elderly. Ambulatory 24-hour Holter electrocardiographic monitoring^{13 14} is of value for all patients where the diagnosis is in question and for those with suspected arrhythmias. Intermittent disturbances of rhythm are likely to be of pathological importance if accompanied by symptoms, and a cardiac cause may be found for blackouts masquerading as epilepsy or transient ischaemic attacks.^{15 16}

Interpretation of the clinical relevance of electrocardiographic data requires astute judgment. Apparently benign complex arrhythmias and conduction defects are frequently detected in healthy people¹⁷⁻¹⁹ but many of the subtler forms of heart block and dysfunction of the sinus node, where a cardiac pacemaker would be beneficial to the patient, are still underdiagnosed.²⁰ The pitfalls of the technique are well illustrated by the patient in the Pittsburgh survey² who, despite asystole lasting five seconds, failed to benefit from pacing and was finally diagnosed as suffering from epilepsy. Given a reasonably high index of suspicion, prolonged electrocardiographic recordings over a minimum period of 72 hours are advisable.^{14 21} Monitoring both the electrocardiogram and electroencephalogram may serve to confirm a cardiac cause for an apparent cerebral event²² or an arrhythmia provoked by an apnoeic episode in sleep or at the onset of a seizure.

The results of exercise testing and trials of cardiac pacing are often unhelpful, and electrophysiological studies²³ which entail unpleasant procedures that are not without risk are of doubtful value.¹² Invasive or provocative procedures of any kind should be reserved for selected patients with specific indications. For the vast majority of patients a diagnosis may be made by taking a detailed history, performing a thorough examination, and using the now well established technique of ambulatory cardiac monitoring.

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Future history

Readers of the *BMJ* may possibly be unaware of a potentially serious threat to the preservation of clinical records. NHS records, both clinical and administrative, are protected under the Public Records Act (1958)¹ and this protection was confirmed by the Wilson Committee (1981).² Nevertheless, a White Paper published in March 1982 as the Government's response to the Wilson Committee's report proposes to remove this protection from clinical (but not administrative) records.³ The arguments put forward for doing so are the familiar ones: cost, volume of records, and confidentiality. A select committee of the House of Commons is at this moment considering this White Paper and may confirm these recommendations. Should this happen, sources of great importance to clinicians, epidemiologists, and medical historians may be placed in jeopardy. Three examples may show the dangers.

Hospitals might be expected to take due care to preserve valuable clinical records. In practice, this may mean no more than the patchy preservation of the records of famous clinicians and the records of the introduction of new treatments and clinical procedures. What is equally important is the preservation of the clinical records of ordinary day to day and apparently "uninteresting" cases. If these are not preserved there will in future be no primary sources for research on the picture of total clinical care in hospitals. Equally serious, data of unexpected future importance but no obvious interest today will not be catered for.

The second example concerns historical records, which may be defined arbitrarily as those over 50 years old. There is no question of an abundance let alone a superfluity of clinical records from the past; they are much scarcer than is generally realised. It would be disastrous if any recommendation led to the possibility, even if it had not been intended, of further loss of the small but very precious and important amount of source material that has escaped the destructive vandalism of the past.

Finally, the records that are the most neglected, most urgently in need of preservation, and most at risk from the recommendations of the White Paper are the clinical records of general practice. At present these are now destroyed routinely five years after the patient has died—so no clinical records from general practice are preserved for future use. The need for a representative sample of general practice records has already been recognised and discussed by a few people. Ideally, a selected sample should be collected and preserved in the area in which they were generated. While hospital records are records of episodes of illness, those from

general practice are the only complete records of all aspects of the medical history of a patient until his or her death. Future epidemiologists will be dependent on these records for studies of long term changes in the patterns of illness, long term effects of treatment, and the effect of social and economic factors in different parts of the country on morbidity and mortality.

The existence of the family practitioner committees and the strength of general practice in Britain provide us with a unique opportunity. Records from general practice might be collected on a scale and with an ease that would be the envy of other countries; and yet—ironically—the Government proposes removing clinical records from the protection of the Public Records Act. If accepted, these proposals might be enough to kill any future plans for the preservation of clinical records from general practice. Everyone whose work depends on access to clinical records should recognise the serious implications of the recommendations of this White Paper.

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Pretibial injuries: a common pitfall

Lacerations over the shin are frequently seen in patients attending accident and emergency departments. If these lesions are given inappropriate treatment the wounds may take months to heal—especially in older patients, those with circulatory problems, or those taking steroids. The injury may be a simple cut or tear, but frequently a flap of skin and subcutaneous tissue is raised, attached either proximally or distally. Three quarters of the patients presenting to hospital with this type of injury are women over the age of 50¹; the sex difference simply reflects fashion, with women's legs less often being covered by trousers. The skin over the front of the tibia is thin and inelastic, with little subcutaneous padding or support. In the elderly, and especially in elderly patients taking steroids, it is also atrophic and may have impaired vascularity. These factors promote easy damage and impair healing, even under ideal circumstances.

The vascular supply of the pretibial skin is by vessels which perforate the deep fascia and branch into a small area of overlying skin. When a flap is raised by injury these vessels are torn and the skin becomes ischaemic. Simple suture of such a wound is doomed to failure. The tissues are always bruised and soon become oedematous. The increased tension

produced by suturing even a transverse laceration will result in spreading necrosis, infection, enlargement of the defect and greatly delayed healing.² The paramount need is to avoid suturing dead skin or killing more by producing tension.

A regimen for conservative treatment has been suggested in which any injured flaps are uncurled and the wound edges loosely approximated with adhesive tapes. The patient is kept mobile, with the leg supported by a Viscopaste bandage and an elastic bandage.³ This method of treatment avoids the need for prolonged bed rest, but healing is slow, since the skin of the wound edges is often necrotic.

A radical surgical approach produces a more rapid and stable result. Under general anaesthesia all non-viable tissue is excised, any haematoma is evacuated, and a split skin graft is applied to resurface the defect. The leg is raised with supporting bandages in hospital for one week when the graft is inspected. Skin stored in the refrigerator since operation is then applied to unhealed areas. The patient remains immobile until the wound is completely healed—an average of 27 days, which compares favourably with 65 days for the conservative approach.

If there is pressure on bed occupancy or the patient refuses admission compromise solutions have to be tried. All depend on radical debridement. A split skin graft taken under local anaesthesia may be applied either as a sheet⁴ or meshed⁵ and the patient then mobilised with firm support. Alternatively the patient may be kept at home for five days with the leg raised before applying the skin, and the leg is then kept raised for a further week.⁶ Excellent results have been claimed for both methods with healing in 14 to 24 days. If the flap has been sutured under tension, so making matters worse, the wound will have become infected and necrotic. The leg will need to be kept raised for a long period before skin grafting so that an even greater delay of healing is inevitable.

Pretibial lacerations are common, so the importance of correct management cannot be overemphasised. Simple suture rarely works; tissue of doubtful viability must be excised and the wound resurfaced by split skin grafting. If this cannot be undertaken in the casualty department, with appropriate aftercare at home, the patient is better admitted for desloughing and grafting by a competent surgeon.

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