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
Richard Smith

Editorial secretary
Susan Minns

General office
Leslie Moore
Andrew Woodward

Information office
Ann Shannon

News
Stella Lowry

Obituaries
Liz Crossan

Original articles
Tony Delamothe
Tony Smith

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

Publishing director
Anthony Smith

Advertisement manager
Bob Hayzen

International sales
Maurice Long

Publishing manager
Derek Parrott

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 subscription $146.

Published by the proprietors, the British Medical Association, Tavistock Square, London WC1H 9JR, Telephone 01 387 4499, and printed by Pulman Web Offset Ltd. Typesetting by Bedford Typesetters Ltd, Bedford. Registered as a newspaper.

Treatment of the terminal stages of breast cancer

When faced with a patient with progressive breast cancer which has responded poorly to treatment doctors are tempted to redouble their efforts against the cancer. They should resist this temptation. It is already known that treatment does not extend average survival at this stage. On p 13 Holli and Hakama show the consequences for the patient of these eleventh hour interventions: the frequency of *x* ray investigations, laboratory tests, and courses of chemotherapy and hormones reach their peak in the week before the patient's death. Better to admit defeat, the authors conclude, and concentrate on the care and comfort of dying patients. Patients' quality of life would improve, and hospital resources would be saved.

Start of a chain reaction

The polymerase chain reaction, a new investigative tool, is being applied to topics as disparate as diagnosis of genetic diseases, tissue typing for organ transplantation, and detection of viral infections. On p 14 Young and colleagues report its application to detecting human papillomaviruses in cervical smears in women with and without a history of cytological abnormality. Their preliminary analysis suggests that the prevalence of the virus in cervical epithelium is greater than that reported with less sensitive techniques.

The advantage of the polymerase chain reaction is that it can selectively enrich a specific DNA sequence by a factor of 10^6. There are, however, risks associated with the use of such an exquisitely sensitive technique; minor contamination produces false positive results, and therefore extreme care in the handling of specimens is imperative. With this proviso the polymerase chain reaction not only has exciting research applications but may be applied in a routine clinical setting.

Diabetes in Asians

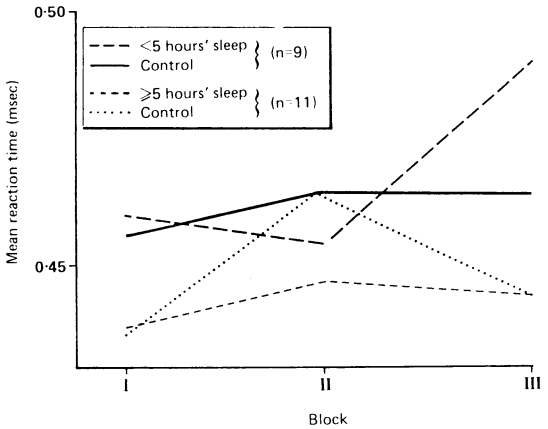
Known diabetes is two to four times more prevalent among Asians than white subjects and 25 years ago it was estimated that in half of all white people with diabetes the condition remained undiagnosed. The Coventry diabetes study is investigating risk factors for diabetes in both Asian and white people by house to house screening and hence can give an update on the prevalence of undiagnosed diabetes in the community. The study (page 18) confirms the high prevalence of non-insulin-dependent diabetes in Asians. The disease is more common in men than women, and one quarter of Asian men aged over 60 were found to be affected. No difference in body mass was found between the two populations. Diabetes is estimated to remain undiagnosed in 40% of white (particularly female) and Asian diabetics in the community, who are at risk of complications. General practitioners should systematically screen "at risk" groups for diabetes.

Night duty and changes in mood and cognitive performance

Duty rosters that entail junior doctors working continuously for two days in a row are considered by some to be deleterious to the doctors and their patients and by others to be a necessary part of medical training. Concern is increasing with the mounting pressures on doctors' workload. On p 21 Orton and Gruzelier present empirical evidence of the effects of long hours of work and lack of sleep in 20 junior doctors in their second house job. By testing the doctors during a normal working day and during a day after a night spent on duty they showed that there was a significant slowing of cognitive processing with a decline in reaction times in a vigilance test and deleterious changes in mood.

Lung immunoglobulins in the sudden infant death syndrome

The sudden infant death syndrome is the main cause of death in infants in developed countries during the first year of life. To date there has been little evidence implicating an identifiable, organic cause of death. The syndrome occurs more commonly at times of increased respiratory tract infection in the general paediatric community, but previous work has found no evidence of lung infection with known pathogens. Reasoning that an abnormal immune response to a mild or unrecognised lung pathogen may be important, Forsyth and colleagues (p 23) have studied the lungs of these infants, looking for any evidence of immune abnormalities. In all 16 cases studied there was indeed a definite abnormality in lung immunoglobulins compared with controls. Though the aetiology of the altered immunoglobulins remains uncertain, Forsyth *et al* have identified an organic system abnormality and provide an important focus for further research into the cause of the sudden infant death syndrome.



Mean choice reaction times in 20 junior doctors after less than five hours of sleep showed greater variability than those of doctors who had had more sleep, but Orton and Gruzelier (p 21) found that it was not lack of sleep but long hours of work that adversely affect junior doctors' cognitive performance