

bullous lung disease in young people.⁶ Inflammatory lung changes, chronic cough, and chest infections are similar to those in cigarette smokers, but may also be commoner in younger people.⁷⁻⁹ Premalignant changes have been shown in the pulmonary epithelium, and there are reports of lung, tongue, and other cancers in cannabis smokers.

Tetrahydrocannabinol has cardiovascular effects, and sudden deaths have been attributed to smoking cannabis.¹⁰ Myocardial infarction is 4.2 times more likely to occur within an hour of smoking cannabis.¹¹ However, despite these alarming facts, there is no evidence at present on whether smoking cannabis contributes to the progression of coronary artery disease, as smoking cigarettes does. More studies of the cardiovascular and pulmonary effects of cannabis are essential.

It may be argued that the extrapolation from small numbers of individual studies to potential large scale effects amounts to scaremongering. For example, one could calculate that if cigarettes cause an annual excess of 120 000 deaths among 13 million smokers, the corresponding figure for deaths among 3.2 million cannabis smokers would be 30 000, assuming equality of effect. Even if the number of deaths attributable to cannabis turned out to be a fraction of that figure, smoking cannabis would still be a major public health hazard. However, when the likely mental health burden is added to the potential for morbidity and premature death from cardiopulmonary disease, these signals cannot be ignored. A recent comment said that prevention and cessation are the two principal strategies in the battle against tobacco.¹² At present,

there is no battle against cannabis and no clear public health message.

John A Henry *professor*

Academic Department of Accident and Emergency Medicine, Imperial College School of Medicine, St Mary's Hospital, London W2 1NY (j.a.henry@ic.ac.uk)

William L G Oldfield *specialist registrar*

Onn Min Kon *consultant*

Department of Respiratory Medicine, St Mary's Hospital

Competing interests: None declared.

- 1 Schools Health Education Unit. *Young people in 2001*. Exeter, 2002. www.shedu.org.uk/pubs/yp01/yp01.htm [accessed 18 Feb 2003].
- 2 Bramley-Harker E. *Sizing the UK market for illicit drugs*. London: Home Office Research, Development and Statistics Directorate, 2001. www.homeoffice.gov.uk/rds/pdfs/oc74-drugs.pdf (accessed 18 Feb 2003). (Occasional paper No. 74.)
- 3 British Lung Foundation. *Cannabis and the lungs*. London: British Lung Foundation, 2002. www.lunguk.org/news/a_smoking_gun.pdf (accessed 18 Feb 2003)
- 4 Rey JM, Tennant CC. Cannabis and mental health. *BMJ* 2002;325:1183-4.
- 5 Wu TC, Tashkin DP, Rose JE, Djahed B. Influence of marijuana potency and amount of cigarette consumed on marijuana smoking pattern. *J Psychoactive Drugs* 1988;20:43-6.
- 6 Johnson MK, Smith RP, Morrison D, Laszlo G, White RJ. Large lung bullae in marijuana smokers. *Thorax* 2000;55:340-2.
- 7 Roth MD, Arora A, Barsky SH, Kleerup EC, Simmons M, Tashkin DP. Airway inflammation in young marijuana and tobacco smokers. *Am J Respir Crit Care Med* 1998;157:928-37.
- 8 Fligel SE, Roth MD, Kleerup EC, Barsky SH, Simmons MS, Tashkin DP. Tracheobronchial histopathology in habitual smokers of cocaine, marijuana, and/or tobacco. *Chest* 1997;112:319-26.
- 9 Bloom JW, Kaltenborn WT, Paoletti P, Camilli A, Lebowitz MD. Respiratory effects of non-tobacco cigarettes. *BMJ* 1987;295:1516-8.
- 10 Bachs L, Morland H. Acute cardiovascular fatalities following cannabis use. *Forensic Sci Int* 2001;124:200-3.
- 11 Mittleman MA, Lewis RA, Maclure M, Sherwood JB, Muller JE. Triggering myocardial infarction by marijuana. *Circulation* 2001;103:2805-9.
- 12 Schroeder SA. Conflicting dispatches from the tobacco wars. *N Engl J Med* 2002;347:1106-9.

People missing as a result of armed conflict

Standards and guidelines are needed for all, including health professionals

Mass graves from past or present conflicts, massacres in the Balkans, disappearances—South American style—and the missing in action are politically sensitive. One reason is that they usually entail violations of international humanitarian law (the wartime rules that protect people who are not in combat or no longer in combat) or human rights law. International criminal tribunals to try individuals believed to be responsible for the violations attract equal attention. Why these events and the reactions to them by the international community are of direct concern to health professionals is not immediately obvious, although it has been widely recognised that they have an important part to play in upholding such laws.^{1 2} However, the specific roles, responsibilities, and expertise of the profession either in ascertaining the fate of the missing or in helping affected families have not been as widely recognised.

The story of people unaccounted for as a result of armed conflict or internal violence is told differently according to the narrator's discipline. Each discipline has its own work and objectives. Lawyers uphold international law and attempt to prosecute the perpetrators of violations; forensic specialists identify remains, contribute to the reconstruction of events surrounding the death, and establish the cause of death. Psychologists address the kind of mental torture associated with

uncertainty of the whereabouts of a family member. Military bodies emphasise the importance of measures such as the wearing of identification tags and registering deaths of their personnel. Red Cross workers respond to families' requests to trace a missing person and to visit and register prisoners of war. This is an incomplete list, and each discipline has worked largely in its own sphere. Furthermore in a given situation there are different actors each employing, manipulating, or even hindering the work of the different disciplines. These actors may be the governments, military bodies, international organisations including the United Nations, and non-governmental organisations. Clearly it is time for standards and guidelines on best practice for all professionals.

The International Committee of the Red Cross has been forced into undertaking an initiative, "The Missing," which has taken the form of a series of expert workshops and studies and a review of its own practice over time and by continent. The outcome has revealed ambiguity about the legal and ethical basis of any action involving forensic specialists, the lack of best practice guidelines to guide these specialists, the difficulty of accommodating local customs and culture in an investigation, and recognition of an inconsistency of the International Committee of the Red Cross's own practice with regard to missing people. At centre stage, however,

is the recognition that as long as people cannot be prevented from becoming unaccounted for, there is a need to put the affected families at the top of the priority list. It is this need that the health profession must address and which represents the duty of the profession beyond simply advocating respect for international law.

A number of recommendations have emerged from the process about the standards of practice for any doctors working in contexts involving missing people. A key aspect of these contexts is the absence of an organised legal and ethical framework that all the professionals take for granted in their domestic work. The recommendations include an overview of how the roles and responsibilities of forensic specialists differ from those of their domestic practice, particularly with respect to identification of remains and their return to the families for burial or cremation; practical guidelines for the management and exhumation of human remains; a standard framework for identifying remains under different and difficult circumstances; legal and ethical guidelines with regard to protection of personal data and genetic information whether from the remains or from the family; elements of an employment contract of forensic specialists for work in these contexts; guidelines for psychological support of affected families; and recognition that working without taking the pertinent culture and context into account amounts to professional negligence.

These and other recommendations were considered and adopted by consensus by government representatives, international organisations, and independent experts at an international conference on "The Missing" held in Geneva from 19 to 21 February 2003.³ However, whether people disappear in armed conflict or internal violence, whether their fate is ascertained, and whether the families receive the information and support they require depends ultimately on action taken by governments. Doctors and national medical associations can make a difference firstly, by ensuring that the statement "Forensic Investigations and the Missing" proposed in October 2002 and to be published by the British Medical Association is adopted by the medical ethics committee of the World Medical Association at its next meeting in May in Divonne, France and secondly, bringing its content to the notice of policy makers.

Robin Coupland *medical adviser, legal division*
Stephen Cordner *consultant in forensic pathology*

International Committee of the Red Cross, 19 avenue de la Paix, CH 1202 Geneva, Switzerland

Competing interests: None declared.

1 British Medical Association. *The medical profession and human rights*. London: Zed Books 2001.

2 Leaning J. Medicine and international humanitarian law. *BMJ* 1999;319:393-4.

3 International Committee of the Red Cross. The missing. www.icrc.org/Web/eng/siteeng0.nsf/html/themissing (accessed 15 Apr 2003).

Biventricular pacing for heart failure

Looks promising

Left bundle branch block in structurally normal hearts results in loss of synchrony of ventricular contraction and impairs both regional and global left ventricular systolic function.¹ In hearts with good overall left ventricular systolic function this has very little clinical effect. But in patients with ischaemic or idiopathic dilated cardiomyopathy it further impairs already poor systolic function and may have a major clinical impact. The prevalence of conduction delay in patients with heart failure is as high as 30%,² and this has led to the development of biventricular pacing in an attempt to restore synchronous ventricular contraction and so improve left ventricular function. Biventricular pacing involves the transvenous placement of a third pacing lead via the right atrium and coronary sinus into a left ventricular cardiac vein; this is in addition to the standard pacing leads in the right atrium and right ventricle³ and permits simultaneous stimulation of the right and left ventricles.

What is the evidence that this works? Several studies have indicated that biventricular pacing improves symptoms in patients with heart failure and left bundle branch block.⁴ A recent multicentre randomised trial of resynchronisation has substantially enhanced the evidence supporting this treatment.² This was a double blind study of cardiac resynchronisation in 453 patients with chronic moderate to severe symptoms of heart failure (New York Heart Association class III-IV) due to ischaemic and non-ischaemic cardiomyopathy and dyssynchronous ventricular contraction evidenced

by a QRS duration of 130 milliseconds or more in left bundle branch block. Patients were randomised to either control (n=225) or atrial synchronised biventricular pacing (n=228), with follow up for six months. In keeping with previous studies,⁴ notable improvements in the primary end points of New York Heart Association functional class, six minute walking distance, and quality of life were observed in the resynchronisation group over those in the control group. These benefits became apparent one month after randomisation and were maintained at six months.

In addition, cardiac resynchronisation seemed to reduce the risk of clinical deterioration during follow up, with the combined risk of a major clinical event (death or admission for worsening heart failure) being reduced by 40%. The number of patients requiring admission for heart failure (34 v 18 for control and resynchronisation groups, respectively) was reflected in a notably reduced number of total hospital days for management of heart failure (363 v 83). This finding has potentially major implications for cost effective use of healthcare resources.

One important limitation of this study is the relatively short period of follow up, and whether the longer term effects are as impressive remains to be seen. In addition, the prognostic implications of biventricular pacing are unknown, although they are being addressed by continuing mortality studies.^{5,6}

The clinical response to biventricular pacing has been shown to be heterogeneous, and an important

BMJ 2003;326:944-5