

with prostatic cancer. Using a different dosage schedule and way of administration (500 µg subcutaneously every eight hours for seven days followed by 400 µg every eight hours intranasally) we have not seen an appreciable rise in serum testosterone four or eight hours after giving the peptide. On only one occasion, after nine months of treatment, the testosterone rose over 1 ng/ml (3.5 nmol/l) (to 1.26 ng/ml; 4.4 nmol/l) and dropped afterwards.

Our data do not support the results obtained by Dr Kerle and others. It should be emphasised that the frequency of giving the agonists may be of crucial importance in suppressing the pituitary-testicular axis. If we assume a 2.5% absorption rate from the intranasal route then 10 µg of buserelin given three times daily is enough to maintain constant testosterone inhibition.

We think it is unjustified to conclude that luteinising hormone releasing hormone agonists should not be recommended as long term treatment for carcinoma of the prostate on the basis of escape with one compound at a given dosage.

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Ablative radioiodine therapy for hyperthyroidism

SIR,—Dr P B S Fowler and others (8 September, p 629) ridicule the use of radioiodine doses aiming at ablation as outlined by Dr Pat Kendall-Taylor and others (11 August, p 361). We have observed 60 consecutive patients treated with standard doses of iodine-131 aiming at ablation during 1969-83.¹ The follow up time is from one to 14 years, and our experience is similar to that of Dr Kendall-Taylor and others.

Hypothyroidism after "calculated" doses of radioiodine expected to give euthyroidism may often develop even 10 or more years after the dose was given. Such patients run a considerable risk of being undetected for a long time. Another problem with a low dose is re-emergence or relapse of the hyperthyroidism.

No method has been described for calculating the dose for achieving permanent euthyroidism with exactitude. Thus it seems better to use ablative dosage and early replacement under controlled conditions than to have patients run the risk of late hypothyroidism and a delay in adequate substitution.

The amount of radioiodine needed for ablation is still uncertain. The doses used in the beginning by Dr Kendall-Taylor as well as by us seem to have been too small. A dose around 740 MBq (20 mCi) may be best.

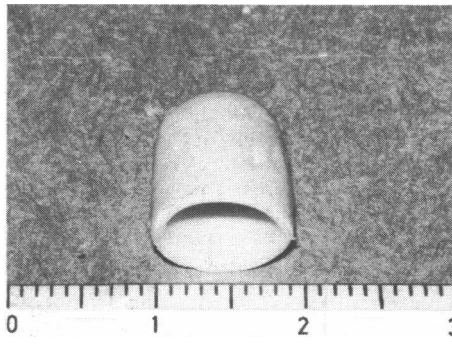
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1 Eriksson E, Eriksson K, Wahlberg P. Treatment of hyperthyroidism with standard doses of radioiodine aiming at ablation. *Acta Med Scand* (in press).

Impaction of a foreign body in the palate

SIR,—Mr P A M Raine and Mr J G McLennan (6 October, p 879) present two infants who had 12 mm brown plastic caps designed to fit over the heads of screws lodged in their palatal mucosa for four weeks before recognition and removal. Older children also get objects



Bright yellow billiard cue tip (12 mm diameter) removed from palate of 8 year old boy.

stuck in the roof of the mouth; all sorts of articles, some quite large, get driven in, and there may be healing of the mucosa over the object with later extrusion.

We have seen a boy of 8 who came to the casualty department because he had had a sharp pain in his mouth at breakfast time and his mother had noticed something in the roof of his mouth. A bright yellow billiard cue tip (12 mm diameter) was extricated, leaving a cavity of the appropriate size. The boy recognised it at once and said he had mislaid it four months before.

Warnings by manufacturers on all small objects likely to be put in the mouths of infants are not practicable, but awareness by parents of the hazards to children of small and pointed objects is important.

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Haemoglobin A_{1c} concentrations in men and women with diabetes

SIR,—Mr M H Stickland and colleagues (22 September, p 733) reported significantly higher haemoglobin A_{1c} concentrations in women than men, while blood glucose concentrations were no different. We have reproduced their tabulation using the latest total haemoglobin A₁ (HbA₁) and blood glucose concentrations routinely measured at our adult and child diabetic clinics at University Hospital, Nottingham.^{1 2}

Data were available for 2669 diabetics (1439 men, 1230 women). Using a multiple regression analysis to predict HbA₁ from blood glucose, sex, age, and type of treatment we found that the significant difference between men and women persisted ($F=34.3$; $p<0.001$). A further multiple regression analysis including duration of diabetes, age at onset, obesity index, creatinine concentration, and current smoking habits as well as blood glucose, sex, age, and treatment type was carried out for the 1780 adults for whom all these data were available. HbA₁ was still significantly greater ($F=14.9$;

$p<0.001$) in women than in men, but further analyses would be required to define precisely the relation between HbA₁, blood glucose, and other variables. In particular we found that blood glucose concentration was significantly greater in women than in men among those aged over 50; there were similar trends in other age groups (table) and also in the data of Mr Stickland and his colleagues. We note also that the variance for both HbA₁ and blood glucose is significantly greater for women than men in both the Leeds data and our own.

We agree that HbA₁ concentrations are higher in women but do not think that the suggestion that "female haemoglobin can undergo a greater degree of glycosylation compared with that of male diabetic patients" can be accepted with confidence. We believe other interpretations are possible. The explanation may even be behavioural rather than physiological—for example, women may be more likely than men to try to obtain good control just before a clinic visit while generally having worse control.

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- 1 Jones RB, Hedley AJ, Peacock I, Allison SP, Tattersall RB. A computer-assisted register and information system for diabetics. *Methods Inf Med* 1983;22:4-14.
- 2 Ambler J, Janik B, Walker G. Measurement of glycosylated haemoglobin on cellulose acetate membranes by mobile affinity electrophoresis. *Clin Chem* 1983;29:340-3.

Replacement of surfactant in hyaline membrane disease

SIR,—Dr Dafydd V Walters' review of current experience in the use of surfactant replacement treatment of the neonatal respiratory distress syndrome paints a depressing picture (6 October, p 855). He rightly emphasises the need for further research on the optimal composition of the surfactant used in clinical trials.

One related feature of lung prematurity may, however, deserve some attention. It is suspected that part of the tissue damage seen in hyaline membrane disease is attributable to the use of positive pressure ventilation to counteract hypoxia.¹ In view of the common occurrence of vitamin E deficiency in premature infants² and the importance of this vitamin in the protection of the lung against oxygen induced lipid peroxidation³ pulmonary defences may already be compromised.⁴ A failure of the infant to transport sufficient vitamin to critical sites within the lung may arise either from an inadequate supply or from underdevelopment of the relevant biochemical mechanism.

Of particular interest in this regard there-

HbA₁ and whole blood glucose concentrations in 2669 diabetics. Results expressed as means (and SD)

	Men			Women		
	No	HbA ₁ (%)	Blood glucose (mmol/l)	No	HbA ₁ (%)	Blood glucose (mmol/l)
All patients	1439	11.1 (2.7)	12.6 (6.1)	1230	11.9 (3.0)	13.4 (6.7)
Age <15	45	11.0 (3.2)	15.7 (6.0)	33	11.0 (2.7)	14.4 (5.7)
Age 15-40	397	11.1 (2.8)*	12.6 (6.7)	319	11.6 (3.1)	13.1 (8.1)
Age 41-50	211	10.8 (2.6)***	11.8 (5.8)	139	11.9 (2.6)	12.7 (5.2)
Age ≥51	786	11.2 (2.6)***	12.6 (5.8)**	739	12.0 (3.0)	13.6 (6.3)
Patients receiving insulin	978	11.2 (2.6)***	12.8 (6.7)**	690	12.0 (2.9)	13.8 (7.5)

Significantly different from women: * $p<0.05$; ** $p<0.01$; *** $p<0.001$.
Conversion: SI to traditional units—Glucose: 1 mmol/l \approx 18 mg/100 ml.