# This week in BMJ

All communications should be addressed to The Editor, BMJ

Editor Stephen Lock

Art department Derek Virtue

**Book reviews** Ruth Holland

BMA affairs Gordon Macpherson Linda Beecham

Correspondence Jane Smith

**Editorials** Tony Smith

Editorial secretary Susan Minns

General office Leslie Moore Andrew Woodward

News Tony Delamothe

Obituaries Liz Crossan

Original articles Stella Lowry Trish Groves

Subediting department
Jacqueline Annis
Diana Blair-Fish
Sue Burkhart
Tony Camps-Linney
Margaret Cooter
Sharon Davies
Deborah Reece

Publishing director Anthony Smith

Advertisement manager Bob Hayzen

International sales Maurice Long

Publishing manager Derek Parrott

© British Medical Journal 1990. All Rights Reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any other means, electronic, mechanical, photocopying, recording, or otherwise, without prior permission, in writing, of the British Medical Journal.

US second class postage paid at Rahway, NJ. Postmaster: send address changes to: BMJ, c/o Mercury Airfreight International Ltd Inc, 2323 Randolph Avenue, Avenel, NJ 07001, USA.
US (direct) subscription \$164.

Published by the proprietors, the British Medical Association, Tavistock Square, London WCIH 9JR, Telephone 01 387 4499 (editorial fax 01 383 6418). Printed by Pulman Web Offset Ltd. Typesetting by Bedford Typesetters Ltd, Bedford. Registered as a newspaper.

## Coronary angioplasty in hospitals without on site cardiac surgical back up

Concern about the development of serious cardiovascular complications at coronary angioplasty has led the subcommittee on coronary angioplasty of the American College of Cardiology and American Heart Association Task Force to recommend that angioplasty should not be performed in any hospital without on site cardiac surgical facilities. Such a policy, if endorsed by cardiologists in the United Kingdom, would have serious implications for many centres that perform coronary angioplasty with off site surgical cover, and it would lengthen waiting lists for cardiac surgery. On p 355 Richardson et al present results of a retrospective review of 540 angioplasties performed in a hospital without on site cover. Their results show that with careful case selection coronary angioplasty may be safely performed under these conditions. The absence of on site surgical cover did not adversely affect the outcome in any case. Patients requiring urgent revascularisation surgery were safely transferred to the surgical unit. Furthermore, the main factor contributing to the delay between complicated angioplasty and revascularisation was the wait for a cardiac operating theatre to become free and not the transfer time between hospitals. The authors argue that coronary angioplasty should continue to be performed in hospitals in the United Kingdom without on site surgery, provided that this is available at a nearby centre.

#### Traumatic intracranial haematoma in children

Computed tomography has improved the outcome of head injury through detection of an intracranial clot before it causes clinical deterioration, permitting its evacuation with the maximum prospect of recovery. But facilities for computed tomography are limited, and among the large number of patients who attend hospital only a small proportion develop a haematoma. Deciding who to scan can therefore be very difficult. On p 363 Teasdale et al describe how information about the conscious level and the result of a skull x ray was used to identify groups of patients at widely varying levels of risk of a haematoma and thus provide a basis for decisions about scanning from a sample of 8400 patients attending accident and emergency departments and 1107 patients with an acute intracranial haematoma evacuated at the Glasgow neurosurgical unit. Overall, the risk differed at different ages, but the lower risk in children was partly because of the larger number brought to hospital after a minor injury. In children and adults impairment of consciousness and the presence of a skull fracture produced very similar patterns of increasing risk of intracranial haematoma. Teasdale *et al* propose that guidelines for decisions about management of head injuries in adults can be applied to children and advocate extending the indications for computed tomography in general hospitals and neurosurgical units.

#### Sleepwalking, night terrors, and consciousness

In the past it was claimed that sleepwalking occurred in wakefulness but with the mind in a dissociated state. The subject was unaware of his or her actions at the time and failed to recall them next morning. Later it was shown that the events arise out of abrupt shifts from non-rapid eye movement stage 4 (deep) sleep into a state of intense arousal, and it was suggested that the disorder is a form of sleep and that the subjects may not be accountable for their actions. On p 360 Crisp et al describe a group of such patients diagnosed on clinical and polysomnographic grounds who scored highly on an inventory measuring such characteristics as enjoyment of acting, posing, and pretending. Patients with night terrors also scored highly on a measure of anxiety and those with sleepwalking on a measure of externally directed hostility. The authors suggest that the neurophysiological mechanism which promotes an initial state of disorientation in people possessing these personality characteristics may provide the basis for wakeful mental dissociation producing sleepwalking or night terrors.

### Non-invasive mechanical ventilation for acute respiratory failure

Mechanical ventilation usually entails endotracheal intubation or tracheostomy and is often an indication for admission to an intensive care unit. On p 358 Elliott et al report the use of positive pressure ventilation delivered non-invasively by a well fitting nasal mask in the management of six patients with acute, life threatening exacerbations of chronic respiratory disease. Four patients were discharged after eight to 17 days in hospital and were well five to 22 months later. The technique provides no protection for the airway and no access for endotracheal suction, but it avoids the complications of intubation and permits early mobilisation, adequate nutrition, and the maintenance of morale. Close observation is required initially but admission to an intensive care unit can be avoided. Intensive care is costly and labour intensive. Any new technique that simplifies management of patients who are acutely ill without sacrificing their safety warrants further evaluation.