

Chloroquine phosphate or sulphate in one dose of 300 mg. of the base once weekly.

Amodiaquine hydrochloride in one dose of 400 mg. of the base once weekly.

Pyrimethamine ("daraprim") in one dose of 25 mg. once weekly.

Mepacrine hydrochloride in a dose of 100 mg. daily.

Quinine sulphate or hydrochloride in a dose of 5-10 grains (0.32-0.65 g.) daily.

The duration of dosage of all these drugs is as given for proguanil. Malignant tertian malaria will not recur after completion of the dosages; the other malaries may do so, and become clinically evident for the first time later.

Neither mepacrine (on account of skin staining) nor quinine (on account of its inferiority for this purpose) is recommended

for suppression if the other drugs are available. Strains of parasites resistant to both proguanil and to pyrimethamine are not uncommon, and some strains refractory to the other synthetic antimalarials have now appeared. The selection of a suppressive may therefore be subject to revision in the light of local knowledge in the endemic area involved. In general, proguanil is the only antimalarial suppressive which is safe from possibly grave toxic effects if misused. If a child obtains and swallows a number of tablets of any of the other drugs severe, and not uncommonly fatal, toxicity can follow.

Correction.—We are informed by the manufacturers that the drug dehydroemetine, referred to in our "To-day's Drugs" article of 28 March (p. 825) for use in the treatment of amoebic dysentery, is now available for general use.

ANY QUESTIONS?

We publish below a selection of questions and answers of general interest.

Temperature and Humidity in Incubator

Q.—*What is the optimum temperature and atmospheric humidity for an incubator for a premature baby? Does the degree of humidity affect alveolar exchange, and, if so, in what way?*

A.—The optimum temperature and humidity for an incubator for a premature baby varies according to the maturity and age of the baby and to a slight extent according to its size exclusive of age and maturity. For a newborn premature baby of 3½ lb. (1.6 kg.) or under a temperature of 85° F. (29.4° C.) and a humidity of at least 70% is required. Temperatures of up to 90° F. (32.2° C.) may be required to maintain a temperature of 93-94° F. (33.9-34.4° C.) in a premature of about 2 lb. (0.9 kg.), and a relatively higher humidity is indicated.

In general, a temperature range of 75-85° F. (23.9-29.4° C.) is adequate^{1,2} in the first week of life and a humidity of 65% or more, gradually decreasing. The degree of humidity probably does not affect alveolar exchange, at least significantly, but serves to conserve water by diminishing the loss in expired air and perhaps through the skin.

REFERENCES

- 1 Corner, B. D., *Prematurity*, 1960. Cassell, London.
- 2 Harvie, F. H., *Pediatric Methods and Standards*, 1958. Lea and Febiger, Philadelphia.

Mechanism of Referred Pain

Q.—*What is the neurophysiological explanation of referred pain?*

A.—Suggested mechanisms of referred pain can be classed as anatomical and physiological. The anatomical models all involve convergence of two axons on to one neurone, and the disputed question is where the convergence occurs. The axon of a peripheral sensory neurone may bifurcate into two and the branches may pass into different nerve trunks¹; convergence of two axons may occur on to a single afferent neurone in the dorsal horn²; and there is some convergence

of pain fibres on to single neurones in the cerebellum³ and the thalamus.⁴ The physiological explanations imagine either the build-up and spread of a central excitatory state as a result of bombardment from visceral afferents⁵ or the opening up of polysynaptic pathways in the cord usually not in use.⁶ Evidence for these alternative explanations is discussed by Sweet.⁷ The true facts in any individual example of the phenomena are not known.

REFERENCES

- 1 Sinclair, D. C., Weddell, G., and Feindel, W. H., *Brain*, 1948, 71, 184.
- 2 Ruch, T. C., in *A Text Book of Physiology*, 1949, 16th ed., edited by J. F. Fulton. Saunders, Philadelphia.
- 3 Widén, L., *Acta physiol. scand.*, 1935, 33, Supp. 117.
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- 6 Ray, B. S., and Wolff, H. G., *Arch. Neurol. Psychiat. (Chic.)*, 1945, 53, 257.
- 7 Sweet, W. H., in *Handbook of Physiology*, 1959, 1, 500, edited by J. Field. American Physiological Society, Washington, D.C.

Erythromycin Estolate

Q.—*Erythromycin estolate is said to cause hepatitis as a side-effect. Are the other erythromycins less toxic and as efficacious?*

A.—Erythromycin base and erythromycin stearate, the other oral preparations available, have not been observed to cause this side-effect. On the other hand, dose for dose they are less efficacious because they are less well absorbed. It was because of its much better absorption, giving blood concentrations as much as twofold higher, that erythromycin estolate was introduced.

Bitumen in the Tank

Q.—*The inside of a yacht's galvanized tank has been painted with bitumen, which remains soft. Is there any danger to health in drinking water from the tank? Is bitumen carcinogenic?*

A.—Bitumen is defined as mixtures of hydrocarbons of natural or pyrogenous origin, or combinations of both, which can

be liquid, semi-solid, or solid and are largely soluble in carbon disulphide. They are insoluble in water and there is no danger to health in drinking water from the tank.

Squamous-celled carcinoma of the skin due to arsenic, tar, pitch, bitumen, mineral oil (including paraffin), soot, or any compound, product, or residue of any of these substances is a prescribed disease (No. 23c).¹

REFERENCE

- 1 National Insurance (Industrial Injuries) Act, 1946. H.M.S.O., London.

Extrasystoles

Q.—*What is likely to be the effect on longevity of chronic extrasystoles at rest in a man aged 62 who has no signs of cardiac or other disease? They were first detected five years ago.*

A.—Extrasystoles (ectopic beats, premature beats) are common after the fourth decade in apparently healthy individuals and in the absence of heart disease have no special significance and do not affect longevity. Ventricular ectopic beats are the commonest, but atrial ones may be found too. Extrasystoles may be precipitated by emotion, smoking, caffeine, amphetamine, and fatigue.

Genital Anaesthesia

Q.—*What can be done for a young woman, happily married for three years and with one child aged 18 months, who has never had an orgasm? She has no objections to intercourse, which is frequent, but she seems to have genital anaesthesia, in that stimulation of the nipples, clitoris, vulva, or cervix causes no erotic sensation. Her sole pleasure is from kissing. The birth of the baby has made no difference one way or the other.*

A.—Failure to achieve orgasm is a symptom and is of no significance in isolation: it can be understood only in relation to the patient's whole personality.

In this case, with the amount of information available, any attempt to estimate the possible cause of the symptom would be based on guesswork. We know only that the patient does not show the expected erotic response to certain tactile stimuli (but whose