from vesicoureteric reflux over a period of 15 years in this area cystourethroscopy, with measurement of the submucosal ureter and calibration of the urethra, has been a routine part of the investigation. The length of the intramural ureter is of considerably less value than that of the submucosal ureter. I consider these endoscopic procedures to be invaluable in helping to decide if reflux is likely to disappear spontaneously or not and therefore a great help in determining a rational programme of treatment. If the length of the submucosal ureter is over 0.5 cm and the bladder and urethra otherwise normal the reflux will almost certainly disappear spontaneously. This, as Dr Edwards has pointed out, may well take longer than two years, but with the confidence of a normal cystourethroscopic examination and an adequate submucosal ureter no arbitrary time limit need be set for "failed medical treatment." About 60% of children come into this class.

Cystourethroscopy is also invaluable in revealing defects which may escape radiology, and I believe that operation should be recommended early when it is clear that no amount of time will result in a spontaneous cure—for example, poorly developed trigone with widely separated gaping ureters, absence of any submucosal ureter, ureter opening into a diverticulum, varieties of duplex, etc. Rare cases of distal obstruction may on occasions escape detection by radiology.

I have found that on cystourethroscopic examination about 25% of children are recommended as candidates for operation. In about 15%, in whom the submucosal ureter is about 0.5 cm or less, the age of the child and severity of reflux, as well as social, geographical, and temperamental factors, play a large part in the planned treatment of the child. In the child with established renal scarring I consider cystourethroscopy to be mandatory if conservative treatment is planned, as only by this examination can the early resolution of reflux be forecast. This examination will spare a few children with established scarring from operation, but I consider that it is unjustifiable to await further evidence of renal scarring before recommending operative treatment as factors other than infections alone are involved in the production of renal damage, especially where there is intrarenal reflux.

In conclusion, I suggest that cystourethroscopy should be a routine in the assessment of children with vesicoureteric reflux as it allows a fairly accurate prediction of the disappearance or otherwise of the reflux to be made. This will allow treatment to be planned with confidence, reduces exposure to radiation, and should prevent further renal damage in those who have already sustained scarring.

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Infantile acne

SIR,—I think that Dr S J Carne (6 August, p 389) has missed the point of my letter. He is quite right in suggesting that milia appears very soon after birth, in contrast to the lesions in the children I observed, which were not apparent before three weeks of age in any case. Indeed, the appearance was not characteristically that associated with milia, which takes its name from its resemblance to millet seed. There was marked improvement when the

children were "treated" with an oestrogen/progestogen combination via breast milk. I felt, therefore, that it was reasonable to assume that the skin condition may have, at least in part, a hormonal basis, and that the oestrogen derivative of the pill may well have been counteracting a predominantly androgen effect. There is, of course, thought to be a similar explanation for the improvement of acne vulgaris in adolescent girls given the contraceptive pill.

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Renal lead excretion

SIR,—In recent years there has been increasing concern that present levels of environmental lead pollution, although not causing frank lead poisoning, may nevertheless be harmful to health. There is evidence that this is particularly likely where lead contaminates drinking water supplies.¹⁻⁴ Our previous studies have demonstrated associations between lead and both hypertension³ and renal insufficiency.⁴

In those studies, however, it was conceded that the disease states themselves might be partly responsible for the elevations of blood lead concentration by depressing renal lead excretion—in other words, that they might be the cause rather than the result of elevated blood lead concentrations. If minor degrees of renal impairment encountered in such epidemiological studies were indeed the cause of elevated blood lead levels one would expect to find some evidence of depressed lead excretion in subjects with severe renal dysfunction.

Accordingly we have looked at 12 patients, nine male and three female, aged 18-72 years, with differing levels of renal function as assessed by creatinine clearance. Four patients had normal renal function; four moderate renal impairment; and four had severe renal failure (table). In each case blood lead concentration was measured and urinary lead output determined over three consecutive 24-h periods. These measurements were made by flameless atomic absorption spectrophotometry and by polarography. Only about one-tenth of total blood lead is carried in the plasma and the technical difficulties encountered in the accurate measurement of such small concentrations makes formal renal lead clearance determination unreliable. This therefore was not attempted. Instead, the relationship of blood lead concentration to

urinary lead output is expressed as a simple arithmetic function in the final column of the table.

In all subjects urinary lead output was of the same order irrespective of renal function and, with one exception, blood lead concentrations fell within the normal range. The ratio of blood lead concentration to urinary lead output varied greatly but was in no way related to severity of renal disease. Clearly, this is an unsophisticated parameter, but because of the technical difficulties mentioned it is as accurate a reflection of renal lead handling as any other.

These findings indicate that it is unlikely that renal impairment is a significant cause of elevated blood lead concentration and that it is more probable that excessive lead in water is indeed one factor in the development of hypertension and renal disease in some subjects.

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¹ Beattie, A D, *et al*, *British Medical Journal*, 1972, 2, 491.

² Beattie, A D, *et al*, *Lancet*, 1975, 1, 589.

³ Beavers, D G, *et al*, *Lancet*, 1976, 2, 1.

⁴ Campbell, B C, *et al*, *British Medical Journal*, 1977, 1, 482.

Danger of instant adhesives

SIR,—There has been considerable concern about the dangers from cyanocrylate glues, the glues that set within seconds by exclusion of air. It is possible to dissolve the glue both before it has set and after it has set using materials which are somewhat irritant but not unacceptably so under medical and nursing supervision.

If the glue has not set contaminated fingers should be kept well apart and immersed in water. This will then set the glue. The dry glue will come off the hands as the skin naturally replaces itself in the course of a day or so. Alternatively, the glue can be dissolved in xylene or toluene solvents, which are fairly common in laboratory and industrial settings and which are not unduly irritant to the skin. They would not be suitable for use in the eyes or in the mouth, of course.

Should body parts be stuck together and it be unacceptable to wait for the glue to fall off naturally, it can be dissolved by swabbing with a solution of nitromethane. This material is not particularly irritant to the skin, has a

Effect of renal dysfunction on blood lead concentration and urinary lead excretion

Case No	Age (years)	Sex	Creatinine clearance ml/min	Blood lead $\mu\text{mol/l}$	Urinary lead $\mu\text{mol/24 h}$	Ratio blood:urine
Normal renal function						
1	28	M	131	0.7	0.05	14
2	44	M	111	0.7	0.02	35
3	18	M	146	0.7	0.03	23
4	19	M	147	0.6	0.02	30
Moderate renal impairment						
5	67	F	22	0.9	0.09	10
6	72	F	24	0.7	0.14	5
7	35	M	30	1.3	0.18	7
8	61	F	16	2.2	0.18	12
Severe renal failure						
9	37	M	3	0.8	0.02	40
10	56	M	2	0.8	0.02	40
11	43	M	9	0.5	0.07	7
12	48	M	4	1.2	0.10	12

Conversion: SI to traditional units—Lead: 1 $\mu\text{mol/l} \approx 20.7 \mu\text{g/100 ml}$; 1 $\mu\text{mol/24 h} \approx 207 \mu\text{g/24 h}$