

after 48 h and the patient has continued on labetalol without further problem. Presumably this unpleasant side-effect has a vascular basis.

This cutaneous sensation may not be confined to the scalp; another patient given 0.7 mg/kg labetalol by intravenous bolus injection had the same prickly sensation all over his body. This was associated with mild dizziness, and after 20 min he had an urgent desire to void urine but was unable to do so. I feel that this problem with micturition is also related to labetalol since I have seen this strong desire to pass urine with inability to do so in a young diabetic with end-stage chronic renal failure who had this unusual side-effect on three occasions after a single oral dose of 100 mg labetalol.

Department of Renal Medicine,
Christchurch Hospital,
Christchurch 1, New Zealand

ROSS R. BAILEY

CÆLIAC-AXIS COMPRESSION

SIR,—The fact that you produced an editorial on this subject and, therefore, regard it as important, is my only excuse for prolonging a correspondence on what I still maintain is a "non-syndrome". So Dr Watson (Sept. 10, p. 561) must be answered:

(1) I was careful not to attribute any sort of alimentary pain to deprivation of blood-supply. The concept of abdominal angina is very dubious.¹

(2) Any analogy with ischaemic colitis is false, in that there is there gross infarction of the gut without arterial narrowing or blockage. This is in complete contradistinction to the "coeliac-axis-compression syndrome" where there is an arterial lesion but no structural or functional abnormality in the gastrointestinal tract.

(3) Arterial narrowing, far from being rare, is almost universal among Western people. Depending on the circulatory territory involved, it may or may not cause symptoms, and surgical procedures designed to correct it need to be evaluated very critically. For instance, Edwards et al.² found that 7% of healthy medical students had an abdominal aortic bruit. Watson asks whether I think there is no possibility of symptoms being associated with narrowing of the coeliac axis. Of course I do not. One cannot prove a negative, and I accept that the occasional patient may be grateful and free of pain after this type of surgery. I do not write off the patient's testimony as a valid method of assessing clinical response. The doctor's purpose is to get his patient better, by whatever means is available, rather than to correct some "medical" fault which lies within his own sphere of definition. But there are various ways of putting people right, and to cut somebody nearly in half to get at their coeliac axis seems to me to be one that puts a very heavy burden of justification on its proponents.

(4) The really significant paper on this subject was that of Evans,³ which I cited but to which Watson does not refer. It is significant that Evans' material was of the patients originally cited by the early American workers.⁴ Almost all these patients did badly.

I would love to believe in the coeliac-axis-compression syndrome. To any surgeon, the idea of a quick snip in the right direction, followed by a smile on the face of the patient and a discomfited physician colleague holding a sheaf of unnecessary biochemical investigations, is immensely seductive. Moreover, if I worked in North America, this activity would be very profitable. The trouble however, is, that, except in an anecdotal sense, there is no evidence that the operation contributes to the permanent relief of abdominal pain.

Middlesex Hospital,
London W1

ADRIAN MARSTON

1. Marston, A. *Intestinal Ischaemia* London, 1977.
2. Edwards, A. E., and others. *Br. med. J.* 1970, **i**, 342.
3. Evans, W. E. *Surgery*, 1974, **76**, 857.
4. Dunbar, J. D. *Am J Roentgenol* 1965, **95**, 731.

LACTIC-DEHYDROGENASE ACTIVITY IN THYMOCYTE POPULATIONS

SIR,—The report of Dr Hoffbrand and his colleagues (Sept. 10, p. 520) and your accompanying editorial on enzyme markers in leukaemia focus on the importance of enzymes as markers of lymphoid populations and their use in defining lymphocyte differentiation pathways.

We examined the lactic dehydrogenase (L.D.H.) activity of lymphoid populations and found that L.D.H.-1 isoenzyme formed a greater percentage of this activity in T lymphocytes than in B lymphocytes while L.D.H.-5 was proportionately lower in T cells than in B cells.^{1,2} We also found a smaller percentage of L.D.H.-1 in thymocytes than in peripheral T cells suggesting that cells of the T cell lineage might differ in L.D.H. isoenzyme pattern at different stages of differentiation.³

This hypothesis was tested by separating normal human thymocytes into four fractions by velocity sedimentation at unit gravity.⁴ In cells with a higher sedimentation rate, L.D.H.-1 formed a smaller percentage of the total enzyme activity.

ISOENZYMES AS PERCENTAGES OF TOTAL L.D.H.

Cell type	L.D.H.-1	L.D.H.-2	L.D.H.-3	L.D.H.-4	L.D.H.-5*
Unseparated	8.3	26.7	35.3	27.1	2.6
High sedimentation-rate	3.3	23.4	35.4	31.6	6.2
Medium sedimentation-rate	6.1	25.9	44.2	21.8	2.0
Low sedimentation-rate	10.2	27.0	36.9	23.4	2.5

*The L.D.H. isoenzymes were determined by agar gel electrophoresis.¹

Since less mature thymocytes have a high sedimentation rate,^{5,6} our finding is consistent with the hypothesis that less mature T cells have an L.D.H. isoenzyme pattern with a low percentage of L.D.H.-1.

Department of Medical Microbiology,
and Nephrological Division,
Department of Medicine,
University Hospital,
B 9000 Gent, Belgium

J. PLUM
S. RINGOIR
M. DE SMEDT

D.D.A.V.P. IN HAEMOPHILIA

SIR,—We were interested to read the report from Dr Lowe and his colleagues (Sept. 17, p. 614) on hyponatraemia in a haemophilic treated with five 12-hourly infusions of D.D.A.V.P. (1-desamino-8-D-arginine vasopressin) at 0.5 µg/kg body-weight. This is an important new drug in the management of mild haemophilia and von Willibrand's disease because it avoids the necessity of administering blood products. As Mannucci's⁷ work showed, water overload is not an inherent risk, and we believe that overload can occur only if the patient receives a quantity of water which is unnecessarily large in the circumstances. Since water produced by metabolism is approximately balanced by the insensible loss, hyponatraemia will develop only where there is access to osmotically free water. A dilution of the plasma-sodium from 137 to 124 mmol/l in 48 h, which Lowe et al. saw, represents a substantial rate of increase in the body water of an average adult. We agree that instructions must be given to limit oral fluids; and other ad-

1. Ringoir, S., Plum, J. *Clin. chim. Acta*, 1975, **60**, 379.
2. Plum, J., Ringoir, S. *Eur. J. Immun.* 1975, **5**, 871.
3. Plum, J., Ringoir, S. *J. Retic. Soc.* 1977, **21**, 225.
4. Miller, K. G., Phillips, R. A. *J. cell. Physiol.* 1969, **73**, 191.
5. Macdonald, H. R., Phillips, R. A., Miller, R. G. *J. Immun.* 1973, **111**, 565.
6. Macdonald, H. R., Phillips, R. A., Miller, R. G. *ibid.* 1973, **111**, 575.
7. Mannucci, P.M., Ruggeri, Z. M., Pareti, F. L., Capitano, A. *Lancet*, 1977, **i**, 869.

ministration of water (e.g., as 5% dextrose infusion in a post-operative routine) must also be carefully controlled. Water accumulation can usually be monitored by weighing the patient.

We have recently treated a 27-year-old haemophilic (factor VIII clotting activity previously recorded as 0.23 I.U./ml, factor VIII-like antigen 128%) with single doses of D.D.A.V.P. 0.4 µg/kg in 30 ml physiological saline on two successive days, with anti-fibrinolytic cover, for the removal of a tooth. The patient was instructed to drink only when he was thirsty. Over the first 24 h period the plasma-sodium changed from 139 to 137 mmol/l and osmolality from 274 to 280 mmol/kg, and we could detect no change in body-weight. On the day of extraction factor VIII clotting activity rose from 0.27 to 0.82 I.U./ml over 24 min after the injection (given over about 5 min), and had reached 0.98 I.U./ml after 3 h. On the second day the activity rose from 0.27 to 0.53 I.U./ml over 14 min. 6 days later, a further single dose was given to cover the removal of sutures, without essay. Haemostasis was normal throughout. Our total dose was much smaller than the quantity given by Lowe et al. but the clinical effect was satisfactory; the initial factor VIII level was higher than in their case.

We hope that others will not be deterred from using D.D.A.V.P. in mild haemophilia for fear of water intoxication, which can be avoided by careful instructions and simple monitoring.

Hematology Department
and Renal Unit,
St. Thomas' Hospital
and Medical School,
London SE1

G. I. C. INGRAM
P. J. HILTON

SMOKING AND AGE OF NATURAL MENOPAUSE

SIR.—Jick et al.¹ have demonstrated an association between cigarette smoking and the age of natural menopause. We can confirm this finding, from a retrospective analysis of the computerised medical records of women who attended the BUPA Medical Centre for routine health screening between March, 1971, and December, 1972. Of 733 women aged 44–53 years, 314 (42.8%) were premenopausal and 161 (22.0%) had had a natural menopause. In the remainder menopausal status was uncertain.

SMOKING AND NATURAL MENOPAUSE

Age (years)	Smoking status	No.	No. postmenopausal
44–45	Non-smokers	67	1
	Smokers	37	1
46–47	Non-smokers	44	5 (11%)
	Smokers	29	5 (17%)
48–49	Non-smokers	66	15 (23%)
	Smokers	36	13 (36%)
50–51	Non-smokers	73	33 (45%)
	Smokers	43	26 (61%)
52–53	Non-smokers	52	37 (71%)
	Smokers	28	25 (89%)

The table shows the proportion of smokers and non-smokers who were postmenopausal within each age group. "Smokers" had smoked at least one cigarette a day regularly and "non-smokers" had never smoked or had given up the habit. Like Jick et al., we found a greater proportion of postmenopausal women among the smokers than among the non-smokers. This was true at all ages. Using Cochran's method² to combine the age-specific results, the effect was highly significant ($P < 0.005$).

BUPA Medical Research,
269 Gray's Inn Road,
London WC1

ALAN BAILEY
DAVID ROBINSON
MARTIN VESSEY

Commentary from Westminster

From Our Parliamentary Correspondent

Woe about the Way Forward

ALTHOUGH senior Ministers continue to express optimism about the country's economic future, the realities of the present continue to be restraints on public spending with all the accompanying problems and frustrations. Last week Mr David Ennals, Secretary of State for Social Services, was hopefully talking about moving into a period of expansion when the economic situation would enable the Government to do some of the things it had not been able to do in the past few years. Yet the occasion for his words was the publication of the Government's latest guidelines¹ for priorities in the health and social services over the next decade which are based very much on the need for economies and rationalisation.

The document, *The Way Forward*, follows the consultative proposals published 18 months ago by the then Secretary of State, Mrs Barbara Castle, *Priorities for Health and Personal Social Services in England*.² Mr Ennals claims that in the "lively debate" which followed these proposals the Castle document stood up to the test of public scrutiny and that its priorities were widely accepted. The result is that last week's guidelines contain only a few modifications to the original proposals and no changes in the general strategy laid down. The main change has been one of emphasis, reflecting the recognition by the Department of Health and Social Security that national guidelines must be more flexible. It is now accepted that precise targets cannot be set down for services which differ from one part of the country to another. As a result last week's document is more tentative in its approach, which should at least please the regional and area health authorities. It emphasises the importance which should continue to be given to adjusting the balance of care to provide more support in the community, and to give priority to primary care for the elderly and disabled, the mentally ill, and the mentally handicapped, and to prevention.

What was questioned during the 18 months' consultative process was the practicability of achieving the Government's objectives within the time scale suggested. The issue causing most concern was the degree of restraint on further growth proposed for the general and acute hospital services. Mr Ennals accepted that restraint in the acute sector was the most difficult part of the whole operation, but the requirement nevertheless remained. But what the Government now says is that there can be no general formula for achieving the necessary degree of economy nationally and that there might have to be a substantially more rapid increase in expenditure on acute services than was implied in Mrs Castle's proposals. The new document says: "In some districts long-sought improvements will be further delayed. Some hospitals will have to continue to manage with facilities which are out-dated or inadequate. The expectations

1 Jick, H., Potter, I., Morrison, A. S. *Lancet*, 1977, ii, 1354.
2 Cochran, W. G. *Biometrics*, 1954, 10, 417.

Lancet, Sept 24, 1977, p. 669.