It must be emphasized that there are great difficulties in the certain assignment of specific gene loci to particular chromosomes, and J. H. Renwick[10] has reviewed the pitfalls in using aberrations of chromosomes to place gene loci on these bodies. Some of the problems, such as the inheritance of silent alleles or doubtful paternity, are eliminated in the patient described by Dr. Callender and her colleagues, and this is an advantage of such prospective studies in single individuals.

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A Cause of Sudden Death

Obstructive cardiomyopathy has become well recognized in the last 12 years. There is marked hypertrophy of the left ventricle, especially of the interventricular septum and outflow tract with consequent narrowing in systole. It presents in two guises: as a cause of sudden death in the previously healthy and as a disease whose manifestations include dyspnoea, angina, dizziness and syncope, and congestive heart failure. The importance of obstructive cardiomyopathy as a cause of sudden death is underlined by a report by T. K. Marshall[1] of 16 examples occurring in Northern Ireland between 1959 and 1967. It accounted for one in every 200 sudden cardiac deaths, and though occurring mostly in the under 30 age group there were instances in every decade up to the eighth. The mechanism of death was thought to be a sudden arrhythmia, and two deaths were apparently precipitated by precordial trauma. With such a frequency as a cause of sudden death it is not surprising that the first comprehensive pathological description was made by a forensic pathologist.[2]

Since D. Teare's description the disease has gained many synonyms and initials (but no eponyms) which include asymmetrical hypertrophy, idiopathic hypertrophic subaortic stenosis (I.H.S.S.), hypertrophic obstructive cardiomyopathy (H.O.C.M.), and hereditary cardiac dysplasia. Two forms are recognized, the familial and the sporadic, and in a series of 126 patients at Bethesda[3, 4] 40 fell into the familial group and 86 into the sporadic. There was a male preponderance in both groups, greater in the sporadic. Sudden death was commoner in the familial, as was severe disablement in the non-fatal cases. Inheritance is apparently by a dominant gene with variable expressivity and incomplete penetrance. The condition has been described in the newborn and has been reported with concomitant congenital cardiac anomalies.[5] The exact pathogenesis of the hypertrophy and even the mechanism of its effect on cardiac function are in doubt. Electron microscopy of the abnormal region has shown mainly non-specific changes, although E. H. Sonnenblick[6] has demonstrated great variations in sarcomere length in operative biopsy specimens, and it seems possible that these abnormal fibres are unable to contract.

The suggestion that there is an increased amount of myocardial noradrenaline[7] has encouraged the study of the effect of β-adrenergic blocking agents in treatment, and some good results have been claimed. Surgical treatment has mostly consisted of removal or division of hypertrophied muscle, either via the left or the right ventricle. In a series of 42 patients treated at the Hammersmith Hospital[8] with oral propranolol for four years dyspnoea was relieved in no more than half, but angina was relieved in the majority. The main place of surgery appears to be in those patients with severe outflow tract obstruction, and in 22 individuals so treated 14 showed symptomatic improvement.

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Aortic Aneurysm and Peptic Ulcer

Aneurysms of the abdominal aorta are being detected more often than formerly, and the great majority are atheromatous in origin.[1] Atheromatous aneurysms generally affect the aorta below the origin of the renal arteries, and they may extend to its bifurcation. They enlarge progressively and usually show themselves as a pulsatile abdominal swelling. Sometimes they cause upper abdominal pain, which may simulate a peptic ulcer, though it is usually not related to food. Untreated aneurysms tend to rupture if the patient does not succumb beforehand to other cardiovascular diseases. About 10% rupture into some part of the gastrointestinal tract, the third part of the duodenum being the commonest site.[2] The resulting haematemesis may be difficult to distinguish from that due to a peptic ulcer.

A. W. Jones and his colleagues have recently investigated the incidence of peptic ulcer in patients with an abdominal aortic aneurysm.[3] They examined the necropsy records of a Manchester teaching hospital over a 13-year period and found 99 cases of aneurysm and 523 cases of peptic ulcer. The incidence of peptic ulcer in the general necropsy population was 7·2%, while in cases with aneurysm it was 22·6%. Of the 22 cases of aneurysm with peptic ulcer only two occurred in women; these had gastric ulcers and both died of ruptured aneurysm. Of the 20 men with the combined lesions, 14 had duodenal ulcers. There was a significant statistical association in males between duodenal ulceration and abdominal aortic aneurysm.

The explanation of this association is obscure. A. Elkeles[4] noted an association between radiological calcification of the aorta and its branches and gastric ulcer in people over the age of 50, and suggested that the ulcers were caused by ischaemia. Gastric ulceration of the elderly is generally held to differ in certain respects from the more common duodenal ulceration that occurs throughout adult life. It is seen predominantly in the labouring classes in Britain and particularly in poor, malnourished people.[5] Perhaps devitalization of the

gastric mucosa is an important predisposing factor. But in Jones and his colleagues' cases the emphasis was on duodenal ulceration, and a purely ischaemic aetiology seems unlikely. A common factor may enter into the causation of both lesions. The severity of atheroma is related to cigarette smoking,[6] and the evidence points to a relationship between peptic ulceration and smoking.[7] Unfortunately there are no data on the smoking habits of Jones and his colleagues' patients. Be this as it may, it is important to know of the association lest haematemesis in a patient with an abdominal aneurysm is automatically attributed to its incipient rupture.

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People's Preferences

The contrast between private affluence and public squalor has grown more striking in Britain, according to a report published last week, as families enjoying higher standards of food, domestic equipment, and holidays are confronted with continuing deficiencies in medical care, schools, housing, and, for an important minority, pensions.[1] Published by the Institute of Economic Affairs, the report is based on a survey of opinion carried out to discover people's preferences in paying for the welfare services.

For some time politicians of all parties have been agreeing that direct taxation has reached the limit the population will stand. Yet there is a good deal of evidence—for example, from schemes of private saving and insurance—that many people do not wish to rely on State welfare alone. They want better services but object to the Treasury extracting the money to pay for them. That people holding these ideas form a substantial proportion of the general population seems clear from the present report. As many as 73% of the sample questioned, for instance, thought that "people should be allowed to pay extra for their health and education and pension arrangements." At the same time 85% agreed that "everybody, rich or poor, is entitled to equal treatment in the social services." And 24% thought that "people should not be allowed to pay extra for the health services they need outside the (National) Health Service." On the question of paying for the Health Service 66% of the sample thought the present system should be left unchanged. But that as many as a third should favour a change to other methods deserves attention. As the report puts it, if one in three brought up on all-party blessing for the N.H.S. is prepared to take a chance on an unknown method of obtaining medical care, the N.H.S. cannot be giving the high standards claimed for it by sociologists, politicians, and others.

Since the inquiry was based on interviews for an average of 45 minutes with 2,005 men and an admittedly not fully representative sample of 199 women its conclusions must be treated with reserve. But they do suggest that though there are expected differences on the average between people in the upper and lower socioeconomic classes there are also unexpected concordances. Not for the first time the politicians of both the main parties may know less about their constituents' opinions and wishes than they think they do. In other words, they may have greater freedom to set about improving the welfare services than they had dared to hope. That "equal treatment" should be available to all who use the Health Service is obviously the wish of the overwhelming majority of people in the country, whether patients or workers in the service, and to that should be added the condition that full medical care is obtainable by all who need it irrespective of their means. But neither of these aims is necessarily incompatible with fresh approaches to financing health services.

[1] Harris, R., and Seldon, A., *Choice in Welfare 1970*. London, Institute of Economic Affairs, 1971.

Geriatric Day Hospitals

In 1960 there were only a dozen geriatric day hospitals in Britain. By the end of last year there were 119 and several more were being built. Day hospitals started in other countries —Russia, Canada, and the U.S.A. all having introduced them for psychiatric patients in the early 1940s—but their use in geriatrics has been largely developed in Britain, where most consultants now believe that they are an essential part of the geriatric service. A point when expansion is slowing down is always a good time for taking stock, and a recent review of day-hospital principles and practice[1] should do much to persuade the unconvinced 4% of geriatric consultants in this country that further development is worthwhile. It should also encourage further expansion abroad.

Most of the patients who attend day hospitals do so for rehabilitation or the maintenance of physical independence. They come in roughly equal proportions from hospital doctors and general practitioners. Day hospitals are usually closely linked with ordinary hospitals (either general or geriatric) —an arrangement which enables them to share physiotherapy, occupational therapy, diagnostic, and treatment services. The typical day hospital in Britain provides over 20 places and has a staff of nurses, physiotherapists, and occupational therapists. Patients are usually brought in by ambulance and attend once or twice a week—in two-thirds of cases for less than a year. Their progress is reviewed at regular case conferences or review clinics. Once experience has been gained in running the day hospital, there is a definite change in the pattern of care: the proportion of patients discharged by the staff increases and that of patients discharging themselves decreases, indicating that the selection of patients is better.

This report shows clearly that the day hospital has an essential role in any full geriatric service. It acts as a midway house between the hospital inpatient geriatric unit and the community social day centre. But not only does the existence of a day hospital enable inpatients to be discharged earlier: it stimulates the morale of all concerned, and it encourages further development of the local facilities for old people. As Professor J. C. Brocklehurst points out in his conclusion, it "acts as a window through which the staff of the whole geriatric department can see the fruits of their labours as their elderly patients are resettled and maintained in the community."

[1] Brocklehurst, J. C., *The Geriatric Day Hospital*. London, King Edward's Fund for London, 1970.