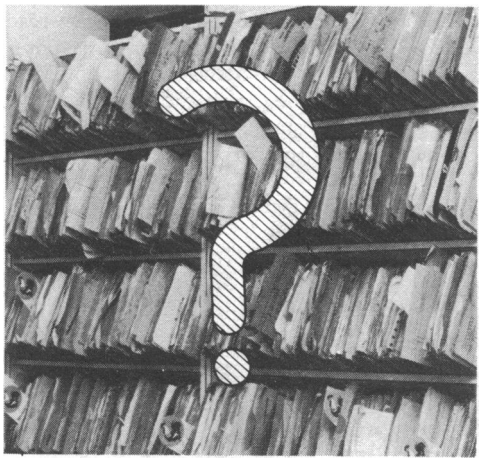
ABC of Blood Pressure Management

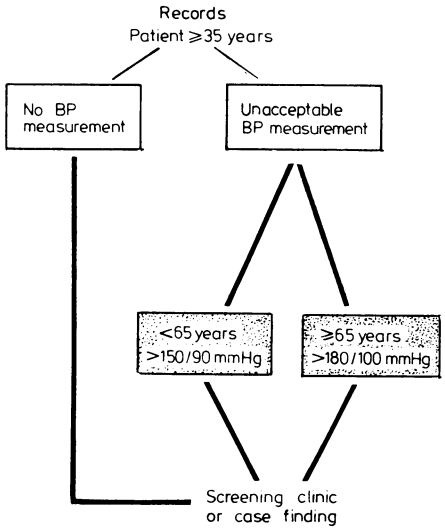
JOHN R COOPE

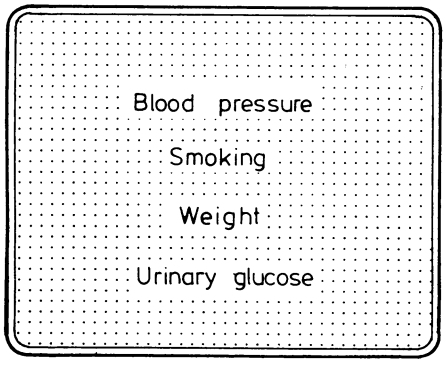
MANAGEMENT OF HYPERTENSION IN GENERAL PRACTICE



Ideally general practitioners should have a recent record of the blood pressures of all their patients over the age of 35. Without this knowledge four patients in every hundred may be deprived of life-saving treatment. In most practices that have not screened their patients only about half the medical records will include a satisfactory record of blood pressure. A systematic attempt to bridge this gap should be made.

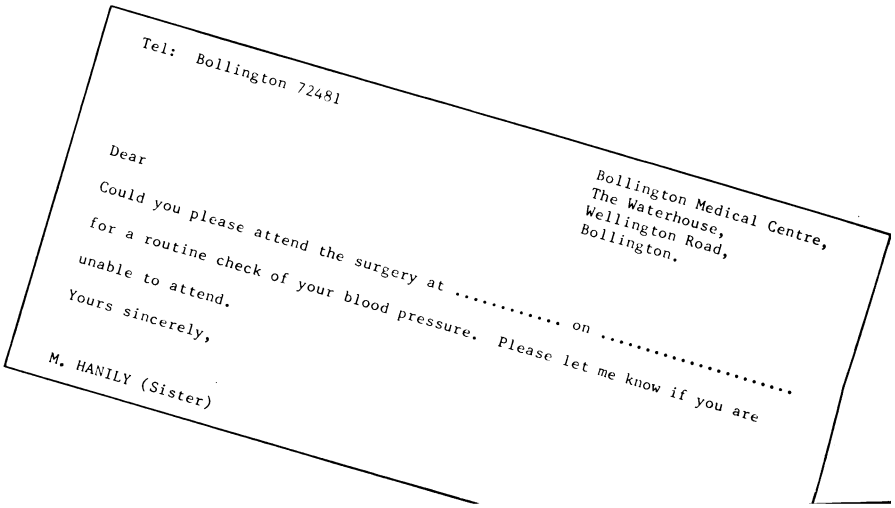
Methods of screening

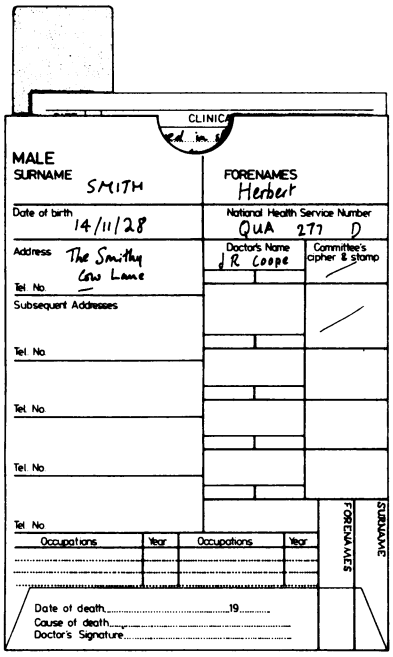




Screening the records—To define the problem the records need to be screened. This may be done by an instructed filing clerk or retired nurse. An age-sex register will cut down the work but is not absolutely necessary. The aim is to find records without acceptable levels of blood pressure recorded during the previous five years. "Acceptable" means below 150/90 mm Hg (phase 5) below the age of 65 and below 180/100 mm Hg (phase 5) above this age. The record envelopes can be generally tidied up and pruned at the same time.

Screening the patients—Several methods of measuring the blood pressure of those in need are available, including screening clinics and case finding. For screening clinics patients are sent cards to attend the medical centre at a particular time. This takes dedication but is rewarding and is popular with patients; about three-quarters turn up. The practice nurse can measure the blood pressure and also survey smoking habits, weigh the patient, and test the urine for glucose, thus picking up other coronary risk factors.

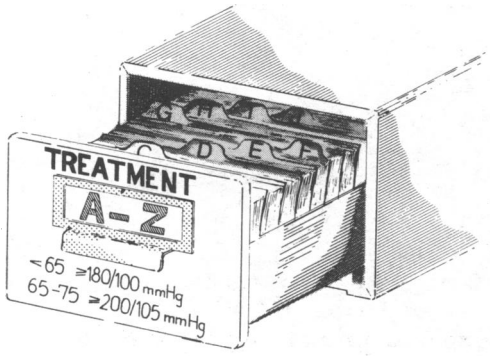


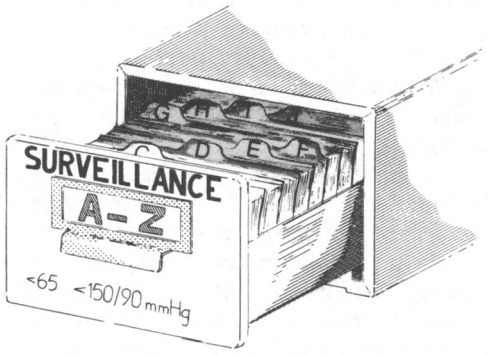


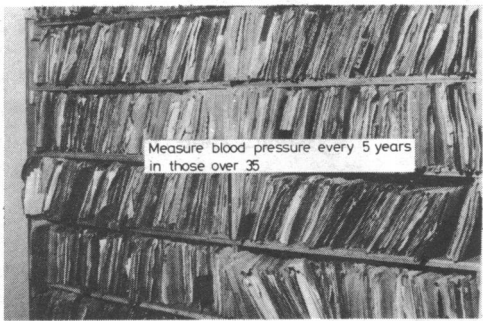
The case finding method uses attendances of patients for other reasons. When they are screened the records of those patients who need their blood pressure measured must be marked. If the doctor or nurse is to measure the blood pressure at the same time as the patient attends for something else the most effective reminder is to write "Take BP" on the next line of the continuation card. If the reception staff have to offer a separate appointment for blood pressure examination then a slat should be inserted into the record or a sticker attached to the front. (The slats may be made from laminated plastic $8\frac{1}{2}$ in $\times 1\frac{1}{2}$ in.) Notices or posters advising patients to have their blood pressure measured may be put in the waiting room.

Patients found to have blood pressures above treatment levels (see below) should be told that their pressure is on the high side but that they will need more readings to decide whether they need treatment. They are asked to book five more attendances with the practice nurse and then to make an appointment to see the doctor for evaluation.

Action







The fact that blood pressure is recorded does not necessarily mean that appropriate action is taken. A search of the records will disclose known hypertensive patients not having treatment, and some patients who do not need treatment will need periodic review. To simplify decision making a "three-box" system is useful.

The first box contains those patients who need treatment. They include:

(1) Patients aged under 65 with a mean blood pressure from five consecutive attendances of at least 180 mm Hg systolic or 100 mm Hg diastolic (phase 5).

(2) All patients aged 65-75 with a mean pressure from five attendances of at least 200 mm Hg systolic or 105 mm Hg diastolic (phase 5).

These patients need investigating as indicated in previous papers in this series and should be treated. Thereafter they should be reviewed not less than every three months. A card index file of these patients is maintained and checked against the record cards every three months to make sure the patient is still attending.

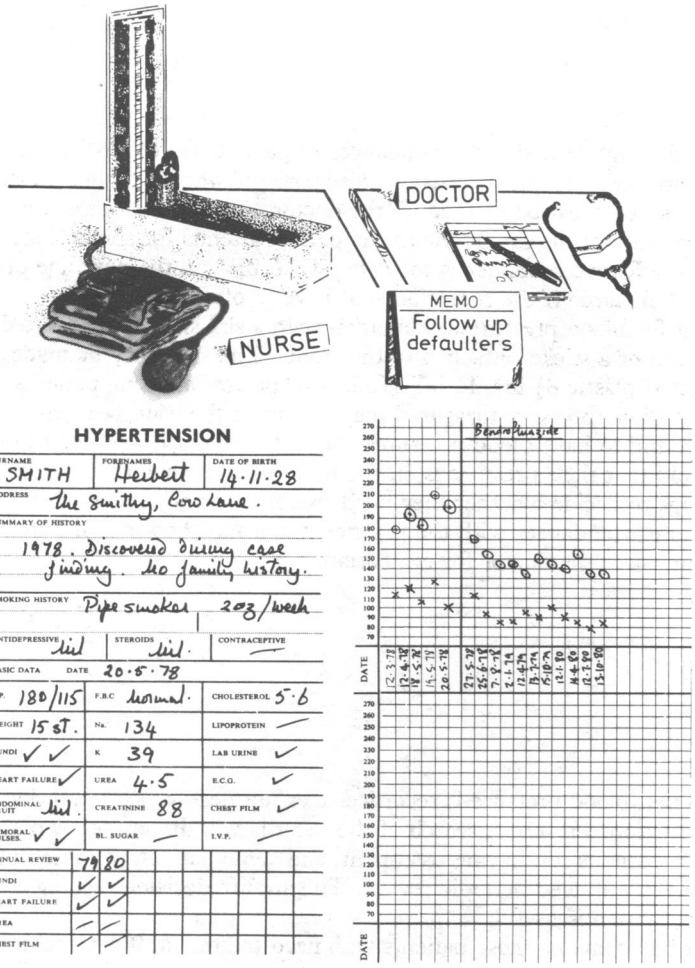
The second box contains the patients who need surveillance and includes all patients aged under 65 with blood pressures below those of patients in the first box but above 150/90 mm Hg on any one occasion. A separate card index file is maintained on these patients and they are asked to return for review of their blood pressure every year.

The third box contains patients with blood pressures below those in the second box. No card index file is kept and no regular effort is needed to review these patients. They should have repeat examinations every five years until 65, when their surveillance may be discontinued.

Once the initial screening has examined and classified patients in terms of blood pressure the same method may be used to screen new entrants to the practice and patients who reach their 35th birthday. The level of blood pressure ascertainment will thus be kept high over the years.

Such a programme might seem ambitious but may be achieved quite easily with the use of a trained nurse to take much of the load from the doctor. The effectiveness of surveillance and treatment may also be monitored periodically.

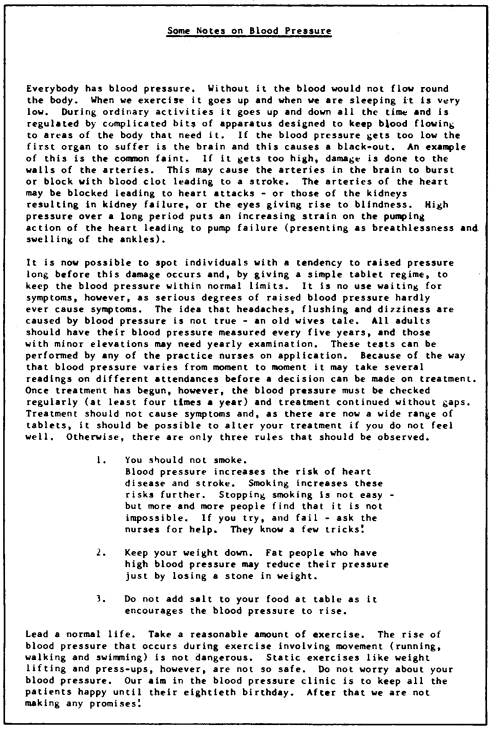
The hypertension clinic



Most practices have an antenatal clinic where patients' progress is reviewed systematically and where much of the work is done by nurses. The same can apply to a hypertension clinic. Blood pressure estimations, weighing, and other tests (such as urine tests) may be done by the nurse before the doctor sees the patient. This leaves the doctor free to review the effectiveness of treatment and discuss side effects or other risk factors such as smoking and obesity. Patients who fail to turn up at the clinic are more important than those who appear. They should be sent a reminder or, in exceptional circumstances, be visited by the nurse. In any event the non-attendance should be noted in the record. Failure to continue with treatment is a common and serious problem.

A card for recording basic data on hypertensive patients and for graphical representation of blood pressure is useful. This enables the doctor to see at a glance what tests have been done and whether the patient's blood pressure is responding to treatment.

Compliance and education



Some Notes on Blood Pressure

Everybody has blood pressure. Without it the blood would not flow round the body. When we exercise it goes up and when we are sleeping it is very low. During ordinary activities it goes up and down all the time and is regulated by complicated bits of apparatus designed to keep blood flowing to areas of the body that need it. If the blood pressure gets too low the first organ to suffer is the brain and this causes a black-out. An example of this is the common faint. If it gets too high, damage is done to the walls of the arteries. This may cause the arteries in the brain to burst or block with blood clot leading to a stroke. The arteries of the heart may be blocked leading to heart attacks - or those of the kidneys resulting in kidney failure, or the eyes giving rise to blindness. High pressure over a long period puts an increasing strain on the pumping action of the heart leading to pump failure (presenting as breathlessness and swelling of the ankles).

It is now possible to spot individuals with a tendency to raised pressure long before this damage occurs and, by giving a simple tablet regime, to keep the blood pressure within normal limits. It is no use waiting for symptoms, however, as serious degrees of raised blood pressure hardly ever cause symptoms. The idea that headaches, flushing and dizziness are caused by blood pressure is not true - an old wives tale. All adults should have their blood pressure measured every five years, and those with minor elevations may need yearly examination. These tests can be performed by any of the practice nurses on application. Because of the way that blood pressure varies from moment to moment it may take several readings on different attendances before a decision can be made on treatment. Once treatment has begun, however, the blood pressure must be checked regularly (at least four times a year) and treatment continued without gaps. Treatment should not cause symptoms and, as there are now a wide range of tablets, it should be possible to alter your treatment if you do not feel well. Otherwise, there are only three rules that should be observed.

1. You should not smoke. Blood pressure increases the risk of heart disease and stroke. Smoking increases these risks further. Stopping smoking is not easy - but more and more people find that it is not impossible. If you try, and fail - ask the nurses for help. They know a few tricks!

2. Keep your weight down. Fat people who have high blood pressure may reduce their pressure just by losing a stone in weight.

3. Do not add salt to your food at table as it encourages the blood pressure to rise.

Lead a normal life. Take a reasonable amount of exercise. The rise of blood pressure that occurs during exercise involving movement (running, walking and swimming) is not dangerous. Static exercises like weight lifting and press-ups, however, are not so safe. Do not worry about your blood pressure. Our aim in the blood pressure clinic is to keep all the patients happy until their eightieth birthday. After that we are not making any promises!

Communication between doctor and patient is very important. Full information should be given to patients before they start treatment in words they can understand. An information sheet is a useful aid. Such sheets can be obtained from some pharmaceutical companies but one produced by the doctor himself is more effective. The points to be included are: the lack of symptoms with hypertension; the reasons for treatment; the need for continuous treatment; the importance of stopping smoking, controlling weight, and reducing salt intake; and the necessity of regular review. Complete openness about blood pressure readings is desirable. The doctor should discuss his success or failure in achieving the blood pressure goals. This fosters a sense of trust that will lead to good compliance. A take it or leave it attitude will often result in the patient opting for the latter. Good working relationships will take months or even years to develop but such a perspective is natural to general practice. The doctor must develop a sensitivity to the patient's symptoms, even when they are not thought to be due to treatment and there must be readiness to compromise and bargain rather than break off relationships. The use of a practice nurse may also encourage the development of an effective rapport. Patients may confide problems to her that they would not disclose to the doctor. Above all, fear must not be inculcated or the patient allowed to adopt an invalid role, so replacing one disease with another more serious.

Dr John R Coope, MRCGP, is a general practitioner in Bollington, Nr Macclesfield, Cheshire.