able to concentrate their resources on these very high risk infants.—I am, etc.,

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1 Cross, K. W., *Lancet*, 1973, **2**, 954.

SIR,—Your leading article, "Respiratory Distress Syndrome in the Newborn" (23 November, p. 428), outlines some of the problems facing clinicians dealing with preterm labour and delivery. The use of a constant distending pressure (C.D.P.) in the airway has made the management of the idiopathic respiratory distress syndrome less empirical, and your plea for centres in each N.H.S. area fully equipped to deal with premature labour and with facilities for proper neonatal care should not be taken lightly.

It is therefore a contradiction to hope, as you do in your last sentence, for a quick and easy way of applying C.D.P. to be available at any maternity hospital. The progress that has been made in this branch of medicine is the tribute to the high degree of medical and nursing skills, with the help of complex apparatus, that is available only at the few prenatal centres that have so far been established. Your hope that the same results could be obtained with methods not requiring this degree of expertise is a false one and can lead only to further expensive pieces of equipment collecting dust in the cupboards and nurseries because they are "difficult to set up and adjust."

What is really expensive is the experienced personnel, and their concentration into the regional centres you rightly suggest establishing is the only way further fallacies and fancies in management will be exposed and progress continued.—I am, etc.,

ANDREW WILKINSON

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SIR,—I read with interest your very succinct leading article (23 November, p. 428) on this subject. Having studied the encouraging results of the use of the Gregory box and in an effort to simplify this kind of treatment I designed and built a new box while working at the Jenny Lind Hospital in Norwich in 1972.

The box, made of Perspex, is similar in appearance to a small "iron lung" in which a constant negative pressure is maintained to obtain an identical effect on the baby's chest wall to that of the positive pressure Gregory box but leaving the baby's head free for access for infusions, aspiration, and intubation as necessary. It was interesting that shortly afterwards a German firm was demonstrating a similar negative pressure box, identical in principle to my design but more elaborate, complicated, and expensive. As far as I know the only English equivalent is rather cumbersome, adapted from an incubator the whole of which is evacuated to the required negative pressure.

Does anyone use a negative pressure box now or have they been found to be unsuccessful? If not, perhaps we should be thinking of developing the idea further and turning the prototype into a production model. If anyone is interested I should be only too pleased to show them the box and to hear their suggestions.—I am, etc.,

WILLIAM BEVINGTON

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SIR,—It was disappointing that your leading article (23 November, p. 428) made no reference to the excellent work of Barrie.[1 2] His method of applying continuous positive airway pressure has been adopted in our unit with great success. Nothing could be simpler than the adaptation of a plastic freezer bag for the purpose. We have now used this technique successfully for the past eight months and our Gregory box is discarded. Junior housemen quickly learn to set it up and the nursing staff find continued observations and monitoring straightforward. In our experience there has been a dramatic improvement in the prognosis of hyaline membrane disease since its introduction and we would recommend other paediatricians to try it.—I am, etc.,

C. E. M. JONES

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1 Barrie, H., *Lancet*, 1972, **1**. 776.
2 Barrie, H., *Lancet*, 1973, **2**, 851.

Oral Contraception and Increased Formation of High Molecular Weight Derivatives of Fibrinogen

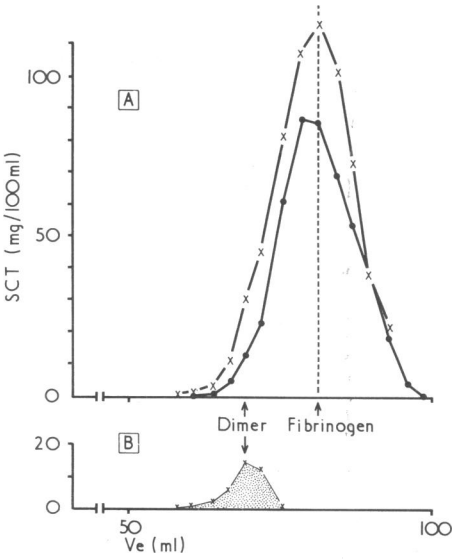
SIR,—An increased formation of soluble fibrin in patients taking oral contraceptives was reported by L. O. Pilgeram and others (31 August, p. 556). They found that contraceptive medication induced a greater uptake of ^{14}C-glycine ethyl ester into a fibrinogen derivative. This seems to correspond with earlier observations of Alkjaersig *et al.*,[1] who noted a chromatographic shift of the fibrinogen peak towards higher molecular weight fibrinogen derivatives. Recent experiments in our laboratory, using a modified agarose gel filtration technique, confirm these results and provide more quantitative information about the induction of intravascular fibrin formation by treatment with oestrogen-containing oral contraceptives.

Seven healthy women aged from 17 to 35 years were examined before and during a four- to 12-week period of treatment with an oral contraceptive containing norgestrel 0·25 mg and ethinyloestradiol 0·05 mg. Citrated plasma taken on days 24 to 26 of the anovulatory menstrual cycles was chromatographed on a Biogel-A-5m-column (25 × 2·3 cm). Fibrinogen-related material in the eluates was titrated manually with the staphylococcal clumping test[2] and the mean concentrations before and during contraceptive treatment calculated for each fraction. These concentrations are shown in the table and graphically represented in the figure.

The results show (1) an unchanged elution position of the quantitatively increased fibrinogen (compare with Alkjaersig *et al.*[1]); (2) increased amounts of high molecular weight derivatives in the early fractions, forming a shoulder in the ascending part of the fibrinogen peak; and (3) the elution position of the main fraction of high molecular weight derivatives in the position calculated for the fibrinogen-fibrin-dimer. Mathematical processing of the data suggests that the polymers represent 5·6% of the total amount of the fibrinogen peak. This would correspond to a monomer concentration of 2-3%, assuming that a 1:1 complex of fibrinogen and fibrin monomers is formed. —We are, etc.,

Concentrations of Fibrinogen-related Material before (n = 6) and during (n = 7) Contraceptive Treatment

Fraction No.	Mean Concentrations (mg/100 ml ± S.D.) Before Treatment	During Treatment
16	0 ± 0	0 ± 0
17	0·02 ± 0·01	0·04 ± 0·03
18	0·05 ± 0·01	0·14 ± 0·13
19	0·11 ± 0·06	0·27 ± 0·56
20	0·19 ± 0·13	0·59 ± 0·24
21	0·37 ± 0·24	1·08 ± 0·33
22	0·77 ± 0·43	2·52 ± 1·46
23	4·25 ± 2·88	10·74 ± 8·07
24	11·65 ± 12·45	29·76 ± 13·36
25	23·89 ± 14·07	45·12 ± 2·005
26	61·23 ± 30·21	80·64 ± 26·88
27	86·61 ± 47·30	107·54 ± 60·10
28	85·12 ± 46·06	115·20 ± 55·34
29	69·44 ± 24·66	111·36 ± 56·87
30	53·01 ± 28·67	72·96 ± 63·45
31	38·83 ± 34·63	38·25 ± 20·82
32	18·29 ± 7·55	21·12 ± 15·72



A. Fibrinogen-related material measured by staphylococcal clumping test before (.——.) and during (x——x) contraceptive treatment. B. High molecular weight material calculated as the difference of the areas under the original curves in A.

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1 Alkjaersig, N., Fletcher, A. P., and Burstein, R., *Thrombosis et Diathesis Haemorrhagica*, 1971, Suppl. no. 49, p. 125.
2 Asbeck, F., Lechler, E., and van de Loo, J., in *Fourth Congress International Society on Thrombosis and Haemostasis*, 1973, abst. p. 287.

Normal Short Children

SIR,—Your leading article (9 November, p. 308) discusses the admirable Newcastle study[1] but does not mention an earlier paper[2] on this topic. It reported from Bristol that in a group of short children the search for physical causes had drawn an almost complete blank; growth hormone levels were found to be normal. This finding has now been confirmed from Newcastle. It is contrary to the finding of Powell *et al.*,[3] which you cite, that "severe emotional deprivation with reversible failure of growth hormone