aneurysm, assessment of the contractile segment, and differentiation from diffuse left ventricular hypokinesis.<sup>13</sup> <sup>15</sup> A giant aneurysm of the anterior wall may be incorrectly diagnosed, however—an error made less likely by additional scintigraphic views and two dimensional echocardiography. 16

Untreated, patients with a left ventricular aneurysm have a 90% chance of dying within five years of their myocardial infarction.17 18 Such global figures must be qualified by the statement that prognosis depends on several factors and, in particular, the overall left ventricular performance. Death usually results from recurrent myocardial infarction with or without left ventricular failure.

Patients should be referred for consideration of surgery when the maximum appropriate medical treatment has failed.<sup>19</sup> All patients, especially those with severe left ventricular failure, must be fully assessed with attention paid to the function of the non-aneurysmal contractile segment of the left ventricle, the severity of occlusive coronary artery disease, and the presence and severity of mitral regurgitation.<sup>20</sup> Both the variable operative mortality (4-50%) and the clinical prognosis depend on these factors.21 22 Radionuclide angiography and two dimensional echocardiography are playing an increasing part in the preoperative (and postoperative) assessment of left ventricular function.23

Many patients with severe left ventricular failure are much relieved after combined aneurysmectomy and coronary artery bypass surgery. 19 24 Some, however, have disappointing results despite apparently good contraction of the nonaneurysmal segment on preoperative assessment. Indeed, a paradoxical inverse relation has been reported between the extent of any improvement in postoperative left ventricular function and the function of the remaining viable segments.<sup>25</sup> In patients who are not in failure aneurysmectomy with coronary artery bypass for refractory angina carries a low operative mortality (4%) and a five year survival of about 75%.26

Mural thrombi are present in about half of all left ventricular aneurysms. The incidence of clinically recognised embolism is low at 5%, but necropsy studies show a higher incidence, of about 30%.27 The presence of mural thrombus correlates inversely with the duration of treatment with anticoagulants, and the effect of anticoagulants should be assessed before considering aneurysmectomy for peripheral embolism.

Aneurysmectomy for ventricular tachyarrhythmias may help many patients, but the results are unpredictable, and the operative mortality approaches 60% within a month of acute myocardial infarction. 19 28 The site of origin of such arrhythmias may be distant from the aneurysm. Electrophysiological mapping may help in its location: an encircling ventriculotomy or endomyocardial resection may then be beneficial.29 Clearly a thorough trial of medical treatment should be given before surgery.

What has emerged from recent research is that patients with left ventricular aneurysms after myocardial infarction form a heterogeneous group. The main determinant of the clinical course and outcome of surgery is the state of the coronary arteries, which in turn determines the function of the non-aneurysmal segment of the left ventricle and the size of the left ventricular aneurysm. More studies of clearly defined subgroups of these patients are needed.

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## **Deputising services**

Facts have been in short supply during the recent debate on problems associated with deputising services in general practice—but opinion has abounded and has at times been based on wishful thinking. If rational decisions on future policy are to be made the facts need to be distinguished and recognised.

Evening, night, and weekend visits make up only 1% to 3% of general practice consultations, 1-3 but they arouse strong emotions in both doctors and patients. 4 Over 40% of night visits are currently carried out by deputising services.5 When a call has been received deputising services usually respond by visiting the patient.<sup>67</sup> General practitioners are much more likely to respond with telephone advice.<sup>1-3</sup> A paper by Sheldon and Harris (p 474) confirms a previous report that use of deputising services was associated with a substantial increase in night visiting.8 No evidence exists to suggest which approach to calls represents good clinical practice.

On the whole, those deputising services which have been studied appear to respond to calls reasonably quickly.69 The appropriateness of delays is, however, difficult to judge from published work: patients are more likely to complain that the delay in visiting has been longer, 10-12 or longer than

they thought appropriate,12-14 when visited by a doctor who was not from their practice. When asked about satisfaction with the medical care provided patients are more likely to express dissatisfaction with a deputising doctor than with one from their own practice. 12 15 Few patients actually express a preference for a deputising service. 16 17

Clearly the public image of deputising services needs to be improved, but do they provide an inadequate standard of care? Some deputising services have employed staff with inappropriate experience,18 and there is anecdotal evidence of poor quality care from overworked deputies. 19 Stevenson, however, visited a series of 57 patients after the visit of the deputy and judged the care provided to have been satisfactory.9 Referrals to hospital from deputising services appear less appropriate than referrals from general practitioners, 20 21 and deputising services have not been thought to contribute substantially to the increasing workload of casualty departments.22

Some problems might be expected from the loss of continuity of care with deputising—compliance with antibiotics, for instance, is greater if the patient knows the prescribing doctor<sup>23</sup> <sup>24</sup>—but the effects have not been quantified. Nor are there data on the effect on care of having the medical records at night, though there are circumstances (for example, in managing a confused old lady or an unconscious young woman) where ready access to the notes would clearly be valuable.

Doctors have mixed attitudes to deputising services. Cartwright and Anderson found that 52% of doctors saw deputising services as a disadvantage for patients.17 In a survey commissioned by the British Medical Association and Air Call, 82% of doctors "who used an outside arrangement" found the care provided satisfactory.25 On the other hand, in Wakeford's survey<sup>26</sup> 47% out of 331 general practitioners "supported or tended to support" the minister's original suggestion that large partnerships should stop using deputising services completely.27

What has become clear is that there is substantial concern about deputising services both from within and without the profession. The standard of the least good deputising services must be improved, and this change is likely to be encouraged by the inclusion of lay members in the new Family Practitioner Committee deputising subcommittees —an innovation not welcomed by the recent annual conference of local medical committees. Nevertheless, the conference reiterated that deputising services and the doctors working for them should be of "high quality."28

Ten years ago most deputising doctors seemed to be hospital doctors, 18 29 but more recent reports indicate that over three quarters of deputies in many services are local general practitioners. 25 30 An extension of the participation of local general practitioners in commercial deputising is described by Bain (p 471), who outlines the Portsmouth deputising service in which the professional advisory committee has stipulated that all doctors using the service should be participants, with the result that 90% of deputies

are practising general practitioners. This arrangement is very similar to a large cooperative and ensures a reasonable standard of deputy while at the same time giving doctors greater flexibility to arrange time off duty. This type of arrangement is particularly suitable in the inner city, where primary care services are less organised<sup>31</sup> but where medical and social need is particularly high. 32 It may also suit doctors in small practices who are less able to arrange cover within their own practice than those in larger groups.

The within practice rota still provides better access to medical records and increased knowledge of the patient (especially difficult and regular callers) than does a deputising service. These are tangible benefits for the visiting doctor—and are seen as such by patients, who clearly prefer a visit from their own doctor or one of his partners. 12-17 Once substandard deputising services are a thing of the past the argument over whether deputising detracts from good patient care will settle on this issue of continuity of care. When patients are ill out of hours, is it important that a doctor from their own practice calls, or will any competent doctor do? Is continuity of care a fundamental feature of general practice, or is it a luxury to be found only during the doctor's office hours?

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