EDITORIAL

THE DECLINE OF CARDIOVASCULAR DISEASES AS A CAUSE OF DEATH

Cardiovascular diseases (CVD) have ranked high, principally in the United States and the industrialized countries of Europe, as representing important causes of death as from the first decades of this century and have shown a tendency to increase. In some of these countries the CVD have represented 50%, or slightly more, of the total of deaths, from the early 50's onwards. It has not been simply that this proportion has grown as a result of the reduction of other causes – but also because the risk of dying from the CVD also increased.

As from the end of the 40's, when preventive measures made possible a reduction of the cardiac complications of rheumatic fever with a consequent drop in mortality, two causes, among the CVD, have stood out: ischemic heart diseases (IHD) and cerebrovascular diseases (CbVD). In the United States the increasing proportion of the IHD in mortality has led some authors to call the disease "the epidemic of the century" and have come to develop a lively interest in studies not only of the descriptive type given by the vital statistics, but also in those analytical studies which should permit a better knowledge of the risk factors for the development of the disease. There then arose numerous projects designed to study population groups, according to diverse characteristics, over a long period of time. Because of the importance, the duration and the large number of its results which indicated risk factors, the Framingham's study deserves special mention.

On the other hand, beyond these studies which provided the population, through their results, with the knowledge which made primary prevention possible, others led to a great technological advance from the therapeutic point of view, both on the clinical and on the surgical side. Thus, at the same time in which ever more sophisticated equipment has arisen and made possible the recovery of many "heart attack" cases and increased the length of survival, the knowledge acquired with regard to the risk factors of atherosclerotic disease led, to a greater or lesser degree, to the reduction of the smoking habit, to the avoidance of fatty foods, to the control of arterial hypertension, to the taking of exercise, and so on.

Whether as a consequence or not of primary prevention or of therapeutic advances, or of both together or possibly of both together with something more still unrecognized (why not the behavior of the disease itself?) a decline of mortality due to CVD has begun to be discovered, after decades of increase, due mainly to the behavior of the IHD, which has received greater emphasis, but also to the decline of mortality by CbVD.

The declining tendency of mortality from IHD began in the United States and Canada, at the end of the 60's. More precisely: in the United States, in 1968. The fact called so much attention that a conference to bring together clinicians, cardiologists, epidemiologists, statisticians and others, was convened in Bethesda, Maryland, USA, in 1978 under the auspices of the "National Heart, Lung and Blood Institute"[1]. The purpose was to discuss whether the decline of more than 20% observed in mortality from IHD, between 1968 and 1976, was real; to discuss possible causes and recommend further studies to elucidate these causes. Among the conclusions reached were the following: the decline in mortality from IHD, in the USA was real and not the result of any artifact; whether it were due to primary prevention, effective by means of changes in some risk factors, or whether due to the improvement of specific medical care, these did not entirely explain the decline, and a more exact quantification of the causes of the decline should be attempted by means of various studies, especially those planned to discover whether the frequency of non-fatal cases of IHD was changing.

In the United States the tendency to decline begun in 1968 continued to exist. The decline has also made itself felt in numerous other countries, including England, Japan, Australia, New Zealand and almost all of Western Europe.

In the S.Paulo county a recent study[2] has shown that, for people over 20 years of age, the tendency to die from IHD grew up to 1976 and that, from that date, it has been declining continuously – the greatest decline being among women.

In this number of the "Revista de Saúde Pública" (p.343) another study showing the tendency of mortality by CbVD in S.Paulo county is being published. In the same way as in the developed countries there is also being verified, among us, a decline in mortality for this group of diseases. The decline began in 1975 and by 1981 was of 11.1% (13.6% for men and 8.5% for women).

Can it be that the same causes which led to the decline in other countries are also having their effect among us? Everything suggests that this is in fact the case – but among these causes which are the most important? Those which are leading the population to change their life-style, that is to say, in the direction of avoiding risk factors?

Or are the clinical and surgical therapeutical measures which are coming to be used more and more, as far as one can tell, in S. Paulo county, one of the main cardiological centers in Latin America, more important? Or is it the general tendency of the disease throughout the world? Are there fewer cases or is the survival rate greater?

The studies which are being undertaken in other countries have not yet found satisfactory answers. Among us only these two studies which show the decline of the IHD and the CbVD are known. Nor is there any news of any study, either under way or planned, with a view to specific analysis of incidence and survival rates.

This is a task which must be thought through by clinicians and epidemiologists together: what types of studies ought to be planned in order to discover an answer to the questions which are being raised in other countries and which are now arising among us too. It is necessary to make it quite clear that one is not dealing with purely academic questions because, as must be evident, the results will produce important data for the clinical and epidemiological understanding of the CVD – specifically of the IHD and the CbVD – which will contribute to the reduction of their incidence and/or to the increase of survival rates.

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