

KINCORAN OPINION

THOUGHTS ON BLOOD PRESSURE DETECTION

EOIN O'BRIEN

Blood Pressure Evaluation and Treatment Clinic, The Charitable Infirmary, Jervis Street

Depending on how we define hypertension, we can take it that between fifteen and twenty-five per cent of the population have elevated blood pressure, and that only about half of these are detected. These figures can leave us in no doubt but that hypertension, a major cause of cardiovascular morbidity and mortality, is one of the most serious diseases in our community. However, we must take care in interpreting these statistics. Whereas it is true that about a quarter of the population have hypertension, probably only about five per cent will need drug treatment, but the remainder will require continuous observation and advice on modifying their lifestyle. When we take account of the fact that of all the hypertensive patients receiving drug treatment, something less than one-fifth have adequately controlled blood pressure, it is obvious that our treatment policies need re-appraisal. But let me not be drawn into discussion on treatment, as my purpose is to concentrate on the detection of hypertension. It could, of course, be argued that if we are capable of only effectively treating less than one-fifth of the hypertensives already detected, it is somewhat pointless to concern ourselves with finding more patients with elevated blood pressure. While there is some validity in this approach it fails to take account of the fact that hypertensive patients may be benefiting considerably from risk factor modification, or put another way, general management as distinct from drug treatment.

At first glance hypertension would seem to be an ideal disease for a nationwide screening programme. The disease is easy to detect—the only apparatus needed is a sphygmomanometer, which nurses and paramedical personnel can operate—and effective treatment does protect the patient from the cardiovascular consequences of hypertension. Leaving aside the enormous cost of a nationwide screening programme (this has been estimated to be in excess of one billion dollars for the United States, to which would have to be added the cost of evaluation, treatment and follow-up), there is good evidence that the medical profession does not utilise effectively the facilities at its disposal for the detection of hypertension. For

example, it has been shown that even in teaching hospitals blood pressure is often not measured, and even when elevated blood pressure is recorded, it is often regarded as an incidental finding and ignored.

If, as has been estimated, sixty to eighty per cent of adults visit a doctor yearly, and more than ninety per cent do so every five years, it would seem that we have at our disposal a most effective means of screening the population for hypertension. The Irish Heart Foundation through co-operation with the public health clinics has established 63 hypertension screening clinics throughout the country, and has to date screened over 20,000 patients. There have been suggestions over the years for the establishment of screening facilities in other areas of health-care contact, for example in chemist shops. The medical profession's reaction to such proposals has ranged from outright hostility to apathy. However, the profession's feelings on this matter have been quite flagrantly disregarded by a number of commercial concerns which have recently established blood pressure recording facilities in a number of large stores in London, and latterly at Dublin Airport. Predictably, the reaction of the British Medical Association was one of denigration and hostility, but to the best of my knowledge there has not as yet been any official statement in this country. We (the collective pronoun is not a delusion of royalty but merely embraces the co-director of the Blood Pressure Clinic, Professor Kevin O'Malley) have given this matter careful consideration, and with the one proviso that the accuracy of the machines is proven by rigid standards and independently, would support this screening method. The advantage in this approach is that for a small cost (50p) and at little inconvenience an individual can learn the height of his or her blood pressure, and if this is elevated a doctor can be consulted for further evaluation. The disadvantages in the system are that there might be a number of false positive diagnoses and that undue anxiety might be induced in some individuals. This criticism is undoubtedly valid, but the benefits to be derived from the detection of hypertensive patients and, hopefully,

the ultimate prevention of cardiovascular disease would, in our view, outweigh these disadvantages.

Now, if we assume that for one reason or another there will be improved detection of hypertension in the community, it must follow that we as doctors are going to be faced with very large numbers of hypertensive patients needing management and possibly drug treatment. Do we have the resources both in manpower and finance to deal with this problem? Perhaps the obvious answer is that if the problem exists the resources will be found, but by the same token if we can save resources in one area, we can then apply them to another. Considerable savings could be made in the management and treatment of hypertension if we accepted the concept of home-recording of blood pressure either by the patient, a friend or relative. As with non-professional methods of screening, so too with the home-recording of blood pressure it may be that the medical profession feels itself threatened. There are now a number of studies which show quite clearly that home-recording of blood pressure is not only feasible but may be very much more revealing than casual blood pressure measurements, and yet it is surprising how little the technique is utilised. Apart from the fact that home-recorded measurements may greatly assist the doctor in judging the efficacy of his management, there is the obvious financial saving to both the patient and State (and ultimately to all of us) in that the patient need only visit a doctor at fixed intervals of time unless blood pressure control is unsatisfactory. This situation is in many ways analogous to the diabetic testing his own urine.

We can conclude that hypertension is a major community problem but by utilising the resources available to us we should be able to detect most hypertensive patients, and by sharing the responsibility for management with the patient, we should make substantial financial savings and perhaps improve patient adherence to therapy, which is one of the major areas of failure in dealing with hypertension.