CENTRAL NERVOUS SYSTEM

a therapeutic review

Indicated for acute mania, manic states

Lentolith (lithium carbonate) available from Intal Ethicals, is indicated for acute mania and manic states involving mild levels of hyperacidity and excitation. It may also be used effectively in certain patients with depression, but the chances of success cannot be predicted.

Contra-indications include impaired renal function cardiac disease, patients with evidence of brain damage and those on a salt-free diet, because when sodium intake is lowered lithium excretion is slower and severe intoxication may ensue.

The specific biochemical mechanism of lithium action is unkown. Lithium alters sodium transport in nerve and muscle cells and effects a shift towards intraneuronal metabolism of catecholamines.

Side-effects include fine hand tremor, slurred speech polyuria, and mild thirst during initial therapy for the acute manic phase which may presist throughout therapy.

Patients on therapeutic doses of lithium may complain of fatigue and muscular weakness. Toxic signs are rarely seen in patients stabilised on maintenance doses.

Diarrhoea, vomitting, drowsiness, muscular weakness and lack of co-ordination may be early signs of lithium intoxication.

Reported toxic reactions include tremor, incontinence epileptiform seizures, cardiac arrhythmia, drying and thinning of hair, dehydration and weight loss. The physician should be alert for possible thyroid involvement. Diuretics should not be used concomitantly with lithium carbonate therapy.

For further information contact Intal Ethical Promotions (Pty) Limited, 3rd Floor, Goldbree, 334 Bree Street, Johannesburg 2001.

For further information circle **No 206**

Permits sound sleep

Normison (temazepam) possesses sedative hypnotic and anticonvulsant, anxiolytic and muscle relaxing properties which have been demonstrated experimentally. Available from Wyeth Laboratories Normison permits sound, refreshing sleep with minimal impairment of next-day performance; patients experience less difficulty in waking and are 'bright' from the start.

Normison, indicated for use as a hypnotic or night time sedative in adults, is rapidly metabolised and eliminated, and the short plasma elimination half-life of approximately six hours frees the patient from morning drowsiness.

The compound is non-accumulating and is well tolerated by elderly patients. The effects are normally restricted to the night of ingestion.

Contra-indications include idiosyncrasy to benzodiazepine derivatives and insomnia due to depression.

Further details are available from Wyeth Laboratories (Pty) Limited, Electron Avenue, Isando, Transvaal.

For further information circle **No 204**

Injectable, highly potent antipsychotic

Modecate injection (fluphenazine decanoate 25mg/ml), an esterified trifluoromethyl phenothiazine from Squibb Laboratories, is a highly potent antipsychotic agent with a markedly extended duration of action.

The onset of action generally appears between 24 and 72 hours after injection, and the effects of the drug on psychotic symptoms become significant within 48 to 96 hours. The therapeutic activity then continues for one to four weeks or longer. To date Modecate is the longest acting phenothiazine preparation available.

Fluphenazine decanoate reduces hallucinations, delusions, confusion, withdrawal and to a lesser degree, hostility and agitation. In general the psychotic patient becomes more co-operative, less withdrawn, and more responsive to social situations and more subject to psychotherapy or other nonchemotherapeutic measures.

Modecate is indicated in the management of psychotic disorders including schizophrenia, mania and organic brain syndrome. It is of particular value in the treatment of chronic schizophrenia.

It is useful in the hospital milieu because of its long duration of action in the long-term maintenance therapy of chronically psychotic patients who are amenable to out-patient therapy.

Modecate is contra-indicated in patients with suspected or established subcortical brain damage — with or without hypothalamic damage — since a hyperthermic reaction with temperatures in excess of 40°C may occur in such patients. It should also not be used in patients receiving large doses of hypnotics.

The side-effects most frequently reported with pheothiazine compounds and other antipsychotic agents are pseudoparkinsonism, akathisia dyskinesia, spasms and opisthotonus, although these are usually reversible. However, a persistent pseudo-parkinsonism syndrome may develop after prolonged administration of phenothiazines.

A reduction in dosage or symptomatic treatment may be necessary to relieve drowsiness, lethargy or depression if they occur.

Further details are available from Squibb Laboratories (Pty) Limited, Electron Avenue, Isando.

For further information circle **No 207**

Anxiolytic therapy without impairment

The first 1,5 benzodiazepine to be introduced for anxiolytic therapy in South Africa, Urbanol (clobazam), is claimed to reduce anxiety without any apparent impairment of psychomotor performance.

Marketed by Roussel Laboratories, Urbanol, after a single administration of 10 to 40 mg, has been shown to reach peak serum concentrations between one and five hours irrespective of the dose given. The original substance is eliminated from the serum with an initial half-life of five hours, and after the eighth hour, the half life has been shown to be 41 hours.

In addition to the treatment of anxiety in neurotic patients — and for pre-operative medication — Urbanol may also be effective in relieving the acute symptoms of alcohol withdrawal. It does, however, have no specific usefulness in the treatment of psychotic patients.

Contraindicated in myasthenia gravis, in infants and in patients with a known sensitivity to clobazam, the effect of urbanol may be enhanced by barbiturates, antihistamines, narcotics, and sedating antidepressants. Dosage should be adjusted accordingly.

Most frequently encountered side effects include drowsiness, dizziness dry mouth and constipation.

Further information available from Roussel Laboratories (Pty) Ltd, P.O. Box 39110, Bramley, Transvaal.

For further information circle **No 205**

CNS — a therapeutic review

For endogenous depression, anxiety

Lantanon (mianserin hydrochloride) is an antidepressant recommended for the treatment of all those cases of depressive illness where antidepressant treatment is indicated (eg. endogenous depression and depression with anxiety.)

Available from Organon Laboratories, Lantanon is particularly useful in alleviating symptoms of anxiety, sleep disturbances and somatic complaints. The active substance of Lantanon belongs to a series of compounds, the piperazinoazepines, which are chemically not related to the commonly used 'tricyclic' antidepressants. Its structure lacks the basic side-chain which is considered to be responsible for the anticholinergic activity of the 'tricyclics'. It is well established that the improvement of sleep disturbances and anxiety become apparent from the first day of treatment with Lantanon.

In a specially designed human study it was shown the Lantonon impaired psychomotor performance for the first days only. Depressed patients treated with psychotropic medicines should in general, avoid performance of such hazardous tasks as driving a motor vehicle or operating machinery. Lantanon may also enhance the effect of alcohol and patients should be advised accordingly.

Slight alterations of the glucose/tolerance curve have been observed in some patients with unstable diabetes melitus who were treated with Lantanon and therefore in such patients regular monitoring of blood sugar levels is advisable. Depressed patients suffering from liver-, renal-, or cardiac insufficiency should in principle be carefully monitored whilst under drug therapy including Lantanon.

Further details are available from Organon (Pty) Ltd, Benmore Gardens, 11th Street, 2010 Benmore.

For further information circle **No 209**

For acute schizophrenia

Loxapac (loxapine succinate), a tranquiliser produced by Lederle Laboratories, is indicated in the treatment of acute and chronic schizophrenia.

Pharmacologically, loxapine and its salts are tranquilisers in which the exact mode of action has not been established. However, changes in the level of excitability have been observed in association with such manifestations of tranquilisation as calming effects and suppression of aggressive behaviour.

Loxapine is contra-indicated in comatose or severe drug-induced depressed states (alcohol, barbiturates, narcotics etc.), and also in patients with a known hypersensitivity to the drug.

Drowsiness, usually mild, may occur at the beginning of therapy or when the dosage is increased but it usually subsides with continued Loxapac therapy.

Further information is available from Lederle Laboratories, Elma Park, Edenvale, Transvaal..

For further information circle **No 208**

Prolongs sleep, reduces nocturnal awakenings

Dalmadorm (flurazepam hydrochloride) or hypnotic produced by Roche Products, is effective in reducing the time until sleep onset, prolonging the total duration of sleep, reducing the number of nocturnal awakenings and improving the subjective quality of sleep.

Dalmadorm is indicated for all the usual forms of insomnia characterised by difficulty in falling asleep and frequent nocturanl or early morning awakenings. Furthermore, Dalmadorm can be used effectively in patients with irregular sleeping habits and in chronic illnesses requiring treatment for associated insomnia.

Apart from the rare cases of myasthenia gravis, there are no known contraindications.

On the usual therapeutic dose, no subjective side-effects occur as a rule, but elderly patients with organic cerebral changes are in general more sensitive. In exceptional cases, patients react paradoxically with restlessness and mild confusion to therapeutic doses. This phenomenon-common to all hypnotics- occasions the need for cautious dosage in these patients. Dizziness, drowsiness and lightheadedness have occasionally been reported.

Further information is available from Roche Products (Pty) Ltd, 4 Brewery Street, Isando, Transvaal.

For further information circle **No 210**

Childhood behavioural disorders an indication

Produced by Searle Laboratories, Serenace (haloperidol) is a tranquiliser which is indicated in acute and chronic schizophrenia, mania and hypomania, organic psychoses, childhood behaviour disorders and motor tics.

It is thought that the behavioural effect of neuroleptic drugs is mediated through the inhibitory pathways of the extrapyramidal midbrain system. Haloperidol, a butyrophenone, may act by mimicking GABA and opposing the action of glutamic acid particularly in specific areas of the extrapyramidal system. Haloperidol block dopamine receptors, possibly by a feed-back mechanism that increases dopamine turnover in the brain.

Where high dosage treatment is used, extrapyramidal side-effects may be encountered at an early stage in the form of dystonic reactions or motor restlessness (akathisia). Thyrotoxic patients may be more prone to develop extrapyramidal symptoms. Serenace should not be used alone where depression is predominant—it may be combined with anti-depressants to treat those conditions where anxiety and depression co-exist.

Further information is available from G D Searle (SA) (Pty) Ltd, 10 Mandy Road, Reuven, Johannesburg 2091.

For further information circle **No 211**

Reactive depressive disorder therapy

Demolox (amoxapine) is indicated for the relief of symptoms of depression in patients with neurotic or reactive depressive disorders as well as endogenous and pyschotic depressions.

Produced by Lederle Laboratories, Demolox is an antidepressant agent with a mild sedative component to its action and, as with other tricyclic antidepressants, the mechanism of its clinical action in man is not well understood. The compound is absorbed rapidly and reaches peak blood levels approximately 90 minutes after ingestion. It is almost completely metabolised and the main route of excretion is the kidney. In man, amoxapine has a serum half-life of approximately eight hours while the major metabolite, eight-hydroxy-amoxapine, has a serum half-life of 30 hours.

Demolox is contra-indicated in patients who have shown a previous hypersensitivity to dibenzoxazepine compounds. It should not be given concomitantly with monoamine oxidase inhibitors, and also should not be administered to nursing mothers.

The compound is well tolerated by most patients and severe complications or adverse reactions are infrequent. Side-effects most often reported are sedative and anticholinergic effects, but these occured in fewer than one-third of patients in clinical trials, were generally mild, and seldom required discontinuation of the drug.

As with other anti-depressants, Demolox should be used with caution in patients with a history of urinary retention, angle-closure glaucoma or increased intraocular pressure. Patients with cardiovascular disorders should also be watched closely.

Further information is available from Lederle Laboratories (Pty) Ltd., Elma Park, Edenvale, Transvaal.

For further information circle **No 212**