The Use of Low-dose Naltrexone in MS, and the Occurrence Side-Effects

When starting low-dose Naltrexone (LDN) in the treatment of MS, side-effects may be related to a number of possible causes.

Symptoms Related to the Intrinsic Toxicity of the Drug

The possibility of adverse side-effects due to the toxicity of the drug, cannot be entirely excluded. The likelihood of damaging side-effects is believed to be minimal however, as the drug is used at such a low dose.

From records of toxicity studies carried out on Naltrexone in the early 1980's, reversible liver changes have been found to occur only in those receiving doses greater than 300 mg per day.

This is, on average, one hundred times the dose used in LDN. That is, the dose of LDN is just **1%** of the dose shown to cause even reversible liver changes.

The use of long-term LDN has not yet been statistically evaluated by a trial. Such a trial is planned however, and it is hoped that it might be conducted at some time in 2005 when adequate funding has been established.

Thus, in the meantime, due to the remote but possible toxic effects of long-term use of this drug upon the liver and kidneys it is required that **anyone suffering previous liver or kidney problems should report this condition before starting therapy.** The risk is believed to be minimal, however, as the dose of the drug is extremely low, when the drug is expected to be metabolized and excreted from the body within three or four hours of ingestion.

Introductory Symptoms

When starting LDN, there may be some transient, though temporary, increase in MS symptoms, such as weakness, changes in sensation, muscle spasm, pain, fatigue or tiredness.

These introductory symptoms may also include some changes due directly to the altered level of brain endorphins, such as disturbed sleep, occasionally with vivid, bizarre and disturbing dreams.

These symptoms usually fade and disappear within the first week of treatment, when they are replaced by improvements in specific symptoms.

In less than five percent of cases treated, increased introductory symptoms may be more severe or more prolonged than usual, lasting perhaps for several weeks. Rarely, symptoms may persist for two or even three months before the appropriate beneficial response is gained. In this situation, the ultra-low 1.5 or 2 mg dose may be introduced to provide a gentler introduction to the method.

Symptoms Related to the Endorphin Response

If the endorphin response is rapid and significant, there may also be some additional symptoms related to an increased level of endorphins, including nausea and constipation.

The nausea usually fades within a few days and may be minimized by temporarily taking a lower dose of the drug until the symptom diminishes. The constipation may take two or three weeks to resolve naturally, during which time some additional supportive measures may be required (see below).

If constipation has been a symptom prior to treatment with LDN this may be related to the MS itself or it may be due to the continued consumption of foods known to promote food sensitivities, such as cow's milk or wheat.

Such food sensitivities are known to promote a range of symptoms collectively referred to as irritable bowel syndrome (IBS). IBS symptoms may include such as abdominal bloating,

flatulence, gastric or abdominal pain, diarrhea or constipation, or a condition alternating between diarrhea and constipation. IBS may also increase urinary symptoms of frequency or urgency.

If constipation has been a problem in the past therefore, it is vital that measures should be taken to minimize this symptom before starting the LDN. Food sensitivities should be resolved by avoiding the foods most likely to cause the problem, that is, wheat and cow's milk.

You should eat plenty of fresh or dried fruit and fresh vegetables.

If already following the routine MS diet, appropriate use of stool softeners, such as Lactulose, Codalax, Docusate sodium (Dioctyl or Docusol). Bulking agents, such as Celevac, Fybogel, or Normacol may be useful, but tend to be less effective than the stool softeners for this purpose.

The bowel stimulants, such as Dulcolax or Senokot, may be more effective but should be used only occasionally, or avoided if possible, as there will be a tendency to become dependent upon these agents.

Commercial laxatives, which may be bought freely at the chemist's without a prescription, often contain the drug, phenolphthalein. There are many different preparations and brands available. These products should be avoided completely as the substance is highly addictive, with a rapidly acquired dependency. Although they appear to solve the problem initially, continued use of such products will inevitably make the constipation much worse!

Symptoms Related to the Prior Use of Opiate Analgesics

Occasionally, other transient symptoms have included more severe pain and spasm, headache, diarrhea or vomiting. These additional symptoms would appear to be associated with the previous frequent use of strong analgesics, which effectively create an addiction and dependency, thus increasing the body's sensitivity to pain.

It is therefore vital that all strong analgesics including the opiates such as codeine, co-dydromol, co-codamol, dihydrocodeine, tramadol, morphine, pethidine or diamorphine etc, should be avoided for at least two weeks prior to treatment with LDN.

Symptoms Related to the Inclusion of Lactose Filler

It has also become apparent that some patients, using LDN with lactose filler, have experienced increasing muscle stiffness and/or joint pain, after a few weeks of therapy.

This delayed increase in symptoms is believed to be due to an increased sensitivity to the lactose filler used in the LDN supplied by some pharmacies.

Martindales Pharmaceuticals Ltd, and many of the pharmacies in the USA, routinely provides LDN using lactose as a filler. Thus, if you require LDN with an alternative filler, you should specify the nature of the filler required, such as calcium carbonate, on the prescription submitted.

All the LDN provided by Dietary Research Ltd uses calcium carbonate as filler.