

700  
377

# BRITISH MEDICAL JOURNAL

STA/STA

SATURDAY 23 APRIL 1983

## LEADING ARTICLES

<b>Ruptured aneurysms</b> E R HITCHCOCK .....	1299	<b>Unequal legs</b> LESLIE KLENERMAN .....	1302
<b>Pseudodementia</b> TOM ARIE .....	1301	<b>Gall stone pancreatitis</b> D C CARTER .....	1303

## CLINICAL RESEARCH • PAPERS AND SHORT REPORTS • PRACTICE OBSERVED

<b>Efficacy of a heat inactivated hepatitis B vaccine in male homosexuals: outcome of a placebo controlled double blind trial</b>			
R A COUTINHO, N LELIE, P ALBRECHT-VAN LENT, E E REERINK-BRONGERS, L STOUTJESDIJK, P DEES, J NIVARD, J HUISMAN, H W REESINK . . . . .			
			1305
<b>Treatment with gonadotrophin releasing hormone analogue in advanced prostatic cancer</b>			
J H WAXMAN, J A H WASS, W F HENDRY, H N WHITFIELD, G M BESSER, J S MALPAS, R T D OLIVER .....			
			1309
<b>Traumatic neuropathy of second cervical spinal nerves</b> SIMON BEHRMAN .....			
			1312
<b>Lymphomatoid granulomatosis in a 10 year old boy</b> A D J PEARSON, H KIRPALANI, T ASHCROFT, H BAIN, A W CRAFT .....			
			1313
<b>Fatal marrow aplasia associated with non-A, non-B hepatitis</b> P BANNISTER, K MILOSZEWSKI, D BARNARD, M S LOSOWSKY .....			
			1314
<b>Cigarette smoking in pregnancy and fetal hyperviscosity</b> PETER C BUCHAN .....			
			1315
<b>Plasmodium malaria resistant to chloroquine in a Zambian living in Zambia</b> J M KOFI EKUE, ANNE-MARIE ULRICH, E K NJELESANI .....			
			1315
<b>Idiopathic hypoparathyroidism associated with stable untreated myelofibrosis</b> H K L SIMPSON, C W HOWDEN, H L ELLIOTT, T J THOMSON ..			
			1316
<b>Chlorpropamide-alcohol flushing and coronary heart disease in non-insulin dependent diabetics</b>			
M LAAKSO, K NUORVA, A ARO, M UUSITUPA, O SIITONEN, R HUUPPONEN .....			
			1317
<b>Bronchoconstriction in response to ipratropium bromide</b> K R PATEL, W M TULLETT .....			
			1318
<b>Practice Research: Problem drinking among drunk drivers</b> TAYSIDE SAFE DRIVING PROJECT .....			
			1319

## MEDICAL PRACTICE

<b>Total parenteral nutrition: value of a standard feeding regimen</b> OXFORD PARENTERAL NUTRITION TEAM .....		1323
<b>Computer prediction of the need for dialysis and transplantation using calculated creatinine clearance</b>		
F W BAILLARDIE, S GARTSIDE, N P MALLICK .....		1328
<b>New Drugs: Antiarrhythmic drugs</b> W S HILLIS, B WHITING .....		1332
<b>ABC of Healthy Travel: Diabetics, children, and pregnant women</b> ERIC WALKER, GLYN WILLIAMS .....		1337
<b>Aviation Medicine: Fitness to travel by air II: Specific medical considerations</b> F JOHN MILLS, RICHARD M HARDING .....		1340
<b>Letters to a Young Doctor: Publication</b> PHILIP RHODES .....		1341
<b>Any Questions?</b> .....		1327, 1331
<b>Medicine and Books</b> .....		1343
<b>Medicine and the Media—Contributions from</b> HENRY R ROLLIN, JOSEPHINE BARNES .....		1347
<b>Personal View</b> MICHAEL WATKINSON .....		1348

U. S. DEPT. OF AGRICULTURE  
NATIONAL AGRICULTURAL LIBRARY  
RECEIVED

<b>CORRESPONDENCE—List of Contents</b> .....	1349	<b>OBITUARY</b> .....	1359
--	------	-----------------------	------

## NEWS AND NOTES

<b>Views</b> .....	1362
<b>Parliament—Data Protection Bill</b> .....	1363
<b>Medical News—Low level lead</b> .....	1363
<b>BMA Notices</b> .....	1364
<b>One Man's Burden</b>	
MICHAEL O'DONNELL .....	1365

<b>OBITUARY</b> .....	1359
-----------------------	------

## SUPPLEMENT

<b>The Week</b> .....	1366
<b>BMA lobbying pays off: medical records protected</b>	
WILLIAM RUSSELL .....	1367
<b>From the JCC:</b>	
Staffing structure: consultant expansion emphasised .....	1368
<b>BMA congress, Toronto, 20-23 September 1983</b> .....	1371
<b>Police and Criminal Evidence Bill</b> .....	1372

## CORRESPONDENCE

<b>The Heimlich manoeuvre</b> H J Heimlich, MD; M A Mason, FRCS; A W B Crockett, MB; J Coals, FRCS; E J Trimmer, MRCGP.....	<b>Why one should not take the MRCGP examination</b> A A Stephen, MRCGP; R M Harden, FRCP; J V Kilby, MRCGP; R P Yadava, MRCGP....	<b>Use of blood in elective general surgery</b> I G Schraibman, FRCS; L R Davis, FRCPATH, and Patricia M Corcoran, FIMLS.....
1349	1354	1356
<b>Pregnancy in an infertile patient after transfer of an embryo fertilised in vitro</b> P Steptoe, FRCOG, and R Edwards, PHD; A Trounson, PHD, and others.....	<b>Acquired immune deficiency syndrome</b> B H O'Connor, MFCM, and others.....	<b>Double indemnity in oesophageal carcinoma?</b> K C McKeown, FRCS.....
1351	1354	1357
<b>Antiemetic effect of nonabine in cancer chemotherapy</b> V J Harvey, MD, and others.....	<b>Is dexamethasone deleterious in cerebral malaria?</b> D A Warrell, FRCP, and others; B Juel- Jensen, FRCP.....	<b>Rural Norfolk: GP as a community property</b> K E Schopflin, FRCGP.....
1352	1355	1357
<b>Intestinal anastomosis</b> C E Pither, FFARCS.....	<b>Injuries and seat belt legislation</b> R Clements, FRCS.....	<b>Laser photocoagulation of senile macular degeneration</b> E D Allen, FRCS.....
1352	1355	1357
<b>Immunisation policies</b> P D Griffiths, MD; S W V Davies, MRCGP; J K Anand, FFCM.....	<b>Adjuvant tamoxifen for operable carcinoma of the breast</b> G M Mead, MRCGP, and others; G G Ribeiro, FRCP, and M K Palmer, PHD....	<b>Screening for fetal malformations</b> P W Gill, FRCP.....
1352	1356	1358
<b>Peritoneal dialysis in infants</b> M Searle, MRCP, and H A Lee, FRCP.....	<b>Emotional distress during cancer chemotherapy</b> Mary E Courtney, MRCPsych.....	<b>Cimetidine for symptomatic treatment of duodenal ulcers</b> K A Cleur, MRCGP.....
1353	1356	1358
<b>Postcoital contraception</b> Wendy Savage, MRCOG.....	<b>Campylobacter enteritis after falling into sewage</b> R W Sumathipala, MRCP, and G W Morrison, MRCP.....	<b>High dose of antacid reduces bioavailability of ranitidine</b> K Frislid, MD, and Arnold Berstad, MD....
1353	1356	1358
<b>Competitive spectacles</b> P Trevor-Roper, MD; R Smith, FRCS.....		<b>Problems of manpower statistics</b> R S Viner.....
1353		1358
		<b>Correction: Medical effects of nuclear war (Carroll).....</b>
		1358

*We may return unduly long letters to the author for shortening so that we can offer readers as wide a selection as possible. We receive so many letters each week that we have to omit some of them. Letters should be typed with double spacing between lines and must be signed personally by all their authors, who should include their degrees. Letters critical of a paper may be sent to the authors of the paper so that their reply may appear in the same issue.*

*Correspondents should present their references in the Vancouver style (see examples in these columns). In particular, the names and initials of all authors must be given unless there are more than six, when only the first three should be given, followed by et al; and the first and last page numbers of articles and chapters should be included.*

## The Heimlich manoeuvre

SIR,—Dr D P Addy (12 February, p 536) has described the confusion regarding recommendations as to whether backslaps or the Heimlich manoeuvre should be used to treat choking children. He asks: "What should we advise parents and others to do when faced with a choking child?" The answer can be found in references in the published work going back to 1854. I would like to take this opportunity to cite some of these references in the hope of clarifying the most effective treatment for saving the life of a choking person.

From the time of the brilliant study by Gross<sup>1</sup> in 1854 to the present, medical reports and textbooks on the subject of airway obstruction by foreign bodies warn that only when a choking patient is in extremis should blows between the shoulder blades be used.<sup>2-19</sup> The reason given for this recommendation is the clinical observation that a back blow causes a foreign body in the throat to be propelled downward and backward, either impacting it in the glottis or driving it into the lung. Several of these articles warning against the use of backslaps are from the Chevalier Jackson Clinic in Philadelphia and are based on that institution's experience beginning with a series of 612 cases of airway obstruction by foreign bodies in 1917 and including more than 6000 by 1979.<sup>3 12 13 16-19</sup>

Similarly, the official textbooks of the American Red Cross from 1973 to 1978 state: "Do not allow anyone to slap you on your back if you choke and do not try to dislodge an object from another person's throat by this means, except as a last, desperate effort to save his life."<sup>2</sup> New scientific confirmation of the earlier clinical observations was recently reported by Day *et al*<sup>4</sup> at the Yale University School of Medicine. The Yale group, using an accelerometer, plethysmograph, and specially designed instrumentation, found that back blows propel a foreign body downward and backward into the throat or larynx in a direction towards the lung at a force of 3 g. They attributed this finding to Newton's third law of motion: "To every action there is always opposed an equal reaction." They concluded that in a choking person "in the case of a partial obstruction, a back blow could transform the situation into one of complete blockage."

In 1977 Gordon *et al*<sup>20</sup> experimented on anaesthetised human volunteers, inserting a piece of meat into the throat to which a string had been tied in order to pull it out in an emergency. Dr Addy's article notes that Gordon also looked into the throat of anaesthetised baboons while slapping the back. From the observations on baboons Gordon con-

cluded that backslaps would not expel a foreign body out loosened it, which might make a subsequent Heimlich manoeuvre more effective. It was solely on the basis of that study by Gordon, adviser to the American Red Cross and the American Heart Association, that those organisations decided that back blows must be the first treatment for choking rather than "a last desperate effort." Recently, the American Red Cross and Heart Association changed their recommendations a third time, now stating that a rescuer can choose whether to slap the back before or after performing the Heimlich manoeuvre.<sup>21</sup>

Dr Addy points out that according to one American organisation compression of the chest is a treatment for choking children, whereas the British associations recommend upper abdominal compression (Heimlich manoeuvre), as do most American public health authorities. A study at Johns Hopkins University has shown that chest compression is not an effective means of increasing intrathoracic pressure.<sup>22</sup> The pressure developed in the chest with chest thrusts is dissipated because the diaphragm is pushed downward. It is unlikely, therefore, that chest thrusts are as effective as subdiaphragmatic pressure for expelling a foreign body obstructing the airway.