

dosage may be gradually reduced over a period of 4-6 weeks. A maintenance dose of prednisone 5 mg. on alternate days or 4 days each week is often prescribed. It is wise to teach the patient or his parents to test the urine for protein so that an increase in corticosteroids may be ordered before the patient becomes oedematous. This together with the treatment of upper respiratory infections is useful in preventing relapses.

Prednisone is preferable to other corticosteroids in view of its lower salt-retaining effect, but the side-effects of obesity, moon facies, hypertension, and gastric discomfort may be distressing. These have led workers to try to determine which cases are likely to respond to long-term corticosteroid therapy. McCrory *et al.*¹ correlated the severity of the illness with early response to corticosteroids. They found that those cases which responded initially to intensive corticosteroid therapy had a benign course while those which were refractory tended to have more severe disease, judged by clearance studies, and more often developed renal failure.

Recently it has been possible to show that the cases which respond well to corticosteroids have normal glomeruli when examined by light microscopy, while those showing the histological appearances of membranous or proliferative glomerulonephritis tend not to have a diuresis. Equally, those with microscopic changes in the renal biopsy have a higher excretion rate of larger protein molecules, so it may be possible to determine which cases are likely to respond to corticosteroids without the need for a renal biopsy. At present early treatment with corticosteroids offers the best hope of success and is likely to be effective in 70-80% of cases.

REFERENCES

- 1 Riley, C. M., and Scaglione, P. R., *Pediatrics*, 1959, **23**, 561.
- 2 Lawson, D., Moncrieff, A., and Payne, W. W., *Arch. Dis. Childh.*, 1960, **35**, 115.
- 3 McCrory, W. W., Fleisher, D., and Rapoport, M., *Amer. J. Dis. Child.*, 1957, **94**, 401.

Vitamins in Pasteurized Milk

Q.—Does the pasteurization of cows' milk destroy all or any of the vitamin content ?

A.—In modern methods of pasteurization of cows' milk there is little destruction of vitamins: less than 10% of thiamine and vitamin B₁₂ and some 10% of vitamin C. The other water-soluble vitamins and the fat-soluble vitamins are not affected.

It should be noted that the loss of vitamin C in heat treatment may be greater, depending on previous exposure to light.

REFERENCE

- 1 Kon, S. K., *Proceedings of the Sixteenth International Dairy Congress, Copenhagen, 1963*, Vol. D., pp. 613-642.

Magnesium Trisilicate and the Foetus

Q.—If magnesium is given to babies over a prolonged period can it cause osteomalacia ? Is this a contraindication to giving magnesium trisilicate for "heartburn" in pregnancy ?

A.—There is no evidence that magnesium given to babies over a long period can cause osteomalacia.¹ A therapeutic dose of magnesium trisilicate contains approximately 100 mg. of magnesium and of this only about 5% is absorbed.² Unless the patient was taking very large amounts of the drug it is extremely

unlikely that this small amount of magnesium would have any effect on the foetus. Provided the patient is taking an adequate amount of calcium in her diet I am sure that the occasional use of magnesium trisilicate for "heartburn" in pregnancy would be quite harmless.

REFERENCES

- 1 Comar, C. L., and Bronner, F., *Mineral Metabolism*, 1964. Academic Press, London.
- 2 Goodman, L. S., and Gilman, A., *The Pharmacological Basis of Therapeutics*, 1955. Macmillan, New York.

Arterial Rupture in Pregnancy

Q.—Is there any special predisposition for certain arteries (e.g., splenic) to rupture during pregnancy ?

A.—Scattered through medical literature there are many reports of rupture of intra-abdominal organs (liver, spleen, or suprarenal gland) or of arteries in pregnancy. The following may be quoted as examples of the latter condition: rupture of splenic artery^{1, 2}; rupture of utero-ovarian vessels^{3, 4}; aneurysms complicating pregnancy⁵; massive intra-peritoneal haemorrhage following normal delivery^{6, 7}; massive retro-peritoneal haemorrhage complicating pregnancy.⁸

It is impossible to state with certainty whether there is a predisposition for arteries to rupture during pregnancy, since those accidents tend to be reported only when they are associated with pregnancy. There is, however, more than a suspicion that such a tendency exists, particularly with regard to the splenic and utero-ovarian vessels.

REFERENCES

- 1 Riva, H. L., Pickhardt, W. L., and Breen, J. L., *Obstet. and Gynec.*, 1957, **10**, 569.
- 2 Sheehan, H. L., and Falkner, N. M., *Brit. med. J.*, 1948, **2**, 1105.
- 3 Jurishica, A. J., and Gutglass, M., *Obstet. and Gynec.*, 1955, **6**, 315.
- 4 Finch, T. V., *Amer. J. Obstet. Gynec.*, 1956, **72**, 1189.
- 5 Pedowitz, P., and Perell, A., *ibid.*, 1957, **73**, 720.
- 6 Macafee, C. H. G., and Magee, R. A. E., *J. Obstet. Gynaec. Brit. Emp.*, 1956, **63**, 349.
- 7 Owen, O. E., Holmes, J. A., and Scannell, T. J., *Lancet*, 1957, **2**, 325.
- 8 Chamblin, W. D., and Marine, W. C., *Amer. J. Obstet. Gynec.*, 1956, **72**, 680.

Adhesive Colostomy Bags

Q.—A woman with a colostomy is sensitive to the zinc oxide adhesive on her stick-on disposal bags. Are any bags made with a different adhesive to which she might not be sensitive ?

A.—It is probably wise for a person with a colostomy to avoid the continuous use of adhesive bags. Many doctors recommend that no bag at all should be used, though others suggest one should be used on special occasions or by particularly fastidious patients.

Two very simple non-adhesive appliances with bags are available (Schacht appliance and a Shaw's appliance). These do not have a cumbersome belt. Perpetual coverage of the skin by an adhesive tends to make it more sensitive, and it is therefore recommended that from time to time non-adhesive bags should be used. Great care should be exercised in removing the adhesive bag, as pulling it from the skin damages the surface epithelium. It is best removed with a plaster remover.

For cases of true allergic sensitivity adhesive bags with an adhesive similar to Sello-

tape are on the market. These are Down Clearseal bags made by Messrs. Down Bros. & Mayer & Phelps Limited, 32 New Cavendish Street, London W.1.

Poisoning from Wax Crayons

Q.—In view of the alleged risk of aniline dye poisoning from ingestion of wax crayons, how many crayons or ounces of crayons must be eaten to produce symptoms of poisoning ?

A.—Though ingestion of wax crayons by children must be a relatively common occurrence toxic effects are uncommon. This is in part owing to the extreme indigestibility of the crayons, with consequent lack of absorption, and also to a factor of individual sensitivity. Dyes are not used in concentrations greater than 0.5% and it is almost impossible to leach out these dyes from the wax.¹

The dyes which have come under closest scrutiny from a toxicity standpoint are those containing either paranitraniline or benzidine as one of the manufacturing components. Both of these compounds are known methaemoglobin-forming agents, and may be present in orange, orange/red, yellow, or violet crayons.² Cases have been reported³⁻⁵ of children who have become intensely cyanosed after the ingestion of a single crayon. Cyanosis is the first manifestation and may appear as early as 10 minutes or as late as 8 hours after ingestion.⁶ The symptoms include headache, mental confusion, nausea, and vertigo. The haematological picture shows massive methaemoglobinemia frequently associated with leucocytosis and the appearance of Heinz bodies.

In addition to individual variation in sensitivity, diet and level of nutrition are also contributory factors in determining the severity of response to the ingestion of these crayons.

REFERENCES

- 1 *J. Amer. med. Ass.*, 1949, **141**, 393.
- 2 Brieger, H., *Amer. J. publ. Hlth.*, 1949, **39**, 1023.
- 3 Jones, J. A., and Brieger, H., *J. Pediat.*, 1947, **30**, 422.
- 4 Murphy, F. J., Zinzi, F. L., and Murphy, L., *Clin. Proc. Child. Hosp. (Wash.)*, 1947, **3**, 105.
- 5 Clark, E. B., *J. Amer. med. Ass.*, 1947, **135**, 917.
- 6 Neuland, W., *Med. Klin.*, 1921, **17**, 903.

Notes and Comments

Inoculations for Malaya.—Dr. J. K. W. FER-GUSON (Connaught Medical Research Laboratories, University of Toronto, Toronto 4, Canada) writes: An erroneous statement was made in answer to this question ("Any Questions ?" 31 October 1964, p. 1122). In the answer it is stated that a scrub-typhus vaccine is made available by Connaught Laboratories and its use is recommended for those who may be exposed to scrub-typhus.

Though I am in complete agreement with the recommendation, if an effective scrub-typhus vaccine is available, I must add that Connaught Laboratories have never produced it. We do prepare a typhus vaccine which includes protection against both the epidemic and endemic forms of that disease but not against scrub-typhus.

Correction.—In the article on "Unprosecuted Mentally Abnormal Offenders" by Dr. H. R. Rolin (March 27, p. 831) the last sentence of the first paragraph on p. 832 should have read, "Of these, three had been admitted twice in similar circumstances, so that there are 75 individual cases."