Another equally harmless, and also common, eruption is seen over the upper third of the bicipital surface of the upper arm. This consists of an oval area of petechiae and perhaps some slight bruising, about $\frac{3}{4}$ in. (2 cm.) long. It is due to the child sucking himself, though most children will for some reason deny that they have done so.

Since vest purpura is not limited to young children, it may well be met in adults, but since Dr. Kibel and I are both paediatricians we have had less chance of seeing it in older subjects.—I am, etc.,

Bath, Somerset.

S. D. V. WELLER.

Hyponatraemia and Bronchial Carcinoma

SIR,—We were most interested to read the article on "Hyponatraemia and Bronchial Carcinoma" by Drs. A. L. Linton and I. Hutton (31 July, p. 277), as we recently had an example of this syndrome and agree that treatment presents certain problems.

The patient was a man aged 51 years with a tumour situated in the left upper lobe involving the mediastinum. At the time of admission for bronchoscopy he was confused, disorientated, and aggressive. Biochemical investigations revealed serum sodium of 110 mEq/l.; potassium 4.7 mEq/l.; chloride 76 mEq/l.; blood urea of 10 mg. ml. Intravenous sodium chloride (450 mEq) raised the serum sodium to 120 mEq/l., with improvement in the patient's mental state. Further investigations showed the urine to contain no glucose and no protein; the creatinine clearance 140 ml./min.; serum osmolality 230 m.osmoles/kg.; urine osmolality 400–500 m.osmoles/kg.; serum cortisol 15 μ g./100 ml.; rising to 45 μ g./100 ml. after an intravenous infusion of A.C.T.H. (35 units). Serum

antidiuretic hormone 25–50 μ U./ml.; blood volume 110 ml./kg.; skull x-rays and x-rays of pituitary fossa normal. Despite intravenous and oral sodium supplements and the addition of 9 α -fluorohydrocortisone (1 mg./day) the serum sodium could not be raised above 120 mEq/l.

The mental state in this condition of inappropriate secretion of antidiuretic hormone is due to the low serum osmolality and is similar to that associated with acute water intoxication. As Schwartz *et al.*¹ point out, these symptoms occur when the serum sodium falls to between 110 and 115 mEq/l. The treatment as suggested by Schwartz *et al.*,¹ Ivy,² and Bower *et*

al.,³ consists of restricting fluid intake to 700 ml./day. The accompanying graph shows the rise in serum sodium and fall in body weight, the rise in serum standard bicarbonate, and the rise to normal levels of blood urea from the sixth day of admission. To demonstrate the inability to excrete a water load the patient was given 1 litre of water to drink over 30 minutes. Two hours later the patient became unconscious and the serum osmolality had fallen to 215 m.osmoles/kg.; a dramatic improvement was obtained by giving 300 mEq of sodium chloride intravenously.

As the tumour was radiologically inoperable, deep x-ray therapy (3,000 r) was given over two weeks commencing on the eighth day after admission. On discharge from hospital, the fluid intake was increased to 1 litre per day, and the patient's mental state remained normal until death on 18 July 1965.

We therefore suggest that the syndrome of inappropriate secretion with antidiuretic hormone associated with bronchial carcinoma should be treated by fluid restriction rather than by sodium supplements and 9 α -fluorohydrocortisone. Once the primary tumour has been dealt with by surgery, radiotherapy, or cytotoxic drugs, and the secretion of antidiuretic-hormone-like activity has diminished, fluid intake may be increased provided the patient does not gain weight and the serum sodium does not fall.

We wish to thank Mr. J. Leigh Collis for permission to publish details of his case and Dr. A. R. Daniel, Department of Pharmacology, The University of Bristol, for kindly performing the plasma antidiuretic hormone-like activity bioassay.

—We are, etc.,

S. GLICK.
B. HULME.

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Birmingham 15.

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Scared to Death?

SIR,—Dr. D. Trevor Thomas (21 August, p. 480) asks if there have been any cases of recovery from the Waterhouse-Friderichsen syndrome "since the advent of more potent bactericidal agents, cortisone, etc." The answer is "Yes." Following reports of the remarkable effect of cortisone in this condition by Newman¹ and Nelson and Goldstein,² I and my colleagues reported two cases in

1952.³ Since then I have had at least two further cases, which responded satisfactorily.

Incidentally, the value of the steroids is not confined to fulminating meningococcal infections, where adrenocortical exhaustion is prominent and haemorrhage in the suprarenals is usually demonstrable at post-mortem. It applies to the whole range of viral and bacterial infections as well. All my cases of severe reaction to infection receive steroids intravenously or orally, or both, depending on the urgency of the situation.

It is interesting to note the decline of meningococcus as a cause of meningitis. Before the war one could almost assume that a case of meningitis was meningococcal, unless proved otherwise. To-day the majority of cases are viral in origin, and of bacterial cases *Haemophilus influenzae* would appear, if anything, to be the most frequent cause. It looks as if the sensitivity of meningococcus to penicillin and the sulphonamides is resulting in its gradual eradication from the British nasopharynx.—I am, etc.,

South Middlesex Hospital,
Isleworth,
Middlesex.

G. E. BREEN.

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At Gallipoli

SIR,—I cannot allow the note on the Gallipoli Campaign (24 April, p. 1134) to pass without comment. Whoever was responsible for it must have been very very young in 1915. Perhaps he was not even born. Has he never heard of the word Anzac? After all Australian and New Zealand troops did have some small part in the operations. Lancashire Landing, to which this note evidently refers, was only one part of the assault on the peninsula, and took place a good many miles along the coast from Anzac Cove.—I am, etc.,

Palmerston N.,
New Zealand.

J. S. MONRO.

** We regret that in the publication of a brief note on the R.A.M.C. at Gallipoli, and the part played by Lieutenant-General Sir Frederick Harris (then Captain Harris), the gallant role of the Australian and New Zealand troops went unmentioned.—Ed., *B.M.J.*

Estimation of Serum Enzymes

SIR,—During the past six months an intensive quality control programme has been instituted in this laboratory. Among other things the quality control sera have been used as enzyme controls, some values for which have not been included by the manufacturer.

These results may be of interest to other laboratories.

The serum enzymes determined were hydroxybutyrate dehydrogenase¹ and lactate dehydrogenase,² isocitrate dehydrogenase,³ and aldolase.⁴ The quality control sera used were Baxter

Results

Serum Enzyme	Serum Control	No. of Determinations	Mean	Standard Deviation
Hydroxybutyrate dehydrogenase	Abnormal	123	260 I.U./l.	46
Hydroxybutyrate dehydrogenase	Enzatrol	13	393 "	—
Lactate dehydrogenase	Abnormal	20	390 "	55
Isocitrate dehydrogenase	Abnormal	4	12 "	—
Aldolase	Abnormal	4	4 units/ml.	—
"	Normal	4	1.7 "	—
"	Enzatrol	7	7 "	—