Lisadimate (USAN, rINN)

Glyceryl Aminobenzoate; Glyceryl PABA; Lisadimato; Lisadimatum. Glyceryl I-(4-aminobenzoate).

Лизадимат $C_{10}H_{13}NO_4 = 211.2.$ CAS — 136-44-7.

Profile

Lisadimate, a substituted aminobenzoate, is a sunscreen (see p.1576) with actions similar to those of aminobenzoic acid (p.1589). It is effective against UVB light (for definitions, see

Preparations

Proprietary Preparations some preparations are listed in Part 3.

Lithium Succinate

Litio, succinato de Лития Сукцинат $C_4H_6O_4.xLi.$ CAS — 16090-09-8. ATC — D11AX04. ATC Vet — QD I I AX04.

Lithium succinate is reported to have anti-inflammatory properties and is used as an 8% cream or ointment, usually with zinc sulfate. It is applied twice daily initially in the treatment of seborrhoeic dermatitis (p.1584). It should be used with caution in patients with psoriasis as it may exacerbate their condition.

◊ References.

- 1. Gould DJ, et al. A double-blind, placebo-controlled, multicenter trial of lithium succinate ointment in the treatment of seborrheic dermatitis. *J Am Acad Dermatol* 1992; **26:** 452–7.
- Cuelenaere C, et al. Use of topical lithium succinate in the treatment of seborrhoeic dermatitis. Dermatology 1992; 184: 194–7.
- Langtry JA, et al. Topical lithium succinate ointment (Efalith) in the treatment of AIDS-related seborrhoeic dermatitis. Clin Exp Dermatol 1997; 22: 216–19.

Preparations

Proprietary Preparations (details are given in Part 3)

Multi-ingredient: Arg.: Litiofarm†; Austria: Efalith; Belg.: Efalith; Ger.: Efadermin; Irl.: Efalith; Switz.: Efalith.

Maggots

Larvas: Sterile Larvae

Profile

Maggots used in wound management are the live sterile larvae of Lucilia sericata, the common greenbottle fly. Larval therapy (sometimes called biosurgery) may be used for debridement of infected or necrotic wounds (p.1585), including diabetic foot ulcers. Maggots produce a mixture of proteolytic enzymes that breaks down the necrotic tissue while leaving the healthy tissue unharmed, and kill or prevent the growth of micro-organisms, particularly Gram-positive bacteria. The movement of the maggots also appears to stimulate the growth of granulation tissue. The maggots are applied to the surface of the wound and kept in place with dressings for up to 3 days. They are removed with the dressing, and the wound is irrigated with sodium chloride solution; any remaining maggots are removed with forceps.

Maggots should not be applied to wounds that have a tendency to bleed easily, or that communicate with a body cavity or any internal organ. Pain has been reported with larval therapy and some patients may require analgesics.

◊ References.

- Courtenay M, et al. Larva therapy in wound management. J R Soc Med 2000; 93: 72–4.
- Jukema GN, et al. Amputation-sparing treatment by nature: "surgical" maggots revisited. Clin Infect Dis 2002; 35: 1566-71.
 Sherman RA, Shimoda KJ. Presurgical maggot debridement of soft tissue wounds is associated with decreased rates of postoperative infection. Clin Infect Dis 2004; 39: 1067-70.
- 4. Armstrong DG, et al. Maggot therapy in "lower-extremity hospice" wound care: fewer amputations and more antibiotic-free days. J Am Podiatr Med Assoc 2005; 95: 254–75.

 5. Steenvoorde P, et al. Maggot debridement therapy: free-range of
- contained? An in-vivo study. Adv Skin Wound Care 2005; 18:

Preparations

Proprietary Preparations (details are given in Part 3)

Melanin

Profile

Melanin is a group of natural pigments found in many plants and animals; they are present in human skin and hair. Natural and synthetic forms of melanin have been used in sunscreen prepara-

Preparations

Proprietary Preparations (details are given in Part 3)

Multi-ingredient: Arg.: Fotocrem Ultra; Chile: ProZone Face; ProZone Gel; Mex.: ProZone Body, ProZone Face; ProZone Gel; ProZone Ultra; ProZone Ultra Fluido.

Mequinol (USAN, rINN)

BMS-181158; p-Guaiacol; 4-HA; 4-Hidroxianisol; HQMME; Hydroquinone Monomethyl Ether; p-Hydroxyanisole; Hydroxyquinone Methyl Ether; Méquinol; Mequinolum; Metoxifenol; p-Metoxifenol. 4-Methoxyphenol.

 $C_7H_8O_2 = 124.1.$ CAS — 150-76-5. ATC — D11AX06. ATC Vet - QD11AX06

Profile

Mequinol is used similarly to hydroquinone (p.1598), in concentrations of up to 20%, in the treatment of hyperpigmentation (see Pigmentation Disorders, p.1582). A preparation containing mequinol 2% with tretinoin 0.01% is used for the treatment of solar lentigines (liver spots).

Adverse effects. A report of severe reversible irregular hypopigmentation of the hands, arms, neck, and legs in a West Indian woman who applied a bleaching wax containing mequinol for 2 to 3 months to lighten the colour of her skin.1

Boyle J, Kennedy CTC. British cosmetic regulations inadequate. BMJ 1984; 288: 1998–9.

Pigmentation disorders. References.

- 1. Fleischer AB, et al. The combination of 2% 4-hydroxyanisole (mequinol) and 0.01% tretinoin is effective in improving the appearance of solar lentigines and related hyperpigmented lesions in two double-blind multicenter clinical studies. J Am Acad Dermatol 2000; 42: 459-67.
- 2. Njoo MD, et al. Depigmentation therapy in vitiligo universalis with topical 4-methoxyphenol and the Q-switched ruby laser. J Am Acad Dermatol 2000; **42:** 760-9.
- Ortonne JP, et al. Safety and efficacy of combined use of 4-hy-droxyanisole (mequinol) 2%/tretinoin 0.01% solution and sun-screen in solar lentigines. Cutis 2004; 74: 261–4.
- 4. Jarratt M. Mequinol 2%/tretinoin 0.01% solution: an effective and safe alternative to hydroquinone 3% in the treatment of solar lentigines. *Cutis* 2004; **74:** 319–22.

 5. Draelos ZD. The combination of 2% 4-hydroxyanisole (mequi-
- nol) and 0.01% tretinoin effectively improves the appearance of solar lentigines in ethnic groups. *J Cosmet Dermatol* 2006; 5:

Preparations

Proprietary Preparations (details are given in Part 3) Austria: Leucobasal; Braz.: Leucodin; Fr.: Any; Leucodinine B; Gr.: Leucodinine-M; Spain: Novo Dermoquinona.

Multi-ingredient: Canad.: Solage†; USA: Solage.

Meradimate (USAN, rINN)

Menthyl O-Aminobenzoate; Menthyl Anthranilate; Méradimate; Meradimato; Meradimatum. 5-Methyl-2-(1-methylethyl)-cyclohexyl 2-aminobenzoate.

Мерадимат $C_{17}H_{25}NO_2 = 275.4$ CAS — 134-09-8.

NOTE. Do not confuse with methyl anthranilate (p.1607). Neo-Heliopan MA is a trade name that has been used for meradiPharmacopoeias. In US.

USP 31 (Meradimate). Store in airtight containers.

Meradimate is used as a sunscreen (p.1576). It is effective against UVA light (for definitions, see p.1580).

Preparations

Proprietary Preparations some preparations are listed in Part 3.

Ammoniated Mercury

Aminomercuric Chloride; Hydrargyri Aminochloridum; Hydrargyrum Amidochloratum; Hydrargyrum Ammoniatum; Hydrargyrum Praecipitatum Album; Mercuric Amidochloride; Mercuric Ammonium Chloride; Mercurio amoniacal; Mercury Amide Chloride; Mercury Aminochloride; Precipitado blanco (de mercurio); White Precipitate.

Хлористый Меркураммоний

 $NH_2HgCI = 252.1.$ CAS — 10124-48-8. ATC — D08AK01. ATC Vet - QD08AK01.

NOTE. 'White Precipitate' has also been used as a name for Precipitated Mercurous Chloride.

Pharmacopoeias. In US.

USP 31 (Ammoniated Mercury). A white amorphous powder or pulverulent pieces; odourless. It is stable in air, but darkens on exposure to light. Insoluble in water and in alcohol; readily soluble in warm hydrochloric, nitric, and acetic acids. Protect from light.

Profile

Ammoniated mercury was formerly used topically in the treatment of skin infections and psoriasis but the use of such mercurial preparations is generally deprecated. Frequent or prolonged application to large areas or to broken skin or mucous membranes can cause mercury poisoning (see p.2341) and use on infants has produced acrodynia (pink disease). Ammoniated mercury is also a potent sensitiser and can produce allergic reactions.

Effects on the kidneys. Of 60 patients who were found to have nephrotic syndrome, 32 had used skin-lightening creams containing 5 to 10% of ammoniated mercury.1 Concentrations of mercury in the urine of these patients were up to 250 nanograms/mL compared with a usual upper limit of 80 nanograms/mL. Of 26 patients followed up for up to 2 years, 13 had no remission or response to treatment; 6 of these had used

Barr RD, et al. Nephrotic syndrome in adult Africans in Nairobi. BMJ 1972; 2: 131–4.

Preparations

Proprietary Preparations (details are given in Part 3)

Multi-ingredient: Cz.: Homeovox; Hung.: Dermaforine†.

Mesulphen (BAN)

Mesulfen (pINN); Dimethyldiphenylene Disulphide; Dimethylthianthrene; Mesulfeeni; Mésulfène; Mesulfeno; Mesulfenum. It consists mainly of 2,7-dimethylthianthrene.

Месульфен

 $C_{14}H_{12}S_2 = 244.4.$ CAS — 135-58-0. ATC — D10AB05; P03AA03. ATC Vet - QDIOABO5; QP53AA01.

Pharmacopoeias. Jpn includes thianthol, a mixture of 2,7dimethylthianthrene and ditolyl disulfide.

Mesulphen has been used as a parasiticide and antipruritic in a range of skin disorders including acne, scabies, and seborrhoea. Sensitivity to mesulphen has occasionally been reported.

Preparations

Proprietary Preparations (details are given in Part 3) Ger.: Citemul S†; Switz.: Soufrol.

Multi-ingredient: India: Polyderm†.