South African Medical Journal : Suid-Afrikaanse Tydskrif vir Geneeskunde

EDITORIAL : VAN DIE REDAKSIE

THE EXCITING CAUSE IN CORONARY OCCLUSION

The opinion used to be generally held that physical exertion was a common proximate cause of coronary occlusion. Among those who have opposed this view is Master of New York, who, with his co-workers, has for many years been observing and documenting confirmed cases of coronary occlusion — exceeding two thousand in number — and has written a number of articles on the subject. At the 1960 annual meeting of the American Medical Association, he read a paper[1] presenting evidence from his records that exertion plays no important part in precipitating the attack in coronary occlusion.

Master emphasizes that this conclusion does not apply to the other form of acute coronary episode — acute coronary insufficiency without occlusion — in which in fact exertion plays an unquestioned rôle. Attacks of coronary insufficiency sometimes cause death; it is in general a relatively benign condition in comparison with coronary occlusion. When the insufficiency is severe enough to lead to infarction, this is confined to local areas in the subendocardial region and the papillary muscles, in contrast to the 'through-and-through' infarction that results from coronary occlusion. Master holds that failure to distinguish between these two forms of 'heart attack' was largely responsible for the mistaken views held in the past about the part played by effort and exertion in the precipitation of coronary occlusion.

In 1,248 cases Master recorded the period of the day when the attack began. He found that in 52·9 per cent. of the cases the onset was between 7 a.m. and 7 p.m. 'If effort were a factor one would expect the percentage of attacks occurring during the working hours to be much higher than 52·9'.[1]

In 603 cases the patient was able to pinpoint the hour of onset; the greatest number of attacks (42) began at 2 a.m., and the next in order were 35 at 10 p.m. and 33 at 11 p.m. 'These are ordinarily not working hours'.[1] The day of the week was recorded in 398 cases. The highest incidence was on Monday (17·1 per cent.) and the next on Tuesday (16 per cent.); but the third was on Sunday (15·8 per cent.), and the incidence on Saturday (13·0 per cent.) was higher than on Wednesday (12·0 per cent.) and Friday (11·0 per cent.). 'One can only deduce that coronary occlusion occurs no more frequently on working days than on holidays'.[1]

In 1639 cases of coronary occlusion the type of activity or inactivity of the patient at the time of the attack was recorded. It was found that 27·2 per cent. occurred during 'rest' (lying down or sitting), 25·6 per cent. during 'mild activity' (including ordinary home activities, being in the office, 'store', or car, and driving a car), and 22·9 per cent. during sleep. On the other hand, 13·2 per cent. occurred during walking (on the street, up or down stairs, after meals, against a cold wind, and while carrying a 'bundle'), 9·0 per cent. during 'moderate activity' (e.g. the work, other than merely walking, regularly performed by painters, carpenters, engineers, and bakers), and 1·9 per cent. during unusual or severe exertion (e.g. lifting or moving a heavy load, playing football, swimming, dancing, and skating). 'To us this adds up to the conclusion that coronary occlusion takes place irrespective of the physical activity being performed or the type of rest taken'.[1]

Master concludes from these analyses that physical exertion is not an exciting cause of coronary occlusion, 'which is the end result of an atherosclerotic process and occurs independently of external influences'. He adds that we 'know neither the cause of the acute coronary occlusion nor how to prevent it'.[1]

A distinction, of course, is to be drawn between the causation of coronary atherosclerosis and the proximate cause of coronary occlusion. Both factors are operative in the occupational aetiology of coronary occlusion. This aetiology Master investigated in 1,377 of his cases where the information was available, and found that there was a greater proneness to coronary occlusion in the 'white-collar' and professional occupational groups than in manual workers and unskilled labourers. These figures, however, do not show as great an excess as Morris *et al.*[2] recorded in England in the mortality rates from coronary disease in physically light occupations over the rates in the heavy-labour classes.

Master, indeed, attributes much of the increase in the recorded mortality rates from coronary disease to the aging of the population, improved diagnosis, a healthy index of suspicion, and changes in the classification and recording of heart disease. 'However,' he writes, 'it has not reached epidemic proportions, nor is it caused by the "stress and strain" of modern life.' In particular, he denies that it is to be regarded as especially the "doctor's disease".

The causation of atheroma is still the crux of the problem.

1. Master, A. M. (1960): J. Amer. Med. Assoc., **174**, 942.
2. Morris, J. N. *et al.* (1953): Lancet, **2**, 1053.

REGISTER VAN MEDIESE VERGADERINGS

Die 43ste Suid-Afrikaanse Mediese Kongres sal gedurende hierdie jaar (24 - 30 September) in Kaapstad gehou word. Behalwe hierdie tweejaarlikse kongresse wat deur die Vereniging gereël word, word daar gereeld 'n groot aantal kongresse, samesprekings, en vergaderings gehou deur groepe in die Vereniging en deur ander mediese organisasies. Liggame soos byvoorbeeld die Suid-Afrikaanse Rooikruisvereniging, die Nasionale Raad vir Blindes, en andere, hou gereeld vergaderings in verskillende dele van die land. Sulke vergaderings is gewoonlik van groot belang vir geneeshere.

Akademiese aktiwiteit van hierdie aard is baie welkom en moet aangemoedig word. Aangesien daar egter so 'n

groot toename is in die aantal kongresse en byeenkomste, vind oorvleueling van datums al hoe meer plaas. Dit is wel waar dat sekere byeenkomste net bedoel is vir gespesialiseerde groepe, maar daar is baie ander byeenkomste waarin dokters uit alle lae van die professie belangstel. As die datums van hierdie byeenkomste bots, veroorsaak dit ongerief, en dokters moet dikwels die moeilike besluit neem oor watter byeenkomste om by te woon en watter nie.

Behalwe akademiese vergaderings is daar ook gereelde byeenkomste van die Federale Raad van die Mediese Vereniging, die Suid-Afrikaanse Geneeskundige en Tandheelkundige Raad, en ander liggame. As hierdie byeenkomste bots met ander van 'n akademiese aard, kan dit ook aanleiding gee tot ongerief. Onlangs is daar byvoorbeeld in Johannesburg drie belangrike mediese byeenkomste gelyktydig gehou, en baie dokters was teleurgesteld omdat hulle moes kies en nie in staat was om al drie by te woon nie.

'n Ander aspek van die probleem is die aansienlike afstand tussen die groot sentrums in ons land waar die vergaderings gewoonlik gehou word. Alhoewel die faktor van afstand van minder belang word as gevolg van lugreise, vind besige dokters dit nogtans moeilik om van een stad na 'n ander te vlieg om een of meer vergaderings binne 'n bepaalde aantal dae by te woon.

Dit sou 'n eenvoudige oplossing van die probleem wees as 'n sentrale register van mediese vergaderings gehou kon word. Enige groep in die Vereniging of enige ander mediese of verwante liggaam wat 'n byeenkoms wil reël, kan dan die voorgestelde datum en plek van byeenkoms vóór die tyd aanstuur vir opname in die register. Die organiseerders kan dan in kennis gestel word of die gegewens inpas by ander reëlings. Indien dit nie die geval is nie, kan alternatiewe aanbevelings gemaak word. Ons wil dit graag sterk aanbeveel dat alle belangstellende liggame hulle aandag aan hierdie voorstel skenk.

Die Sekretaris van die Mediese Vereniging by die hoofkantoor van die Vereniging in Kaapstad het te kenne gegee dat hy gewillig sal wees om so 'n register van vergaderings te hou. 'n Lys van die voorgestelde byeenkomste kan dan van tyd tot tyd in die *Tydskrif* geplaas word ter algemene inligting.

Die menings van alle moontlike betrokke partye in hierdie verband sal graag ontvang word. As die idee gunstig ontvang word, sal stappe gedoen word om so 'n register so gou as moontlik in te stel.

CENTRAL REGISTER OF MEETINGS

This year the 43rd South African Medical Congress will be held. Apart from such major biennial congresses organized by the Medical Association, the many Groups within the Association, as well as other medical bodies, hold frequent congresses, symposia and meetings of their own. Organizations such as the South African Red Cross Society, the National Council for the Blind, and others, hold meetings in various parts of the country which are of interest to medical men.

This academic activity is a sign of professional maturity and is to be highly commended. However, with the increasing frequency of these congresses and meetings, overlapping of dates is common. It is true that some specialized congresses are of interest only to members of the specialty concerned, but there are many which doctors from all ranks of the profession wish to attend. If the dates of these meetings clash, much irritation is caused, and doctors have to make what is sometimes a difficult choice between several important subjects.

Apart from these academic meetings, there are regular meetings of the Federal Council of the Medical Association, the South African Medical and Dental Council, and other bodies. If these meetings clash with others of an academic nature the same difficulty arises. Recently, in Johannesburg, three important meetings were held simultaneously, and many doctors were disappointed that they had to choose between them and were not in a position to attend all three.

Another aspect of the difficulty is the distance between the large centres in this country where the meetings are held. Admittedly, air travel has made distance of little consequence, but a busy doctor finds it onerous to have to fly from one centre to another to attend two or more meetings within a matter of days.

A simple solution to the problem would be to keep a central register of medical meetings. Any Group within the Association or any other medical or para-medical body which intends to hold a congress or meeting could submit the proposed date and venue *in good time* to the central registry. The organizers would then be informed whether the date and venue was likely to clash with any other previously-arranged meeting and could be given a suitable alternative suggestion. We strongly urge that all interested bodies agree to make use of such facilities.

The Secretary of the Medical Association has intimated that the Head Office of the Association in Cape Town would be willing to be responsible for keeping a register of meetings; a list of such meetings could then be published from time to time in the *Journal* for general information.

The views and comments of all groups and other interested bodies concerning this proposal are invited; if it meets with general favour steps will be taken to implement it as soon as possible.