

Footnote

R

British National Formulary - Section Numbers for Therapeutic Groups

CLASSIFIED NOTES ON DRUGS AND PREPARATIONS

- 1: Gastro-intestinal System
 - 1.1 Antacids
 - 1.2 Antispasmodics and other drugs altering gut motility
 - 1.3 Ulcer-healing drugs
 - 1.4 Antidiarrhoeal drugs
 - 1.5 Treatment of chronic diarrhoeas
 - 1.6 Laxatives
 - 1.7 Rectal and colonic drugs
 - 1.8 Stoma care
 - 1.9 Drugs affecting intestinal secretions
- 2: Cardiovascular System
 - 2.1 Cardiac glycosides
 - 2.2 Diuretics
 - 2.3 Anti-arrhythmic drugs
 - 2.4 Beta-adrenoceptor blocking drugs
 - 2.5 Antihypertensive drugs
 - 2.6 Vasodilators
 - 2.7 Sympathomimetics
 - 2.8 Anticoagulants and protamine
 - 2.9 Antiplatelet drugs
 - 2.10 Fibrinolytic drugs
 - 2.11 Antifibrinolytic drugs and haemostatics
 - 2.12 Drugs used in the treatment of hyperlipidaemia
 - 2.13 Local sclerosants
- 3: Respiratory System
 - 3.1 Bronchodilators
 - 3.2 Corticosteroids
 - 3.3 Prophylaxis of asthma
 - 3.4 Allergic disorders
 - 3.5 Respiratory stimulants
 - 3.6 Oxygen
 - 3.7 Mucolytics
 - 3.8 Inhalations
 - 3.9 Antitussives
 - 3.10 Systemic nasal decongestants
- 4: Central Nervous System
 - 4.1 Hypnotics and anxiolytics
 - 4.2 Drugs used in psychoses and related disorders
 - 4.3 Antidepressant drugs
 - 4.4 Central nervous stimulants
 - 4.5 Appetite suppressants
 - 4.6 Drugs used in nausea and vertigo
 - 4.7 Analgesics
 - 4.8 Antiepileptics
 - 4.9 Drugs used in parkinsonism and related disorders
- 5: Infections
 - 5.1 Antibacterial drugs
 - 5.2 Antifungal drugs
 - 5.3 Antiviral drugs
 - 5.4 Antiprotozoal drugs
 - 5.5 Anthelmintics
- 6: Endocrine System
 - 6.1 Drugs used in diabetes
 - 6.2 Thyroid and antithyroid drugs
 - 6.3 Corticosteroids
 - 6.4 Sex hormones
 - 6.5 Hypothalamic and pituitary hormones
 - 6.6 Drugs affecting bone metabolism
 - 6.7 Other endocrine drugs
- 7: Obstetrics, Gynaecology, and Urinary-tract Disorders
 - 7.1 Drugs acting on smooth muscle
 - 7.2 Treatment of vaginal and vulval conditions
 - 7.3 Contraceptives
 - 7.4 Drugs used in urinary-tract disorders
- 8: Malignant Disease and Immunosuppression
 - 8.1 Cytotoxic drugs
 - 8.2 Drugs affecting the immune response
 - 8.3 Sex hormones and antagonists in malignant disease
- 9: Nutrition and Blood
 - 9.1 Drugs used in anaemias
 - 9.2 Electrolyte and water replacement
 - 9.3 Intravenous nutrition
 - 9.4 Foods for special diets and nutritional support
 - 9.5 Minerals
 - 9.6 Vitamins
 - 9.7 Bitters and tonics
 - 9.8 Drugs used in metabolic disorders
- 10: Musculoskeletal and Joint Diseases
 - 10.1 Drugs used in rheumatic diseases and gout
 - 10.2 Drugs used in neuromuscular disorders
 - 10.3 Drugs for the relief of soft-tissue inflammation
- 11: Eye
 - 11.1 Administration of drugs to the eye
 - 11.2 Control of microbial contamination
 - 11.3 Anti-infective preparations
 - 11.4 Corticosteroids and other anti-inflammatory preparations
 - 11.5 Mydriatics and cycloplegics
 - 11.6 Treatment of glaucoma
 - 11.7 Local anaesthetics
 - 11.8 Miscellaneous ophthalmic preparations
 - 11.9 Contact lenses
- 12: Ear, Nose, and Oropharynx
 - 12.1 Drugs acting on the ear
 - 12.2 Drugs acting on the nose
 - 12.3 Drugs acting on the oropharynx
- 13: Skin
 - 13.1 Vehicles and diluents
 - 13.2 Emollient and barrier preparations
 - 13.3 Local anaesthetic and antipruritic preparations
 - 13.4 Topical corticosteroids
 - 13.5 Preparations for psoriasis and eczema
 - 13.6 Preparations for acne
 - 13.7 Preparations for warts and calluses
 - 13.8 Sunscreens and camouflaging preparations
 - 13.9 Scalp preparations
 - 13.10 Anti-infective skin preparations
 - 13.11 Skin disinfecting and cleansing agents
 - 13.12 Antiperspirants
 - 13.13 Preparations for wounds and ulcers
 - 13.14 Topical preparations for circulatory disorders
- 14: Immunological Products and Vaccines
 - 14.1 Active immunity
 - 14.2 Passive immunity
 - 14.3 Storage and use
 - 14.4 Vaccines and antisera
 - 14.5 Immunoglobulins
 - 14.6 Vaccination programmes
 - 14.7 International travel
- 15: Anaesthesia
 - 15.1 General anaesthesia
 - 15.2 Local anaesthesia

Footnotes: Medicines Classification

NB: "Personal utility" scores are not generally applicable to medicines which are used chronically. This category is intended to reflect the increased convenience and decreased expense accruing from the more general availability of medicines which are used intermittently (or where usage cannot be predicted) as in recurrent infections or the treatment of exacerbations of longstanding illnesses.

An Asterix (*) beside a total score in the tables means that some over-riding consideration dictates that the numerical total should not relate to the availability recommendation. For instance, Labetalol scores only 11, a total low enough to qualify for pharmacist-sale; however, it was felt that antihypertensives should not be obtainable without medical supervision.

Section 1: Drugs Used in Treatment of Disorders of the Gastrointestinal System

1.1. Antacids should be available generally; Bismuth-containing substances carry a small risk of accumulation (in high doses) and neurotoxicity.

1.2. Spasmolytics most of these are already available from the pharmacy. Some have potentially severe anticholinergic side-effects, especially in children.

1.2.16./1.2.17. Domperidone/Metoclopramide these drugs could have personal utility as antiemetics, but side-effects (especially extra-pyramidal) mean they should be restricted to prescription, other than Metoclopramide when used in smaller doses in combination with Paracetamol (as used in the treatment of migraine).

Section 2: Cardiovascular system Drugs

2.1.1.-2.2.8. Diuretics these should be restricted to prescription; they may be abused (to lose weight for instance) and also require monitoring of medical condition.

2.4.1.-2.4.2. Betablockers/Labetalol not suitable for pharmacist availability. This group could be suitable for long term prescription by "warrant" provided self-monitoring of blood pressure is possible.

2.5.4.4. Prazosin has few side effects/cautions and is less toxic than other antihypertensives. It is however often prescribed in combination with other medicines. Could be pharmacist sale but at present "asterixed up" to "prescription".

2.12.1. and 2.12.3. Bile sequestrants these are relatively safe and may be available through pharmacist sale; advice regarding the necessity of using these lipid-lowering drugs should be given.

Section 3: Drugs Used in Treatment of Respiratory Conditions

3.1.1.1. category (selective beta-adrenoceptor stimulants) scores refer to inhaled preparations, score would be lower for oral preps (abuse potential lower, less personal utility; although therapeutic range might score higher). Terbutaline is considered to have more CNS toxicity and is also longer-acting and more potent. Fenoterol may be less beta-2 selective than some others in this group.

3.1.4. "Compound bronchodilator preps" includes combinations of bronchodilators with expectorants, anti-anxiety drugs etc. The BNF states that the use of such medications is "inadvisable" (i.e. better to prescribe alone or individually) so score of 5 in Misuse 1 reflects this.

3.2. Inhaled Steroid score 3 for misuse 1 due to possibility of inappropriate self-diagnosis (or inappropriate treatment choice) of asthma. Score 1 in misuse 1 owing to paucity of SE/cautions. Score -1 in personal utility owing to recurrence and tendency of asthma to worsen and remit.

3.3.2. Ketotifen scored 3 in misuse 1 due to likelihood of being inappropriately used e.g. instead of more useful drugs in asthma.

3.9.2. Compound cough preps includes mixtures of codeine-type suppressants with expectorants, antihistamines, bronchodilators etc. The BNF states they "have no place in the treatment of respiratory disorders".

Section 4: Central Nervous System

4.1.1.1. Chloral hydrate: Short term use (loses effectiveness). Caution preg, severe cardiac disease, renal/hepatic. Interaction with alcohol. Dependence may occur.

4.1.1.2. Chlormethiazole: hypnosedative/anticonvulsant. Less caution in elderly than benzodiazepines. Dependence may occur.

4.1.1.3. Triclofos: less gastric irritation than chloral hydrate.

4.1.1.4. Meprobamate: antianxiety carbamate derivative. Multiple CNS actions. Caution preg, alcohol etc. Dependence may occur.

4.1.2. Benzodiazepines: Caution preg, elderly, paed., hepatic impairment. Toxic: CNS depressant. Interaction with

alcohol, driving etc.

4.1.3. Barbiturates powerful CNS depressant. Dependence occurs readily.

4.2.1.1. Chlorpromazine group post-synaptic receptor blocker/alpha-adrenergic blocker/dopamine receptor blocker: effects on pituitary hormones/medullary chemoreceptor zone. This group: strong anti-muscarinic effects, moderate extrapyramidal. Effects on prolactin secretion. SE: tardive dyskinesia, sedating. Caution preg, elderly.

4.2.1.2. Piperidine group strong antimuscarinic, weak extrapyramidal, sedating. Prototype thioridazine.

4.2.1.3. Fluphenazine group: weak antiemetic, antimuscarinic sedative, strong extrapyramidal SE.

4.2.3. Lithium mood-stabilising (effect on ATPase). Narrow therapeutic range. Drug interaction ++. Cautions preg, elderly.

4.3.1. Tricyclic antidepressants potent central dopamine/block reuptake NA also peripheral antimuscarinic. Toxic in overdose. Side effects anticholinergic. Cautions elderly, renal/hepatic, prostate, schizophrenia, asthma/cardiac etc.

4.3.2. MAOIs CI elderly, children. Many interactions, cautions.

4.4.1. Weak CNS Stimulants includes caffeine, pemoline, prolintane.

4.6 group (anti-emetics) or as listed in the BNF: "Drugs for nausea and vomiting". The BNF states that these drugs should be prescribed only when the cause (of vomiting) is known, especially in children. There is little merit in making them generally available.

4.7.1.1. Aspirin irreversible platelet-aggregation inhibitor as well as prostaglandin inhibitor. Central analgesic action and peripheral anti-inflammatory. May cause birth defects. Reye's syndrome. May impair renal function. Side-effects gastrointestinal bleeding, tinnitus etc. Allergies (esp. ~~bronchospasm may occur~~): Dangerous in overdose.



4.7.1.7. Naproxen According to "Drugs Information: Advice for the Health Professional", this is the prototype NSAID. Combination of highest potency in anti-inflammation with lowest incidence SE.

Preg B category. More fluid retention, Gastrointestinal side effects. Allergy also.

4.7.1.9. Compound analgesics According to the British National Formulary (BNF) these are not recommended; little advantage over single ingredient preps and increase cost of treatment and complicate treatment of overdose. Examples of this group include combinations of laxative/antihistamine/hypnotic.

4.7.2.10. Nalbuphine synthetic partial opiate agonist analgesic. CNS resp depressant etc. Addiction.

4.7.2.14. Propoxyphene synthetic analgesic structurally related to methadone. Mild analgesic. Not antipyretic. Dependence liability similar to codeine. Toxic esp. in combination with other CNS depressants. Some studies show little increase in efficacy over aspirin or codeine (or such substances alone vs in combination with dextropropoxyphene).

Section 5: Drugs Used in Infections

NB Antibiotics generally rate a "5" in "misuse 1" (disease factors) because of the necessity (as perceived by this group) for medical diagnosis of most conditions requiring systemic antibiotic therapy.

5.1.11.2.3. Nalidixic acid main use treatment/prophylaxis urinary tract infections. Safe in preg. Relatively few SEs and lower probability of resistance occurring than with some other antibiotics. Gets a 4 in "misuse 1" due to the possibility of mis-self-diagnosis of UTI. Gets personal utility -1 due to the recurrent and self-recognisable nature of UTIs in many women. However total score of 8.5 is asterixed into "PM" category as the group did not sanction antibiotics being available without medical supervision.

5.1.11.2.1. Nitrofurantoin is more toxic and has more SEs (e.g. pulmonary reactions/neuritis). Development of resistance said to be rare.

5.4.2. (Amoebicides)-5.4.7. (Treatment of toxoplasmosis) get 5* in misuse 1 due to the necessity for medical diagnosis of these conditions.

Section 6: Drugs Used in Disorders of the Endocrine System

6.2.-6.7. categories medical supervision in diagnosis and

treatment required for all these conditions.

Section 7: Drugs Used in Obstetrics, Gynaecology, and Urinary Tract Disorders

7.2.3. Vaginal antibacterials BNF lists "Sultrin" (mixture of sulphonamides)

7.2.4. Vaginal antiseptics includes Aci-jel, Betadine

7.3.1. Combined oral contraceptives although this category was considered suitable for long-term prescription under a "warrant" system, pharmacist-sales would mean that women might initiate therapy themselves and continue for long periods of time without ever having medical supervision.

Section 8: Drugs Used in Malignant Disease & Immunosuppression
Section 9: "Nutrition and Blood" }

(these therapeutic categories were not considered)

Section 10: Drugs Used in the Treatment of Musculoskeletal Disorders

10.1.1.11. Fenoprofen more GI side-effects.

10.1.1.12. Flurbiprofen more efficacious, more GI SE.

10.1.1.13. Ibuprofen weaker but fewer SE.

10.1.1.10. Fenbufen SE: fewer GI but more rashes.

10.1.1.14. Indomethacin more toxic including CNS effects, scored 5 in Misuse 2 due to frequency and seriousness of side effects, cautions, interactions.

10.1.3.1. Aurothiomalate scored 5 in Misuse 2 due to severity of SEs and need for medical supervision.

10.1.3. (antirheumatic) and 10.1.4. (anti-gout) categories score highly in Misuse 1 (Disease factors) due to high possibility of mistakes in self-diagnosis of rheumatic disease. Rheumatic-type symptoms are common but RA diseases requiring this category of treatment are rare. Generally would require medical diagnosis. Same applies to gout.

10.3.1. category proteolytic enzymes score highly in misuse 2 because of antigenicity (likelihood of allergic reactions).

Section 11: Drugs Used in Treatment of Disorders of the Eye

11.3. Antibiotic/Antiviral Eye Preparations Medicines falling under this category were thought to be unsuitable for availability by anything other than prescription, as diagnosis of eye conditions would in general require medical expertise.

11.4.9. Sodium Cromoglycate persons suffering from allergic conditions should be competent to recognise this and differentiate same from infections.

11.4.10. Eye Decongestants were thought to be suitable for general availability as rebound vasocongestion is not such a problem as with nasal decongestants.

Section 12: Drugs Used in the Treatment of Ear, Nose, and Throat Conditions

12.1.1.-12.1.9. Ear drops (antibiotic and steroid) it was thought that diagnosis of ear conditions requiring these treatments (such as otitis externa) would require medical expertise.

12.2.1.1. Nasal steroids perhaps might be suitable for pharmacist sale; however it was decided that conditions such as allergic rhinitis should be first diagnosed medically before starting on steroids. This (effective and safe) category of medicine which has wide use in the population might be suitable for very long term prescription under a "warrant" system.

12.2.2.2. Nasal decongestants this group of medicines should not be more widely available than pharmacist sales due to the risk of rebound vasocongestion if used for longer than a few days. Persons using such drugs should be advised accordingly by the pharmacist.

Section 13: Drugs Used in Treatment of Skin Conditions

13.3.3. Local anaesthetics likely to cause sensitisation, avoid in eczema. danger in prolonged use. Potential for systemic absorption.

13.3.4. Topical antihistamines may cause sensitisation also said to be rather ineffective.

13.5.4. Dithranol this substance, although messy to use, is effective in the treatment of psoriasis. Pharmacists would be competent to advise on the method of use.

13.6.2. Benzoyl Peroxide available generally subject to concentration.

13.10.1.1.4. Mafenide used for treatment of burns (active against

pseudomonas)

13.10.1.2. Antibiotic skin preps also used systemically higher scores in "communal" category reflect the possibility of resistance as well as potential harm from sensitisation before later systemic use.

13.10.5. Preps for minor skin infections includes Brulidine, Cetrimide, Polynoxilin etc. Some preps incorporating e.g. sulphonamides or camphor should be avoided.

13.13. Treatment of wounds/ulcers caution here as any medicines used on areas of broken skin will be more likely to be systemically absorbed and also to cause sensitisation.

13.14. Treatment (topical) of circulatory disorders the value of these preps in treatment is doubtful.

Section 14: Immunological Products & Vaccines

Section 15: Drugs Used in Anaesthesia

- these two therapeutic categories were not considered by the group.

Supplementary Notes.

2.3.2.8. Procainamide AF prophylaxis; SE and toxicity serious, narrow therapeutic range.

2.3.2.10. Tocainide VF prophylaxis, SE frequent but mild. No autonomic effect.

2.5.5. ACE inhibitors newer drug, some side effects still emerging.

2.6.1.1. Glycerol TNT scores "2" in Personal utility due to method of usage (intermittant, irregular).

2.6.3.3. Nicotinic acid } "4" for misuse 1 due to likelihood of

2.6.3.4. Oxypentifylline } mistaken self-diagnosis (peripheral vascular disease)

2.7.3. Sympathetic vasoconstrictors get 5 in Misuse 1- because of necessity of medical treatment of diseases for which these drugs are indicated.

3.1.1.1.2. Terbutaline is more potent (long acting) than other beta-selectives. Reports of toxicity in children in American literature. NB there have been concerns about Fenoterol also in NZ- causes undue proportion of deaths? not very beta-2 selective.

4.2.1.4. Haloperidol dopamine blocker + alpha-adrenergic effect. Increase prolactin levels. Not indicated in children(?) Caution preg, elderly. Extrapyramidal SE. Neuroleptic malignant syndrome.

4.7.1
Diflunisal salicylate long-acting. Mild-mod pain esp when anti-inflammatory action needed. NSAID, prostaglandin inhibitor. Allergies, caution preg (esp diflunisal) and elderly.

Mefenamic acid caution hepatic. short term use only? Mainly dysmenorrhoea. Caution preg. SE diarrhoea++.

12.1.3. Clioquinol scores "0" in "communal" category as antifungals do not usually induce resistance (?)

12.2.2.2. Oxymetazoline } are more potent than Ephedrine.

2.2.2.4. Xylometazoline } Xylometazoline is particularly longacting; toxicity in children.

12.2.3. Anti-infective nasal preps-e.g. Soframycin/Betnesol N -re-infection (recolonisation) often occurs.

12.3.1.2. Corticosteroid lozenges; incorrect use of steroid for infection could have serious consequences.

13.10.1.1.4. Mafenide } have specific indications in

13.10.1.1.9. Silver sulphadiazine } treatment of burns as they have activity against pseudomonas.