# NEW REMEDIES

*The asterisk (*) after the name of an article indicates that the information given is derived from the makers' publications. Further information regarding these articles may be obtained by application to the Editor.*

**Asma-Vydrin*** is a spray solution for use by oral or nasal inhalation. It contains atropine methylnitrate 0·14 per cent., papaverine hydrochloride 0·88 per cent., pituitary extract 0·75 per cent., chlorbutol 0·50 per cent., and adrenaline 0·55 per cent. It is indicated in the symptomatic treatment of asthma, emphysema and chronic bronchitis associated with bronchial spasm. It is administered as an aerosol by means of an oro-nasal inhaler, the spray being inhaled for 1 or 2 minutes whenever an attack threatens or at the onset of an attack. It may be used every 2 or 3 hours, if necessary, without producing toxic effects or habituation. The *p*H of the solvent is adjusted to avoid the production of irritation after prolonged use. The inhalation liquid is issued in bottles containing ½, 1 and 4 fl. oz. S. L. W.

**Cetyl Pyridinium Chloride.** (*New and Non-official Remedies, J. Amer. med. Ass.*, 1948, **137,** 701.) Cetyl pyridinium chloride is the monohydrate of the quaternary salt of pyridine and cetyl chloride, and contains not less than 97 per cent., and not more than 103 per cent., of $C_{21}H_{38}NCl$, $H_2O$; mol.wt. 357·99. It occurs as a white powder; odour, slight; melting-range, 77°C. to 83°C. Very soluble in water, alcohol and chloroform; only slightly soluble in ether and benzene. A 1 per cent. aqueous solution has *p*H 6 to 7 when determined by indicators, but glass-electrodes give variable results. Surface tension of a 1 per cent. aqueous solution at 25°C., about 10·40, and of a 10 per cent. solution 38·15. When dried to constant weight *in vacuo* over phosphorus pentoxide, loses not less than 4·5 per cent. and not more than 5·5 per cent. of its weight; ash, with reference to the sample dried to constant weight, not more than 0·2 per cent. It gives the reactions characteristic of chlorides. On melting, it becomes brown and evolves the odour of pyridine. On adding 5 ml. of 0·01M potassium ferricyanide to 5 ml., a yellow precipitate is produced. 1 ml. of a saturated solution of potassium thiocyanate produces with 1 ml. a white gelatinous precipitate, and 1 ml. of a saturated solution of picric acid produces with 1 ml. a yellow precipitate. For the assay, dissolve 0·25 g., accurately weighed, in 5 ml. of a buffer solution containing 26 per cent. of sodium acetate and 9 per cent. of acetic acid, add 50 ml. of 0·1M potassium ferricyanide and make the solution up to 100 ml. with water. Mix, allow to stand for 1 hour, and filter, rejecting the first 15 ml. of filtrate. To 50 ml. of the remaining filtrate, add 5 ml. of a 10 per cent. solution of potassium iodide in water, and 10 ml. of hydrochloric acid; allow to stand for 1 minute. Add 10 ml. of a 10 per cent. solution of zinc sulphate in water, and titrate with 0·01 N sodium thiosulphate, using a starch test-solution near the end-point; each ml. of 0·01 N sodium thiosulphate is equivalent to 0·01074 g. of $C_{21}H_{38}NCl,H_2O$. Cetyl pyridinium chloride is a cationic detergent, possessing antiseptic as well as useful surface-active properties. It is incompatible with anionic detergents, such as soaps, and may be reduced in the presence of serum and tissue fluids. It is not reliable against clostridial spores. L. H. P.

**Dihydroxy Aluminium Aminoacetate.** (*New and Non-official Remedies, J. Amer. med. Ass.*, 1948, **137,** 1226). Dihydroxy aluminum aminoacetate is a basic aluminium salt of glycine containing small amounts of aluminium

hydroxide and glycine; $C_2H_6O_4NAl$, mol. wt. 135·05. It is a white powder, odourless, taste slightly sweet; insoluble in water and in organic solvents, soluble in dilute mineral acids and fixed alkalis forming a cloudy solution which clears on heating. Loses, when dried to constant weight at 130°C. for 2 or 3 days, not more than 14·5 per cent. of its weight. A 4 per cent. w/v suspension in distilled water has *p*H 6·5 to 7·5; a 0·8 per cent. w/v suspension in 0·1N hydrochloric acid has *p*H above 3·0. On adding excess of ammonia solution to an acidified 4 per cent. w/v suspension, a white flocculent precipitate, insoluble in excess of ammonia but soluble in sodium hydroxide solution, is produced. On adding one drop of liquefied phenol and 5 ml. of sodium hypochlorite solution to 10 ml. of a similar acidified suspension, a blue colour, characteristic of aminoacetic acid, is produced. The compound must be free from heavy metals and from mercury; when a 5 per cent. suspension in 0·1N potassium permanganate acidified with concentrated sulphuric acid is refluxed for 30 minutes, the distillate must be free from acetone. At room-temperature 1 g. neutralises in 10 minutes not less than 125 ml. and not more than 175 ml. of 0·1N hydrochloric acid, using bromophenol blue solution as indicator. Dihydroxy aluminum aminoacetate contains not less than 9·8 per cent. and not more than 10·8 per cent. of nitrogen, when determined by the semi-micro Kjeldahl method of the U.S.P., and not less than 34·9 per cent. and not more than 38·7 per cent. of $Al_2O_3$, when determined by a method depending on ignition with acid, solution of the aluminium salts formed, precipitation of the hydroxide and ignition to form the oxide. L. H. P.

**Disprin*** tablets contain 5 gr. of acetylsalicylic acid with the requisite calcium base to form, in water, 6 gr. of calcium aspirin. The tablets have the advantage over ordinary calcium aspirin tablets that the calcium aspirin is not formed until the tablets are dissolved in water, that is, until it is actually required for use. The tablets are therefore much more stable, less liable to contain free salicylic acid, and less liable to cause gastric irritation than calcium aspirin tablets. Disprin tablets are used for the same purposes as aspirin, the average adult dose being 2 tablets repeated four-hourly. S. L. W.

**Heptalgin*** is 4 : 4-diphenyl-6-morpholinoheptan-3-one hydrochloride, and is an analgesic with a potency about 6 times that of morphine, 20 times that of pethidine, and 3 times that of amidone, and having an acute toxicity in relation to analgesic potency much lower than any of these substances. Given orally it exerts its effect within 15 to 30 minutes, relief from pain lasting from 3 to 4 hours; with parenteral administration the effect commences within 2 or 3 minutes and lasts for 1 or 2 hours. It abolishes pain with little or no accompanying cortical depression. Apart from mild drowsiness following full dosage, it does not give rise to hypnotic effects, and it has only a slight depressant action on the respiratory centre. Early experience suggests that addiction is improbable, and there is no evidence of development of tolerance. In a small proportion of cases it may cause transient giddiness; other minor side-effects are rare. In clinical trials, it has given relief from pain in fibrositis, pleurisy, and coronary thrombosis; in the headache of subarachnoid hæmorrhage; in gall-bladder and ureteric colic; in inoperable malignant growth; in sinusitis, toothache, and gastric ulcer. Dosage varies from 10 to 30 mg. by mouth, the dose by subcutaneous or intramuscular injection being 10 mg. in 1 ml. Tablets containing 10 mg. are issued in bottles of 25 and 100, and ampoules containing 10 mg. in 1 ml. in boxes of 6.

S. L. W.