# 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

**Publishing director**
Anthony Smith

**Advertisement manager**
Bob Hayzen

**International sales**
Maurice Long

**Publishing manager**
Derek Parrott

## Hope for broken hips

Breaking a hip can be a catastrophe in old age. The chances of elderly victims of proximal femoral fractures being fully restored to independence remain poor despite major advances in anaesthesia and operative techniques. Such fractures are placing an increasing burden on short stay orthopaedic units, and as a result many orthopaedic services have joined forces with geriatric medicine units to provide postoperative care and rehabilitation. But is a problem shared a problem halved?

A prospective randomised study in a district general hospital (p 1083) found that elderly patients with broken hips go home sooner and retain greater independence when physical rehabilitation after operation took place away from the admission ward under the supervision of a geriatrician: the numbers in hospital or nursing homes at the end of the study were more than halved. If unnecessary handicap and loss of autonomy are to be avoided such frail elderly patients must be cared for by specialist rehabilitation services.

## Angiotensin converting enzyme inhibitors and diabetic nephropathy

About 40% of all insulin dependent diabetics eventually develop nephropathy—defined as persistent proteinuria, a decline in glomerular filtration, and increased blood pressure. Research studies on rats have shown that glomerular hypertension may be present even when the systemic blood pressure is normal. Treatment with converting enzyme inhibitors reduces the glomerular pressure by dilating the efferent arterioles, and such treatment may be expected to slow the rate of progression of renal damage in diabetics.

Two studies in this issue confirm the clinical value of this approach. Parving *et al* (p 1086) treated hypertensive diabetics with captopril and showed a reduction in proteinuria and a slowing of the rate of progression of the nephropathy when compared with historical controls. Marre *et al* (p 1092) intervened at an earlier stage in normotensive patients with microalbuminuria and showed that five of the 10 treated recovered a normal rate of excretion of protein.

## Short term increase in breast cancer risk after pregnancy

The traditional teaching over the past 30 years has been that one full term pregnancy or high parity, or both, has a protective effect against the development of breast cancer. Even so, women with a first full term pregnancy after the age of 32-35 are at a higher risk of breast cancer than nulliparous women, and during the reproductive years breast cancer is commoner among parous than nulliparous women. Bruzzi *et al* (p 1096) have now analysed data from two large case-control studies on breast cancer. They suggest that pregnancy may cause a short term increase in the risk of breast cancer, which overcomes the long term protective effect for about three years. Their findings, which confirm predictions from animal studies, may prove important in understanding breast carcinogenesis, particularly the role of endogenous hormones in both suppressing and promoting the process.

## "No room" may be fatal

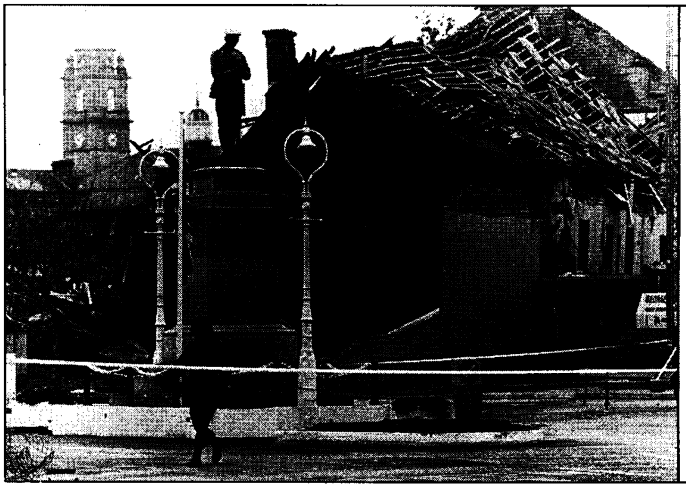
Among the currently fashionable performance indicators is bed occupancy, and a high rate is commonly equated with high efficiency. Evidence is accumulating, however, that a high rate of bed occupancy may mean that emergency admissions are sometimes turned away. In a clinical setting fluctuations in demand are both inevitable and unpredictable.

A practical example of these conflicts appears on p 1098, where Bowman *et al* present data from the perinatal unit at the Royal Women's Hospital, Melbourne. Over 18 months almost one quarter of the infants born before 30 weeks had to be moved to other hospitals because the perinatal centre was full. Mortality in the infants transferred was double that in those treated in the hospital in which they were born. The authors conclude that because the requirement for neonatal intensive care is episodic and unpredictable the system needs to be more adaptable.



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.



*The Enniskillen bomb explosion on 8 November 1987 was the first major incident in Northern Ireland to take place close to a district general hospital in a small town (p 1113). Because it was Sunday only seven doctors and 20 nurses were immediately available on site, though these figures increased to 20 and 40 respectively by the time triage had been completed. The disaster plan worked well, the most notable difficulties being the lack of ex-directory telephone lines to allow rapid communications outside the hospital and access to the hospital because of traffic congestion and road closures. Only one patient required immediate surgery, though she died from unsalvagable injuries; another 13 were admitted as casualties and treated. Helicopters had a major role in transferring seven seriously injured patients, whose condition was stabilised, to specialised units elsewhere*

echocardiography and its clinical significance in acquired valvular diseases with special reference to the evaluation of valvular regurgitation. *Jpn Heart J* 1984;25:325-40.
6 Rijsterborgh H, Roelendt J. Doppler assessment of aortic stenosis: Bernouilli revisited. *Ultrasound Med Biol* 1987;**13**:241-8.
7 Libanoff AJ, Rodbard S. Atrioventricular half time measure of mitral valve orifice area. *Circulation* 1968;**38**:144-50.
8 Hatle L, Angelsen B, Tromsdal A. Noninvasive assessment of atrioventricular half-time by Doppler ultrasound. *Circulation* 1979;**60**:1096-104.
9 Otto CM, Pearlman AS, Comess KA, Reamer RP, Janko CL, Huntsman LL. Determination of the stenotic aortic valve area in adults using Doppler echocardiography. *J Am Coll Cardiol* 1986;7:509-17.
10 Feigenbaum H. *Echocardiography*. Philadelphia: Lea and Febiger, 1986.
11 Schnittger I, Gordon EP, Fitzgerald PJ, Popp RL. Standardised intracardiac measurements of two-dimensional echocardiography. *J Am Coll Cardiol* 1983;**2**:934-8.
12 Wilson N, Goldberg SJ, Dickinson DF, Scott O. Normal intracardiac and great artery blood velocity measurements by pulsed Doppler echocardiography. *Br Heart J* 1985;**53**:451-8.
13 Hatle L, Brubakk A, Tromsdal A, Angelsen B. Non-invasive assessment of pressure drop on mitral stenosis by Doppler ultrasound. *Br Heart J* 1978;**40**:131-40.
14 Hatle L. Noninvasive assessment and differentiation of left ventricular outflow obstruction by Doppler ultrasound. *Circulation* 1981;**64**:381-7.
15 Krafchek J, Robertson JH, Radford M, Adams D, Kisslo J. A reconsideration of Doppler assessed gradients in suspected aortic stenosis. *Am Heart J* 1985;**110**:765-72.
16 Miyatake T, Izumi S, Okamoto M, *et al*. Semiquantitative grading of severity of mitral regurgitation by real-time two-dimensional Doppler flow imaging technique. *J Am Coll Cardiol* 1986;7:82-8.
17 Helmcke F, Nanda NC, Hsuing MC, Soto B, Adey CK, Goyal RG, Gatewood RP. Color Doppler assessment of mitral regurgitation with orthogonal planes. *Circulation* 1987;**75**:175-83.
18 Sahn DJ, Chung KJ, Tamura T, *et al*. Factors affecting jet visualisation by color flow mapping Doppler echo: in vitro studies. *Circulation* 1986;**74**(suppl II):271.
19 Hatle L, Angelsen B. Pulsed and continuous wave Doppler in diagnosis and assessment of various heart lesions. In: *Doppler ultrasound in cardiology*. Philadelphia: Lea and Febiger, 1985:97-292.
20 Ciobanu M, Abbasi AS, Allen M, Hermer A, Spellberg R. Pulsed Doppler echocardiography in the diagnosis and estimation of severity of aortic insufficiency. *Am J Cardiol* 1982;**49**:339-43.
21 Gehl LG, Mintz GS, Kotler MN, Segal BL. Left atrial volume overload in mitral regurgitation: a two dimensional echocardiographic study. *Am J Cardiol* 1982;**49**:33-8.
22 Henry WL, Maron BJ, Griffith JM. Cross-sectional echocardiography in the diagnosis of congenital heart disease. *Circulation* 1977;**56**:267-73.
23 Lieppe W, Scallion R, Behar VS, Kisslo JA. Two-dimensional echocardiographic findings in atrial septal defect. *Circulation* 1977;**56**:447-56.
24 Silverman NH, Schiller NB. Apex echocardiography. A two-dimensional technique for evaluating congenital heart disease. *Circulation* 1978;**57**:503-11.
25 Sahn DJ, Allen HD, McDonald G, Goldberg SJ. Real-time cross-sectional echocardiographic diagnosis of coarctation of the aorta. *Circulation* 1977;**56**:762-9.
26 Weyman AE, Hurwitz RA, Girod DA, Dillon JC, Feigenbaum H, Green D. Cross-sectional echocardiographic visualization of the stenotic pulmonary valve. *Circulation* 1977;**56**:769-74.
27 Omoto R. *Color atlas of real-time two-dimensional Doppler echocardiography*. Tokyo: Shindan-To-Chiryo, 1987.
28 Sanders SP, Yeager S, Williams RG. Measurement of systemic and pulmonary blood flow and QP/QS ratio using Doppler and two-dimensional echocardiography. *Am J Cardiol* 1983;**51**:952-6.
29 Kyo S, Omoto R, Takamoto S, Takanawa E. Quantitative estimation of intracardiac shunt flow in atrial septal defect by real-time two-dimensional color flow Doppler. *Circulation* 1984;**70**:(suppl II):3.
30 Serwer GA, Armstrong BE, Anderson PAW. Continuous wave Doppler ultrasonographic quantitation of patent ductus arteriosus flow. *J Pediatr* 1982;**100**:297-9.
31 Kerber RE, Marcus ML, Erhart J, Wilson R, Abboud FM. Correlation between echocardiographically demonstrated segmental dyskinesis and regional myocardial perfusion. *Circulation* 1975;52:1097-104.
32 Weiss JL, Bulkley BH, Hutchins JM, Mason SJ. Two-dimensional echocardiographic recognition of myocardial injury in man: comparison with postmortem studies. *Circulation* 1981;**63**:401-8.
33 Weyman AE, Peskoe SM, Williams ES, Dillon JC, Feigenbaum H. Detection of left ventricular aneurysms by cross-sectional echocardiography. *Circulation* 1976;**54**:936-44.
34 Asinger RW, Mikell FL, Sharma B, Hodges M. Observations on detecting left ventricular thrombus with two-dimensional echocardiography: emphasis on avoidance of false positive diagnoses. *Am J Cardiol* 1981;**47**:145-56.
35 Labovitz AJ, Pearson AC. Evaluation of left ventricular diastolic function: Clinical relevance and recent Doppler echocardiographic insights. *Am Heart J* 1987;**114**:836-51.
36 Silverman KJ, Huthchins GM, Weiss JL, Moore GW. Catenoidal shape of the interventricular septum in idiopathic hypertrophic subaortic stenosis: two dimensional echocardiographic confirmation. *Am J Cardiol* 1982;**49**:27-32.
37 Sutton MG, StJ, Tajik AJ, Gibson DG, Brown DJ, Seward JB, Giuliani ER. Echocardiographic assessment of left ventricular filling and septal and posterior wall dynamics in idiopathic hypertrophic subaortic stenosis. *Circulation* 1978;**57**:512-20.
38 Borer JS, Henry WJ, Epstein SE. Echocardiographic observations in patients with systemic infiltrative disease involving the heart. *Am J Cardiol* 1977;**39**:184-8.
39 Maron BJ, Gottdiener JS, Bonow RO, Epstein SE. Hypertrophic cardiomyopathy with unusual locations of left ventricular hypertrophy undetectable by M-mode echocardiography: Identification by wide-angle two-dimensional echocardiography. *Circulation* 1981;**63**:409-18.
40 Maron BJ, Gottdiener JS, Arce J, Rosing DR, Wesley YE, Epstein SE. Dynamic subaortic obstruction in hypertrophic cardiomyopathy: analysis by pulsed Doppler echocardiography. *J Am Coll Cardiol* 1985;**6**:1-15.
41 Appleton CP, Hatle LK, Popp RL. Demonstration of restrictive ventricular physiology by Doppler echocardiography. *J Am Coll Cardiol* 1988;**11**:757-68.
42 Kotler MN, Mintz GS, Panidis I, Morganroth J, Segal BL, Ross J. Noninvasive evaluation of normal and abnormal prosthetic valve function. *J Am Coll Cardiol* 1983;**2**:151-73.
43 Forman MB, Phelan BK, Robertson RM, Virmani R. Correlation of two-dimensional echocardiography and pathologic findings in porcine valve dysfunction. *J Am Coll Cardiol* 1985;5:224-30.
44 Willerson JT, Kastor JA, Dinsmore RE, *et al*. Non-invasive assessment of prosthetic mitral paravalvular and intravalvular regurgitation. *Br Heart J* 1972;**34**:561-8.
45 Dawkins KD, Cotter L, Gibson DG. Assessment of mitral Bjork-Shiley prosthetic dysfunction using digitised M mode echocardiography. *Br Heart J* 1984;**51**:168-74.
46 Skorton DJ, Child JS, Eber LM. Noninvasive diagnosis of prosthetic mitral valve malfunction. *Radiology* 1979;**131**:185-6.
47 Mintz GS, Carlson EB, Kotler MN. Comparison of noninvasive techniques in evaluation of the nontissue cardiac valve prosthesis. *Am J Cardiol* 1982;**49**:39-44.
48 Weinstein IR, Marbarger JP, Perez JE. Ultrasonic assessment of the St Jude prosthetic valve: M mode, two-dimensional, and Doppler echocardiography. *Circulation* 1983;**68**:897-905.
49 Veyrat C, Witchitz S, Lessana A, Ameur A, Abitbol G, Kalmanson D. Valvar prosthetic dysfunction. Localisation and evaluation of the dysfunction using the Doppler technique. *Br Heart J* 1985;**54**:273-84.
50 Sagar KB, Wann S, Paulsen WHJ, Romhilt DW. Doppler echocardiographic evaluation of Hancock and Bjork-Shiley prosthetic valves. *J Am Coll Cardiol* 1986;7:681-7.
51 Chambers JB, Jackson G. Initial experience of colour flow Doppler mapping in the assessment of prosthetic valves. *Br Heart J* 1988;**59**:90.
52 Martin RP, Rakowski H, French J, Popp RL. Localisation of pericardial effusion with wide angle phased array echocardiography. *Am J Cardiol* 1978;**42**:904-12.
53 Voelkel AG, Pietro DA, Folland ED, Fisher ML, Parisi AF. Echocardiographic features of constrictive pericarditis. *Circulation* 1978;**58**:871-5.
54 Erbel R, Rohmann S, Drexler M, *et al*. Improved diagnostic value of echocardiography in patients with infective endocarditis by transoesophageal approach. A prospective study. *Eur Heart J* 1988;**9**:43-53.
55 DeMaria AN, Bommer W, Neumann A, Weinert L, Bogren H, Mason DT. Identification and localisation of aneurysms of the ascending aorta by cross-sectional echocardiography. *Circulation* 1979;**59**:755-61.
56 Nanda NC, Gramiak R, Shah PM. Diagnosis of aortic root dissection by echocardiography. *Circulation* 1975;**48**:11-7.
57 Iliceto S, Nanda NC, Rizzon P, *et al*. Color Doppler evaluation of aortic dissection. *Circulation* 1987;75:748-55.
58 Sahn DJ. Determination of cardiac output by echocardiographic Doppler methods: Relative accuracy of various sites for measurement. *J Am Coll Cardiol* 1985;**6**:663-4.
59 Chandaratna PA, Nanna M, McKay C, *et al*. Determination of cardiac output by transcutaneous continuous-wave ultrasonic Doppler computer. *Am J Cardiol* 1984;**53**:234-7.
60 Berger M, Haimowitz, van Tosh A, Berdoff RL, Goldberg E. Quantitative assessment of pulmonary hypertension in patients with tricuspid regurgitation using continuous wave Doppler ultrasound. *J Am Coll Cardiol* 1985;**6**:359-65.
61 Roelendt JRTC, Sutherland GR. Oesophageal echocardiography. *Br Heart J* 1988;**60**:1-3.
62 Topol EJ, Weiss JL, Guzman PA, *et al*. Immediate improvement of dysfunctional myocardial segments after coronary revascularisation: detection by intraoperative transoesophageal echocardiography. *J Am Coll Cardiol* 1984;**4**:1123-34.
63 Erbel R, Börner N, Steller D, *et al*. Detection of aortic dissection by transoesophageal echocardiography. *Br Heart J* 1987;**58**:45-51.
64 Tei C, Sakamaki T, Shah PM, *et al*. Myocardial contrast echocardiography: a reproducible technique of myocardial opacification for identifying regional perfusion defecits. *Circulation* 1983;**67**:585-93.
65 Monaghan MJ, Quigley PJ, Metcalfe JM, Jewitt DE. Digital subtraction contrast echocardiography: a new method for the evaluation of regional myocardial perfusion. *Br Heart J* 1988;**59**:12-9.
66 Martin MA. Reproducibility of M-mode echocardiography. In: Hunter S, Hall R, eds. *Clinical echocardiography*. Tunbridge Wells: Castle House Publications, 1986:1-7.
67 Popp RL, Filly K, Brown OR, Harrison DC. Effect of transducer placement on echocardiographic measurement of left ventricular dimensions. *Am J Cardiol* 1975;**35**:537-40.

## INSTRUCTIONS TO AUTHORS

*The BMJ has agreed to accept manuscripts prepared in accordance with the Vancouver style (BMJ, 6 February 1988, p 401) and will consider any paper that conforms to the style. More detailed and specific instructions are given below.*

The following include the minimum requirements for manuscripts submitted for publication.

All material submitted for publication is assumed to be submitted exclusively to the *BMJ* unless the contrary is stated.

Manuscripts will be acknowledged; letters will not be unless a stamped addressed envelope is enclosed.

Papers will normally be refereed and may be statistically assessed before acceptance.

**Authors** should give their names and initials, their posts at the time they did the work, and one degree or diploma. All authors must sign their consent to publication.

**Three copies** should be submitted. If the manuscript is rejected these will be shredded.

**Typing** should be on one side of the paper, with double spacing between the lines and 5 cm margins at the top and left hand side of the sheet.

**Abbreviations** should not be used in the text.

**Drugs** should be given their approved names, not their proprietary names, and the source of any new or experimental preparations should be given.

**SI units** are used for scientific measurements, but blood pressure should continue to be expressed in mm Hg.

**Statistical procedures** should be described in the methods section or supported by references.

**Tables and illustrations** should be separate from the text of the paper. Tables should be simple and should not duplicate information in the text of the article.

**References** must be in the Vancouver style and their accuracy checked before submission. They should be numbered in the order in which they appear in the text.

**Letters to the editor** submitted for publication must be signed personally by all authors, who should include one degree or diploma.

**The editor** reserves the customary right to style and if necessary shorten material accepted for publication and to determine the priority and time of publication.

**Detailed instructions** are given in the *BMJ* dated 2 January 1988, p 48.