgeons, we should be guided in our treatment by personal judgements but it is surely essential, from the ethical as well as the scientific points of view, that the organized medical profession should insist on proper trials before thousands of patients are subjected to unproven and possibly hazardous drugs and procedures.

Finally, in describing the results of surgical as opposed to medical treatment, we make a plea that authors should describe the exact method of medical treatment which is employed. Far too many drugs and other methods of conservative treatment are unproven and one must admit the futility of many of these.

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References


patients surviving a first coronary attack. *British Heart Journal*, 37, 158.


This letter was shown to Dr. Lawson and his colleagues who reply as follows:

Sir:

We are disappointed that Drs. Mulcahy and Hickey consider our review of the medical management of acute coronary insufficiency, as quoted in our recent paper, selective and non-representative of the natural history of the condition. We attempted, in fact, to try and survey recent British and American data as mainly assessed by cardiologists, and regret that Dr. Mulcahy’s findings were not reviewed. This omission has now been rectified.

In their paper on experience of acute coronary insufficiency in a coronary care unit (Murnaghan, Hurley, and Mulcahy, 1970) they noted that 8 of 43 of these patients (18-5%) developed a myocardial infarction, 5 within 2 days and 3 within 10 days of admission. Four of these 8 (50%) were fatal. These findings are little different from the series quoted in our paper.

The 4-year follow-up studies (Mulcahy, Murnaghan, and Hickey, 1970; Mulcahy et al., 1975) show encouragingly low late mortalities in patients with acute coronary insufficiency and myocardial infarcts. It is of interest that 23-5% per cent of the late deaths occurred in the first six months and 41 per cent in the first year (Mulcahy et al., 1975). It is also not entirely clear in these follow-up studies whether a patient with acute coronary insufficiency who sustained a myocardial infarct was thereafter classified in the acute coronary insufficiency or myocardial infarct group. Should such a patient subsequently die, the late mortality in the two series would be affected by his classification before death.

Though only one of Krauss’s patients died in the acute stage, a further 21 seemed to die of cardiac causes at an average follow-up of 20 months (Krauss, Hutter, and DeSanctis, 1972).

All our patients were initially treated by bed rest, sublingual nitrate and opiate analgesics in a coronary care unit. Propranolol was rarely given and lignocaine and atropine were used only for specific arrhythmias; no other drugs were given.

We do know the value of the prospective, randomized trial. Indeed recent preliminary results in two such American trials have shown no significant difference in mortality in medically and surgically managed patients with acute coronary insufficiency, though significantly more surgically treated patients were free of angina, had higher exercise and heart rate thresholds for angina; and higher lactate extraction during tachycardia (Conti et al., 1975; Seldin et al., 1974). It may well be that in future, urgent surgery will be required only by the high risk groups with angina continuing for 24 to 48 hours or more after hospital admission (Gazes et al., 1973; Bonchek et al., 1974). All 8 patients admitted with acute coronary insufficiency and subsequently suffering a myocardial infarction (Murnaghan et al., 1970) appeared to be in this category.

Our results were due to cardiac expertise in performing safe and detailed coronary arteriography, to readily available surgical skills, and to close liaison between cardiologist and surgeon. In such circumstances and given the state of the art in 1973–74, we feel that our results showed that urgent surgical treatment of acute coronary insufficiency was both safe and effective.

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References


