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Doctors' Diseases: Insurance society figures for early 1960s show a 60% rise in incidence of ischaemic heart disease, and 111% more cases of "sudden" death in 45–54 age group. Increase in mortality during all episodes of ischaemic heart disease was the same in doctors as in general male population of this age group, during this same period (p. 701).

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Prevention of Coronary Heart Disease

The increasing morbidity and mortality from coronary artery disease, particularly in young and middle-aged men in Britain,[1] the U.S.A.,[2] and Australia,[3] are causing growing concern. Indeed, some authorities have concluded that we are facing a modern epidemic comparable to the large-scale outbreaks of the contagious diseases in the nineteenth century. Certainly it is important to look at those factors which are probably associated with coronary artery disease to see whether any measures can be recommended to try to halt the rise in its incidence.

Several recent epidemiological studies have clearly indicated that people with certain characteristics form a high-risk group, in which the chances of death from myocardial infarction are several times greater than in the general population. Coronary artery disease affects mainly men between 40 and 60 years of age, and its incidence rises sharply with each decade. In women the condition is much less common than in men until about 10 years after the menopause. Heredity is another important aetiological factor. The man whose father or mother died suddenly in middle age is probably about twice as likely to have a cardiac infarction as one with a negative family history, and the risk may be fivefold if both parents have had premature coronary artery disease.

Fortunately the other characteristics of the high-risk group offer more scope for preventive measures. They have recently been listed by M. F. Oliver and C. H. Stuart-Harris[1] as hyperlipidaemic states, hypertension, cigarette-smoking, physical inactivity, and premature cessation of ovarian activity. There is good evidence that apparently healthy people living in a Western society who have one of these characteristics or habits have an increased likelihood of developing coronary heart disease. The effects of the individual factors are independent and additive. The incidence of clinical coronary heart disease in men aged 40–59 rises from 9 per 1,000 when one of these factors is present to 77 per 1,000 when any three of them are noted at the initial examination.[4] Other possible influences on the development of coronary artery disease are obesity—especially a rapid gain in weight—hyperglycaemia, psychogenic stress and the individual's reaction to it, hyperuricaemia, and a thrombotic tendency.

Most of these factors can be influenced by present-day treatment. Thus hyperlipidaemia can be controlled by a diet which is low in unsaturated fat content or by the use of drugs, of which the most successful so far is clofibrate. Studies carried out on survivors from myocardial infarction have failed to show that lowering the serum lipids thereafter improves the prognosis.[5] Nevertheless, this does not mean that similar measures employed prophylactically in subjects known to be at risk would not be effective, and the results of prospective trials both with diet and with clofibrate which are in progress at present are eagerly awaited. Some information is already available. The experience of "The Anti-Coronary

Club" in New York suggests that a modified diet will reduce the incidence of new coronary events in men aged 40–49, provided the patient sticks to the regimen for two years or more.[6] The results of the National Diet–Heart Study carried out by the American Heart Association[7] have shown that it is feasible to carry out large-scale field trials on the use of special diets, and the committee responsible for organizing the study has strongly recommended that these should be started as soon as possible, a recommendation also endorsed by I. H. Page and H. B. Brown.[8]

So far most workers have concentrated on the control of hyperlipidaemia, which is thought to be the most important risk factor. Nevertheless, a therapeutic attack on at least two other major factors is possible. Hypertension can be largely controlled by hypotensive drugs, though there is no convincing evidence that this treatment reduces the incidence of coronary artery disease, particularly in patients with mild asymptomatic hypertension.[9] Hormonal substitution therapy in women who have had an early menopause, however, is a simple and probably effective form of prophylaxis.[1] Of the other important characteristics of the high-risk group obesity, cigarette-smoking, and physical inactivity are all theoretically remediable, but in practice little success has been achieved.

J. B. Hickie,[3] from Melbourne, suggests that the situation is too urgent to wait for convincing evidence from organized trials. Instead, people known to be at risk should be offered a preventive programme, comprising a changed diet, less smoking, more physical activity, and control of mild hypertension. He estimates that such a programme would affect at least 40% of Australian men over the age of 40.

Theoretically, few would disagree that these measures may be desirable, but experience suggests that a programme of this nature is unlikely to meet with much success. Thus many doctors who have worked in an obesity clinic know just how few patients will adhere to a regimen of even a mild restriction on their usual diet for more than a short period. Both the National Diet–Heart Study and the Anti-Coronary Club found that even among highly selected volunteers the number who drop out is considerable. Similarly with smoking; few doctors who have made conscientious attempts to stop patients smoking would claim that they have had much success. The results recently reported by J. S. Mausner and her colleagues[10] are probably typical: six months after a serious warning about the dangers of smoking they found that only one-third of the patients had reduced their consumption by at least 10 cigarettes a day. Moreover, even when a lead is given by the medical profession themselves, as in the case of smoking in relation to lung cancer,[11] this is unlikely to be followed by the general public. Quite apart from these problems it is also important to point out, as A. R. P. Walker[12] has done, that some of these apparently important predisposing factors have been found to be present in more primitive populations in which coronary heart disease is rare or absent, and that by correcting them we do not affect ethnic and evironmental influences, which may well be much more important.

For these reasons many will conclude that the time is not yet ripe to institute preventive measures against coronary heart disease on a national or other large-scale basis. Nevertheless, if an individual patient who has more than one of the high-risk characteristics seeks medical advice he should be recommended to adopt a programme such as that suggested by Hickie. As Hickie also points out, a good doctor who handles his patient with skill and tact should be able to supervise this kind of regimen without causing unnecessary alarm or inducing a cardiac neurosis.

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Neuroblastoma

Neoplastic disease in children is now one of the main causes of death once the neonatal period is past. Leukaemia and associated disorders of the haemopoietic tissues account for about one-third of these deaths, and a further third result from tumours of the nervous system, including neuroblastomas. Neuroblastomas and ganglioneuromas are the third commonest tumours in children and adolescents.[1] Neuroblastomas are seen most frequently in infants and young children, and in some instances the tumours are undoubtedly congenital in origin. In addition to the quite large tumours which are obvious at necropsy and which may have metastasized widely at birth or shortly afterwards, small foci of neuroblastoma may be discovered in the suprarenal glands and elsewhere during routine histological examination of tissues obtained at necropsy during the neonatal period. This is sometimes referred to as neuroblastoma in situ.

Neuroblastomas, especially those arising in the suprarenal glands, seem commoner in the male, and the male–female ratio is of the order of 2:1.[1 2] By contrast the ganglioneuroma, which is regarded as a benign tumour and incapable of metastasis, occurs in older children and may even first be detected in adult life. Unlike neuroblastomas, ganglioneuromas are commoner in females, and the sex ratio may be of the order of 1:3. It has been suggested that in a few instances a neuroblastoma may gradually mature into a ganglioneuroma, and it is an interesting hypothesis that this process may be commoner in the female.[1 3]

In spite of the frequency with which neuroblastomas are seen in young children it is a rare event for more than one

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