findings suggest that glycyrrhizic acid mimics this as well as other actions of aldosterone.

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¹ Davanzo, J P, Crossfield, N C, and Swingle, W W, *Endocrinology*, 1958, **63**, 825.

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Dermatitis from cosmetics

SIR,—Every practising dermatologist must welcome your timely leading article (24 September, p 782) on this difficult problem, but I think there are two additional aspects which should be stressed if the problem is to lessen.

It may seem trite but it would be invaluable for the Dermatologists Subcommittee of the Central Committee for Hospital Medical Services to point out to manufacturers that, perfumes apart, the commonest allergens in cosmetics are lanolin, ethylenediamine, used as a stabiliser, and parabens, used as preservatives, and that substitutes for these should be found.

Conversely, and quite the reverse of enforced American law, there is still no requirement in Britain or the EEC for a list of contents to appear on each cosmetic package, though it was quite clearly stated by the relevant EEC committee many years ago that it would seem to be imminent. How can any doctor advise his cosmetic-allergic patient to change to a new preparation, even if "hypoallergic," when he has no more knowledge than she if this is going to make the situation better or worse?

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Erythema nodosum and oral contraceptives

SIR,—We were most interested in the case report of Dr S Bombardieri and others (11 June, p 1509) describing erythema nodosum associated with pregnancy and oral contraceptives, as we have recently investigated a woman who developed erythema nodosum while taking Minilyn (ethinylloestradiol 50 µg, with lynoestrenol 2.5 mg). There has been a previous report of erythema nodosum occurring with this preparation; the pill taken by Bombardieri's patient also contained ethinylloestradiol. We wish to emphasise the need for caution before attributing erythema nodosum to oral contraceptives.

A 26-year-old woman who had been taking Minilyn for three years was admitted with erythema nodosum of the lower limbs. This developed one week after she had been given Cephalax for a sore throat. When she was admitted both drugs were withheld and the lesions subsided within a week. Later the Minilyn was restarted; the erythema nodosum returned within three days and then subsided after withdrawal of the drug. This sequence was repeated the following week. Her WBC was $14 \times 10^9/l$ with a neutrophilia, the ESR

was 40 mm per hour, and she had a mild normochromic anaemia. The following investigations gave normal results: chest x-ray, ECG, urea and electrolytes, nose and throat swab, 24-hour urinary calcium, Kveim and Paul-Bunnell tests, brucella and yersinia antibody titres. The ASO titre never exceeded 200 international units. She had never had BCG and she was Mantoux-negative.

The patient was then challenged with four types of coded capsules supplied by Organon Laboratories Ltd. She took one of the specially formulated preparations each day for two weeks and then took no tablets for the next two weeks. This sequence was then repeated with each of the preparations in turn. Two weeks after finishing this programme she took Minilyn again for two weeks. No further lesions developed in response to the capsules—which were a placebo, Minilyn, Lynoral (ethinylloestradiol), and Exluton (lynnoestrenol), respectively. There was no reaction to the final Minilyn challenge nor was there any variation detected in the weekly measurements of T cell lymphocytes measured throughout the period.

We conclude that this patient's erythema nodosum could not be attributed to her contraceptive pill despite the three apparent responses to Minilyn challenge. But it is of course possible that repeated challenges with Minilyn over a long period resulted in desensitisation and a lack of further response.

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Hexachlorophane—yes or no?

SIR,—I would like to comment on your leading article (5 February, p 337) and subsequent correspondence—in particular, the comments of Drs M D Young and Glenda Treadway (2 April, p 904) involving an article of which I was coauthor.¹ Specifically, I do not agree with their implication that our study supports the safety of hexachlorophane. In our study the number of subjects not hexachlorophane-bathed was 18, a limitation which makes it difficult to show a statistically significant difference unfavourable to hexachlorophane. Nevertheless, we did show that hexachlorophane was present in brain tissue in four of six infants bathed in it at birth and in one of two infants whose mothers were prepared with it just prior to delivery. As we pointed out, both of the two subjects bathed in hexachlorophane who did not show tissue levels survived long enough to have eliminated it from their systems even though in one lesions were still present.

Premature babies absorb more hexachlorophane from a given exposure, but infants in our study showed more lesions as their birth weight increased, and lesions were seen in mature infants. We would interpret this as indicating that in man as in rats the period of maximum myelination of the central nervous system coincides with the period of maximum susceptibility.² Thus, data based on follow-up of prematures may not be a reliable indication of the effects in full-term infants.

In regard to the safety of hexachlorophane when used less than three times, the manufacturer's directions suggest that repeated use is necessary for effectiveness, and further that

rinsing is not effective in removing it from the skin: "Cumulative antibacterial action develops with repeated use. This antibacterial residue is resistant to removal by many solvents, soaps, and detergents for several days."³

There are other studies which show that other, more malignant, organisms colonise the newborn if, in fact, hexachlorophane bathing does eliminate *Staphylococcus epidermidis*.⁴⁻⁶ In many cases, the appearance of minor staphylococcal skin lesions is merely postponed until the baby has left the hospital.⁷ It is problematical whether this is good or bad. On the one hand, older babies may tolerate these infections better; on the other, the IgG immunity derived from the mother begins to decline and may lower their resistance. At any rate, most staphylococcal skin infections are minor and of no practical consequence.

In summary, hexachlorophane is absorbed from the intact skin of the newborn, both premature and full term.⁸⁻¹³ Vacuolisation of the central nervous system can be found in the brains of infants so bathed¹⁴⁻¹⁶ in our study associated with tissue levels of hexachlorophane.

Discontinuance of hexachlorophane bathing has not increased perinatal mortality.¹⁷ It seems to me that the hazard is proved. Other methods of preventing staphylococcal infection are available and should be pursued.

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⁶ Stratford, B C, *Medical Journal of Australia*, 1963, **50**, 308.

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⁹ Corner, B D, et al, *British Medical Journal*, 1977, **1**, 636.

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¹¹ Plueckhahn, V D, *Medical Journal of Australia*, 1973, **1**, 93.

¹² Cunningham, M D, and Tsoulos, N G, *Pediatric Research*, 1972, **46**, 431.

¹³ Alder, B D, et al, *Lancet*, 1972, **2**, 384.

¹⁴ Schuman, R M, Leech, R W, Alvord, E G, Jr, *Pediatrics*, 1974, **54**, 689.

¹⁵ Schuman, R M, Leech, R W, and Alvord, E G, Jr, *Archives of Neurology*, 1975, **32**, 320.

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¹⁷ Gordon, R R, *British Medical Journal*, 1977, **2**, 705.

Indomethacin in pleurisy

SIR,—I wish to comment on the use of indomethacin as an analgesic for patients with pleurisy. I can find no previous reference to this, although the value of the drug in acute pericarditis has been reported.¹

During the past eight months 21 hospital inpatients with pleurisy were given indomethacin for relief of their chest pain. Two had tuberculous pleural effusions, three had pulmonary infarcts, and the remainder had pleurisy with pneumonia. The dose was 25 mg two or three times a day and in some cases 50 mg at night. All patients expressed satisfaction with the relief of pain and they were able to cough and breathe deeply with little or no discomfort. The drug had to be stopped in two patients because of side effects: one had a haematemesis and the other severe nausea.

Chest pain in pleurisy is not well controlled by simple analgesics such as paracetamol or