an addiction, as learned behaviour, as a volitional act, and as a social phenomenon.

The role of occupation is regrettably often neglected and the reviewer was glad to see almost a third of the book devoted to nine chapters covering occupational cancers, asthma, non-specific lung disease, epidemiological topics, and the measurement of occupational exposures. The succinct and clear account of occupational asthma covers the issues relevant to prevention, but it would have been good to see a separate chapter focusing on primary preventive strategies by controlling exposure in the workplace. It is possible that occupational asthma and rhinitis are more common than occupational respiratory cancer, although the balance in this section does not reflect this with five of the nine chapters being on cancer.

Samet and Spengler review the prevention of diseases due to indoor and outdoor air pollution in a readable overview which is a good introduction to the section on environmental sources of respiratory disease. Other chapters cover indoor radon, the air conditioned building, indoor allergens, and the problem of concurrent exposure to multiple pollutants. The section on biological markers has an introduction to the subject of genetic markers in complex diseases and also covers topics related to emphysema.

Infection is the major omission. The book would have benefitted from tighter editing, with less overlap and a more consistent structure for the chapters. It lacked a general introduction to the concepts of primary prevention (control of harmful exposures), secondary prevention (early detection of disease), and tertiary prevention (action to minimise complications and disability). This is a book that all but the smallest libraries should buy, and that many individuals will wish to purchase for themselves. – KV.

The Pulmonary Artery Catheter – Methodology and Clinical Applications. 2nd Edition. Charles L Sprung. (Pp 295). USA: Critical Care Research Associates, 1993. 0 9637315 0 5.

I was doing "rounds" on a Los Angeles Intensive Care Unit with an old friend who had trained in Britain but had emigrated to California. The resident was presenting the cases of those patients who had been admitted overnight. The first case he described as follows: "A 49 year old Caucasian male was admitted as an emergency last night with a wedge pressure of 32 mm Hg." My friend and I looked at each other aghast. Has clinical medicine taken such a second place to technology that we were not to be treated to the history and examination before the pulmonary artery catheter had been inserted?

This story illustrates the movement in medicine towards high technology, particularly in the USA. Nowhere is this movement more apparent than in the vast increase in monitoring systems for the critically ill and not so ill. It is estimated that in the USA critical care consumes about 15% of the total health budget. Important in these costs is the increasing use of pulmonary artery catheters. It is estimated that approximately one million pulmonary artery catheters are used every year in the US at a cost of two billion dollars. Their use is clearly increasing. In 1975 7·2% of patients with acute myocardial infarction had catheters inserted and in 1984 this had risen to almost 20%.

Clearly these figures are nothing like as high in the UK and Europe, but even here there is increasing reliance on the numbers produced by catheter rather than careful clinical observation. It now appears that the pulmonary artery catheter is so well entrenched in US coronary care units and ICUs that it is impossible to do a proper trial of its use. Indeed, no proper trial has ever been done into the effectiveness of these catheters despite their widespread use. Since the pulmonary artery flotation catheter is here to stay and is unlikely to be replaced in the short term by non-invasive instrumentation, it is very important that the catheter is only used where the information gained will make a significant change to the management of the patient, and is only placed by competent personnel trained in its insertion and in the interpretation of its findings.

This is the second edition of Charles Sprung's book which aims to ensure that these objectives are achieved. Indeed the illustration on the frontispiece is of a simple balance with a stethoscope on one side and a flotation catheter on the other. The balance must always be between clinical judgement and invasive measurement. The authors take great pains to point out that the catheter should only be used in the proper circumstances. Indeed, the authors take on an almost paranoid air in defending the use of the catheter from its significant critics, especially Professor Eugene Robin who has claimed that not only is the pulmonary artery catheter useless but in many cases it is actually positively dangerous. Dr Sprung, an anaesthetist and critical care physician, has amassed an international group of authors who come mostly from the USA, but also from Israel, France, and Belgium.

The book is divided into three sections. The first section is methodological where the indications for pulmonary artery catheterisation, techniques of insertion, and complications are discussed in detail. This for me was the most useful section of the book because it described in a clear, easy to read fashion many of the rules of right heart catheterisation that should be followed by all those involved. I was surprised, however, at the list of indications which included myocardial infarction where there is hypotension, pulmonary oedema, mitral regurgitation, tamponade, or ventricular septal defect. It also included pulmonary thromboembolism, congestive cardiac failure, shock, respiratory failure in the face of myocardial disease, and many states which could be described as problems of intravascular volume such as renal disease, cirrhosis, and burns. I think many physicians would take exception to using a pulmonary artery catheter for these indications where a central venous pressure line would suffice and would probably be less dangerous. The main indication for right heart catheterisation is for measurement of the two variables that cannot be obtained clinically – left atrial pressure and pulmonary artery pressure – that would make a significant difference to the management of the patient. This is particularly true, for example, in right ventricular infarction where inexperienced physicians might treat a high IVP with diuretics only to reduce left ventricular preload to unacceptable levels. It may also be true in a patient with respiratory failure where there is widespread lung shadowing and the question is raised whether or not this is due to myocardial dysfunction or to a so called low pressure pulmonary oedema. In many other conditions such as burns, renal disease, and pulmonary thromboembolism there is very little added benefit of a pulmonary artery catheter over a right atrial line.

The second section of the book is on clinical applications, particularly the measurements and calculations derived from them. The third section covers new techniques such as extravascular lung water measurement, right ventricular ejection fraction, and comparison of non-invasive echocardiography with direct measurements from a pulmonary artery catheter. The final chapter consists of 13 clinical studies where the use of a catheter made a significant difference to the management of individual patients. These examples are very useful and make clear much of the more theoretical material encountered earlier in the book.

This book is really for use in the USA where huge numbers of pulmonary artery catheters are placed. In the UK it would be welcome in intensive care units and, perhaps, coronary care units where junior doctors involved in right heart catheterisation need easy access to a description of the best of clinical practice.—AJP

NOTICE

19th International Conference on Lung Sounds

The 19th International Conference on Lung Sounds will be held at the Rappaport Institute, Technion, Haifa, Israel on 28–30 September 1994. For further information please contact Raymond L H Murphy, Attn: Barbara Keith, Faulkner Hospital, Pulmonary Department, 1153 Centre St, Boston, Massachusetts 02130, USA. Telephone: (617) 522 5800, ext 1968 or Fax: (617) 524 8663.