WD Support Group-UK Meeting 2008

Among the speakers at our 2008 meeting, **Rupert Purchase** spoke briefly on some new work carried out in Japan on the bioavailability of trientine dihydrochloride and recounted some advice from a Scottish-based physician about the correct storage conditions for trientine.

It is known that trientine dihydrochloride is poorly absorbed from the gastrointestinal tract and this decreases the amount of the drug that is bioavailable to chelate with cupric ions in the blood. That is why relatively large doses of this chelating agent have to be given to patients. Another complication with trientine is that food can interfere with its absorption. Therefore it is recommended that trientine should be taken on an empty stomach, at least one hour before meals or two hours after meals and at least one hour apart from any other drug, food or milk.

Recent work from Japan offers a possible solution to the interaction of food with trientine. Firstly, the Japanese researchers confirmed the so called “negative effect” that food has on the absorption of trientine. Then they went on to prepare a novel formulation of trientine dihydrochloride in which tablets of the drug were coated with a derivative of cellulose. When tested, it was found that absorption of the trientine was markedly improved in animals fed with these coated tablets. Further work with this formulation is continuing in Japan. If successful, it will make the problem of juggling meal times with work and trying to remember the correct times to take trientine a lot easier.

Professor R G Will, a consultant neurologist who works in Edinburgh, recounted a cautionary story about using trientine in the journal *Practical Neurology* last year. The condition of a Wilson’s disease (WD) patient who had used trientine for a number of years started to deteriorate. So much so that another drug for treating WD, British anti-Lewisite, BAL, had to be administered intermittently. This pattern continued for some years, until a simple solution to the patient’s problems emerged. The patient’s pharmacy had been providing her with about six months’ supply of trientine dihydrochloride at a time. Although the patient knew from the instructions for using this drug that it should be stored in her refrigerator, with such a large stock it was not possible to keep it all in this way. Much of the trientine she used had not been stored in a refrigerator. In fact, it was kept in a Welsh dresser near to a radiator — often for weeks at a time.

With these facts in hand, resolution of this problem was swift. The patient was supplied more frequently with trientine, storage of unopened containers at or above room temperature for long periods was therefore no longer necessary and, most importantly, the patient’s health recovered.

Clearly, the advice given by the manufacturer for storing trientine dihydrochloride needs to be followed: ‘Trientine should be stored at 2-8 °C.’ However, the quality of trientine dihydrochloride will not alter significantly if it is kept at room temperature (say 25 °C or below) for several hours at a time — during a working day for example. For other situations, this may not always be the case. A two-week summer holiday in a warm climate will require some thought about the best conditions to store medication, and the advice of a doctor should be sought beforehand.