

If I Had . . .

Hypertension

EOIN O'BRIEN

British Medical Journal, 1978, 1, 1469-1470

Let me begin by assuring the reader that I regard myself as a fairly healthy 38-year-old, and that I am (as most hypertensive patients would be) completely asymptomatic. My specialty has shown to me the frailty of human flesh, and this, together with the consequences of living in an inflationary age, forces me to seek further insurance, and I am instructed to attend an eminent specialist for examination.

Circumstances of diagnosis

On the day of my appointment everything seems to go wrong: my outpatient clinic is overbooked, a colleague's wife becomes unwell and has to be seen immediately, and, having run from the nearest available parking space two blocks away, I arrive 10 minutes late for my appointment. A receptionist of mature years and frosty complexion indicates, by asking was I unaware that her good boss was an extremely busy man (a fact which I accept without demur), that no favouritism is shown to medical colleagues in this establishment. The learned physician himself is in a tizzy, and mutters that, because he is late for an important meeting, the examination will of necessity be rapid. After mumbling apologies, I deny a propensity to fits, asthma, mental and nervous disease, miscarriages, and syphilis, and with diminishing ardour defend my family honour. Fumbling with shoelaces in one hand, and a half-opened fly in the other, I fall on the couch and feel the sphygmo cuff tightening around my biceps. "Good God," mumbles he, "ever had blood pressure, boy?" "No," I reply, terrified. "Any of the family ever die from strokes?" "No, honestly," I assure him.

After a few more clinical manoeuvres, one of which displays his sartorial panache with a tape measure, I am faced with the dreadful prospect of peeing on demand into a receptacle that at

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

EOIN O'BRIEN, FRCPI, MRCP, consultant physician (cardiology)

best would hold one-third of my bladder capacity after a hike across the desert. Another estimation of my blood pressure, and I am shown the door with the assurance that the insurance company will be contacted without delay.

Consequences of diagnosis

This day has been an extremely important one in my life. I have been labelled *hypertensive*. If this has been discovered early I must be forever grateful to the insurance company, because, given that effective management is instigated before cardiovascular damage has been done, my prognosis is good. On the other hand, it is possible that the condition has been misdiagnosed—a point to which I shall return. In either event the consequences will be similar: I shall hear from the insurance company that my proposal is acceptable, but at an increased premium. In effect, I have been classified, and labelled, as hypertensive—and this has similar consequences to a poor credit rating. I will always find it difficult hereafter to obtain insurance, and mortgage and pension options will likewise be affected. My employment prospects are unlikely to be influenced by the diagnosis—but were I an airline pilot or a train driver my occupation would be in jeopardy.

In short, life will never be quite the same again. I am not saying that this should not be so, but would it not be rather terrible if all of this happened because the insurance doctor and I were both in a great hurry when our paths briefly crossed?

On being told of the diagnosis, and before seeking another opinion, I would attempt to mollify the diagnosis by applying my own clinical logic. Without being aware of the actual level of my blood pressure, I would argue that the diagnosis was based on a casual reading in circumstances that although a little contrived are not by any means unrealistic. I would point to works showing the effects of stress and exertion on the blood pressure. I would even want to know if the good doctor's sphygmomanometer was accurate. Did he not use an aneroid model which has to be checked for accuracy from time to time (and so rarely is), and has it not been shown that about one-third of hospital sphygmomanometers are inaccurate for one reason or another? Did he use the fourth phase (muffling of Korotkoff sounds), or the fifth phase (the disappearance of sounds) when assessing my diastolic pressure? There can be a 10 mm difference between the two, a factor of considerable importance in borderline hypertension. But my major doubt about the doctor and the insurance company would rest on the assumption that they may not have taken into account the general state of my cardiovascular system. Should not the state of my urine, the size of my heart, the intensity of my aortic second sound, and the

condition of my optic fundi be of even greater importance than my blood pressure level as markers of cardiovascular reaction ?

If I really had hypertension

Having gone through this mental catharsis, I would seek out a colleague of sanguine temperament and conservative outlook with, if not renowned skill in hypertension, at least a declared interest in its management. I should like to think that he would not pay too much heed to my blood pressure at the first consultation, unless the diastolic was over 120 mm Hg (fifth phase)—in which case more urgent assessment and treatment might be necessary. He would, of course, learn much from careful examination of my cardiovascular system, and a normal ECG would reassure us both.

A discussion on my lifestyle would be worth while, particularly my diet (salt, calorie, and cholesterol intake may either singly or together be relevant); smoking habits (I must be advised to give up all tobacco); exercise (do I take sufficient regular exercise to keep myself reasonably fit?); and stress as balanced against leisure and relaxation (always difficult to assess, and even more difficult to modify, but well worth discussing). Let us assume that after three visits or so I have a sustained blood pressure of 160/105 mm Hg (fifth phase), that there is no evidence of cardiovascular reaction on examination, and that my ECG is normal.

And so to investigation, and drugs

The fewer the investigations the greater would be my confidence in my doctor. I would permit an urea, creatinine, potassium, and cholesterol estimation, and I regard urinalysis (and if abnormal, urine microscopy) and an ECG as part of basic assessment. I would not permit intravenous pyelography without definite clinical or biochemical indications, not only because I am terrified of injections, but because fewer than 4% of patients with hypertension have renovascular disease, and of these only a very few will be suitable for surgical treatment. The result of a normal chest x-ray film might be consoling for other reasons, but will add little if anything to the information already gathered. Catecholamine and renin estimations are not justified without specific indications:

The likelihood is that all the results of the above biochemical investigations will be normal (as indeed they will be in most hypertensive patients), but in the light of present thought these are generally accepted as being the least one should do in assessing hypertension, and I suppose they can be excused for being relatively inexpensive.

At this stage I should like my doctor to give me a review of

my condition as he sees it. I should like to know whether or not he thinks we might get by without drugs, at least for a time. I think I should be agreeable to modifying my lifestyle over a six-month period, while keeping a careful check on my progress, but if my blood pressure remained around 160/105 mm Hg, I should like to begin treatment that would probably be for life. The only problem remaining is to decide which drug, or drugs. As I see it there are two possibilities: a thiazide diuretic alone, or beta-blockers. The potential disadvantages of the thiazides are: failure to control my blood pressure (there is little to be lost by a trial of treatment); the occurrence of side effects such as hyperuricaemia (a definite risk, but I would consider myself unlucky if I developed clinical gout); hypokalaemia (in my case I would not regard this as a very great risk, and I would not consider a potassium supplement necessary); and diabetes mellitus (again, the risk is small and would not perturb me).

If treatment for one reason or another failed with a thiazide, I would adamantly refuse any suggestion of treatment with methyl dopa, clonidine, or adrenergic neurone-blocking drugs in favour of a beta-blocker either alone or combined with a thiazide. The advantages of beta-blockers are efficacy; comparative freedom from side effects; the facility for once-daily dosage; and the possibility, however unproved, that there may be a cardio-protective property. The disadvantages are the unknown side effects of long-term treatment, the possibility, however remote, of oculocutaneous reactions similar to those occurring with practolol, and expense. I hope I would not be bothered by cold extremities, vivid dreams, or constipation. In the absence of any respiratory history, cardioselectivity would not be important, and, although long-acting preparations may be advantageous, I suspect that once my blood pressure has been controlled all beta-blockers can be administered once a day, making it much easier to conform to treatment. So, for me, it would be a trial with a thiazide diuretic, and, in the event of failure, a beta-blocker alone.

Follow-up

Finally, I should like to see my doctor at least once each season to ensure that adequate control was being maintained; to detect the early signs of cardiovascular reaction to hypertension; but, perhaps most importantly, to talk with me about my condition, to reassure me when necessary, or to admonish me gently for failing to stick to a suitable lifestyle, or to treatment. I would ask his permission to take my own blood pressure two or three times weekly, a simple exercise which should help us both, and one which must surely come to have more universal application in managing hypertension.