increased gradually to every 4 to 6 weeks. Treatment may be continued for up to 5 years after remission.

Improvement may not be seen until a total dose of 300 to 500 mg has been given. If no major improvement has occurred after a total of 1 g has been given (excluding the test dose) therapy should be stopped; alternatively in the absence of toxicity, 100 mg may be given weekly for a further 6 weeks; should there be no response at this dose other forms of therapy should be tried. In patients who relapse while receiving maintenance therapy, the interval between doses should be reduced to one week and should not be increased again until control has been obtained; however, if no response is obtained within 2 months, alternative treatment should be used. It is important to avoid complete relapse since a second course of gold therapy is not usually effective.

For doses in juvenile idiopathic arthritis, see Administration in Children, below.

NSAIDs may be continued when sodium aurothiomalate therapy is begun.

Other gold compounds that have been used include auranofin (p.25), aurothioglucose (p.26), aurotioprol (p.26), gold keratinate (p.62), and sodium aurotiosulfate (below).

Administration in children. For children with progressive juvenile idiopathic arthritis the suggested initial weekly dose of sodium aurothiomalate is 1 mg/kg by deep intramuscular injection to a maximum of 50 mg weekly (one-tenth to one-fifth of the calculated initial weekly dose may be given for 2 to 3 weeks to test the patient's tolerance). Weekly doses should continue until signs of remission occur, at which point the dosage interval may be increased to fortnightly. With full remission, the dosage interval may again be increased gradually to every 4 weeks. If no improvement has occurred after 20 weeks, the dose could be raised slightly or another antirheumatic drug tried. For the view that use of gold compounds is no longer appropriate to treat juvenile idiopathic arthritis see Rheumatic Disorders, below.

Asthma. For comment on the use of parenteral gold compounds in the treatment of asthma, see under Auranofin, p.26.

Pemphigus and pemphigoid. Corticosteroids are the main treatment for blistering in pemphigus and pemphigoid (p.1582). Intramuscular gold therapy has been used concomitantly to permit a reduction in corticosteroid dosage although evidence for the steroid-sparing effect is lacking;[1,2] it has been suggested that gold therapy should be reserved for patients who cannot tolerate corticosteroids or in whom they are contra-indicated.[1]

1. Bystryn J-C, Steinman NM. The adjuvant therapy of pemphigus: an update. *Arch Dermatol* 1996; **132:** 203–12.
2. Pandya AG, Dyke C. Treatment of pemphigus with gold. *Arch Dermatol* 1998; **134:** 1104–7.

Rheumatic disorders. Gold compounds are among the disease-modifying antirheumatic drugs (DMARDs) that may be used in the treatment of rheumatoid arthritis (p.11). Although toxicity has now reduced its popularity, intramuscular gold has long been used for the treatment of rheumatoid arthritis[1-4] and is often the standard against which the efficacy of other treatments is measured. Oral gold is less toxic but is also much less effective. It is unclear if there are differences between available intramuscular forms, but a study[5] in 120 patients converted from aurothioglucose to aurothiomalate found that 29 withdrew from the latter drug within 12 months, mostly because of lack of efficacy or the development of adverse effects not seen with the previous drug.

Gold compounds have also been used in the treatment of juvenile idiopathic arthritis (p.10); however, the *BNFC* states that gold is no longer used for this indication.

Gold compounds may also be of benefit in psoriatic arthritis (see under Spondyloarthropathies, p.13).

1. Epstein WV, *et al.* Effect of parenterally administered gold therapy on the course of adult rheumatoid arthritis. *Ann Intern Med* 1991; **114:** 437–44.
2. Anonymous. Gold therapy in rheumatoid arthritis. *Lancet* 1991; **338:** 19–20.
3. Klinkhoff AV, Teufel A. How low can you go? Use of very low dosage of gold in patients with mucocutaneous reactions. *J Rheumatol* 1995; **22:** 1657–9.
4. Clark P, *et al.* Injectable gold for rheumatoid arthritis. Available in The Cochrane Database of Systematic Reviews; Issue 4. Chichester: John Wiley; 1997 (accessed 13/11/06).
5. van Roon, EN, *et al.* Parenteral gold preparations: efficacy and safety of therapy after switching from aurothioglucose to aurothiomalate. *J Rheumatol* 2005; **32:** 1026–30.

Preparations

BP 2008: Sodium Aurothiomalate Injection;
USP 31: Gold Sodium Thiomalate Injection.

Proprietary Preparations (details are given in Part 3)
Austral.: Myocrisin; ***Austria:*** Tauredon; ***Canad.:*** Myochrysine; ***Cz.:*** Tauredon; ***Denm.:*** Myocrisin; ***Fin.:*** Myocrisin; ***Ger.:*** Tauredon; ***Gr.:*** Miocrin; Myocrysine†; Tauredon; Tuaredon†; ***Hung.:*** Tauredon†; ***Irl.:*** Myocrisin; ***Neth.:*** Tauredon; ***Norw.:*** Myocrisin; ***NZ:*** Myocrisin; ***Port.:*** Tauredon; ***S.Afr.:*** Myocrisin†; ***Singapore:*** Miocrin; ***Spain:*** Miocrin; ***Swed.:*** Myocrisin; ***Switz.:*** Tauredon; ***Thai.:*** Myocrisin; ***UK:*** Myocrisin; ***USA:*** Aurolate; Myochrysine.

Sodium Aurotiosulfate *(rINN)*

Aurotiosulfate de Sodium; Aurotiosulfato de sodio; Gold Sodium Thiosulphate; Natrii Aurotiosulfas; Natrii Aurotiosulphas; Natriumaurotiosulfaatti; Natriumaurotiosulfat; Sodium Aurothiosulphate; Sodium Dithiosulfatoaurate.

Натрия Ауротиосульфат

$Na_3Au(S_2O_3)_2,2H_2O$ = 526.2.

CAS — 10233-88-2 (anhydrous sodium aurotiosulfate); 10210-36-3 (sodium aurotiosulfate dihydrate).
ATC — M01CB02.
ATC Vet — QM01CB02.

Profile

Sodium aurotiosulfate has a gold content of about 37%. It has similar actions and uses to those of sodium aurothiomalate (p.122). It is given by intramuscular injection in a usual dose of 56.1 mg every 5 to 7 days.

Preparations

Proprietary Preparations (details are given in Part 3)
Arg.: Crytion; ***Chile:*** Crytioro; ***Ital.:*** Fosfocrisolo.

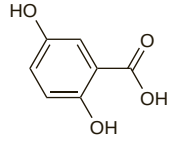
Sodium Gentisate *(rINN)*

Gentisate de Sodium; Gentisato de sodio; Gentisato Sodico; Natrii Gentisas. Sodium 2,5-dihydroxybenzoate dihydrate.

Натрия Гентизат

$C_7H_5NaO_4,2H_2O$ = 212.1.

CAS — 490-79-9 (gentisic acid); 4955-90-2 (anhydrous sodium gentisate).



(gentisic acid)

Pharmacopoeias. In *Fr.*

Profile

Sodium gentisate has been used as an analgesic in the treatment of musculoskeletal and joint disorders. It is also used as a preservative.

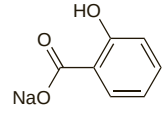
Sodium Salicylate

Natrii salicylas; Natrio salicilatas; Natriumsalicylat; Natriumsalisylaatti; Nátrium-szalicilát; Salicilato sódico; Salicylan sodný; Sodium, salicylate de; Sodu salicylan; Sodyum Salisilat. Sodium 2-hydroxybenzoate.

Салицилат Натрия

$C_7H_5NaO_3$ = 160.1.

CAS — 54-21-7.
ATC — N02BA04.
ATC Vet — QN02BA04.



Pharmacopoeias. In *Eur.* (see p.vii), *Int.*, *Jpn*, *US*, and *Viet.*

Ph. Eur. 6.2 (Sodium Salicylate). Colourless small crystals or shiny flakes, or white or almost white, crystalline powder. Freely soluble in water; sparingly soluble in alcohol. Store in airtight containers. Protect from light.

USP 31 (Sodium Salicylate). Amorphous or microcrystalline powder or scales. It is colourless or has not more than a faint pink tinge. It is odourless or has a faint characteristic odour. A freshly made 10% solution in water is neutral or acid to litmus. Freely (and slowly) soluble in water and in glycerol; very soluble in boiling water and in boiling alcohol; slowly soluble in alcohol. Protect from light.

Adverse Effects, Treatment, and Precautions

As for Aspirin, p.20.

Although sodium salicylate has been used in the treatment of rheumatic fever, its high sodium content may cause problems in patients with cardiac complications.

The use of aspirin and other acetylated salicylates is generally not recommended for children because of the risk of Reye's syndrome, unless specifically indicated. Some licensed drug information extends this precaution to sodium salicylate.

Effects on the eyes. Retinal haemorrhages were reported in a 60-year-old woman taking sodium salicylate 6 g daily by mouth for 2 months and in a 10-year-old girl taking sodium salicylate, 4 g daily by mouth, for 40 days.[1] In both cases the haemorrhages gradually resolved after the treatment was stopped.

1. Mortada A, Abboud I. Retinal haemorrhages after prolonged use of salicylates. *Br J Ophthalmol* 1973; **57:** 199–200.

Interactions

For interactions associated with salicylates, see Aspirin, p.23.

Uses and Administration

Sodium salicylate is a salicylic acid derivative that has analgesic, anti-inflammatory, and antipyretic actions similar to those of aspirin (p.23). Sodium salicylate 1 g is equivalent to about 1.1 g of aspirin. It is used in the treatment of pain, fever, and in rheumatic disorders such as osteoarthritis and rheumatoid arthritis. The usual oral dose of sodium salicylate for pain or fever is 325 to 650 mg every four hours as required. The oral dose for rheumatic disorders is 3.6 to 5.4 g daily in divided doses. Sodium salicylate has also been used in the symptomatic treatment of rheumatic fever but its high sodium content may cause problems in patients with cardiac complications.

Sodium salicylate has also been given by intravenous infusion and topically.

Preparations

USP 31: Sodium Salicylate Tablets.

Proprietary Preparations (details are given in Part 3)
Canad.: Dodds†; Saliject; ***NZ:*** Hairscience Shampoo†; ***Turk.:*** Enter-Sal; ***UK:*** Jackson's Pain & Fever.

Multi-ingredient: ***Braz.:*** A Saude da Mulher; Abacateirol†; Pilulas De Witt's†; ***Canad.:*** Plax; Thunas Tab for Menstrual Pain†; ***Chile:*** Eucerin Shampoo Anticaspa; ***Fr.:*** Brulex; ***Ger.:*** Gelonida NA†; ***Hong Kong:*** Gly Thymol; ***S.Afr.:*** Colphen; Doans Backache Pills; Ilvico; TCP; ***UK:*** Antiseptic Mouthwash; Doans Backache Pills; TCP; ***USA:*** Cystex; Scot-Tussin Original 5-Action; Tussirex; ***Venez.:*** Boncilin†; Inquilim†.

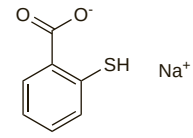
Sodium Thiosalicylate

Tiosalicilato sódico. Sodium 2-sulfanylbenzoate.

Тиосалицилат Натрия

$C_7H_5O_2NaS$ = 176.2.

CAS — 134-23-6.



Profile

Sodium thiosalicylate is a salicylic acid derivative (see Aspirin, p.20) that has been used parenterally in the treatment of musculoskeletal disorders, osteoarthritis, rheumatic fever, and acute gout.

Preparations

Proprietary Preparations (details are given in Part 3)
USA: Rexolate†.

Sufentanil *(BAN, rINN)* ⊗

R-30730; Sufentaniili; Sufentanilis; Sufentanilo; Sufentanilum; Szufentanil. *N*-{4-(Methoxymethyl)-1-[2-(2-thienyl)ethyl]-4-piperidyl}propionanilide.

Суфентанил

$C_{22}H_{30}N_2O_2S$ = 386.6.

CAS — 56030-54-7.
ATC — N01AH03.
ATC Vet — QN01AH03.