

Take paracetamol regularly with care

Paracetamol enjoys a worldwide reputation for being a safe analgesic, and is given to adults and children alike as a medicine that avoids the recognised perils associated with aspirin. A dose of up to 4g daily for an adult has been recommended, and the analgesic is freely available over the counter, not just in pharmacies but in supermarkets, where supervision over sales is notoriously slack.

Nevertheless — as pharmacists are aware and as an article in the 23/30 December 2006 issue of *The Lancet* points out — restraint is

called for in the domestic use of paracetamol, perhaps more than for any other drug.

It has long been known that when its recommended maximum dose is exceeded, paracetamol may damage the liver and kidneys. Despite this knowledge, over the past 15 years paracetamol has become the biggest cause of acute liver failure, particularly in Europe and the US. The condition has a high mortality rate.

In the US the main cause of paracetamol-induced liver failure has been unintentional overdose rather than deliberate resort to self-

poisoning. Liver failure has been associated with a daily dose as low as 7g daily. A study last year of liver function tests showed high concentrations of alanine aminotransferase during treatment.

There are indications that at the clinical onset of acute liver disease patients may be exceptionally susceptible to paracetamol. Patients undergoing long-term continuous paracetamol treatment are particularly at risk. However, patients should not be made so anxious over their treatment that they switch to potentially more toxic alternatives.

The Strad: rather more than a mere violin

It has been recognised for years that there is something about a Stradivarius that makes it rather more than a mere violin, apart from its fabulous value on the market. Played by an expert it fills our ears and consciousness with glorious music and much the same is to be said of its closest rival, the Guarnerius.

The 17th century Italian instrument makers Antonio Stradivari and Giuseppe Guarneri were famous for good reasons. Much discussion has

ranged over the methods they employed to achieve the results that we hear today.

In *Nature* for 30 November 2006 there is a discussion that helps to resolve the mystery of the perfect tone of their instruments. A chemist from Texas has analysed shavings from a Stradivarius and a Guarnerius using infrared and nuclear magnetic spectroscopy and has discovered that a wood-preservative regularly used in timber yards around Cremona, where the two violin makers worked, seems to have conferred special sound quality.

When modern maple timber was treated with salt water and grape juice and employed



in making violin backs it conferred a Stradivarius-type resonance to the instrument. The effect was further helped when borax, as employed by Stradivari, was used as the anti-woodworm dressing.

However, chemical analysis has shown that the maple wood grown near Cremona today differs from that found in the time of Stradivari. Moreover, the old violin backs were apparently given heavy treatment with salts of copper, iron and chromium, which were then used as preservatives. These salts may give a clue to the glorious tone characteristic of the old violins, and further research into their nature is being conducted.

New look at an ancient evergreen antidote

In the 23/30 December 2006 issue of the *British Medical Journal* Edzard Ernst comments on the use in anthroposophic medicine of extracts of mistletoe as a treatment for cancer and remarks that controlled trials fail to show benefit but indicate considerable potential for harm.

In other respects, mistletoe has acquired a chequered reputation, particularly in folklore. Its medicinal reputation dates from the time of Pliny the Elder, who described the druids as claiming that it was an antidote for all poisons.

Because of its pagan associations, the plant was traditionally banned from churches but it has remained a favourite in the domestic scene, where kissing beneath its berries at Christmas has been a highly popular activity.

There have been various views as to how mistletoe should be disposed of after the Christmas festivities. In Devon it was the custom to keep some hanging until the next Christmas and to use some to cook the pancakes on Shrove Tuesday.

In Wales a bunch of mistletoe was often stuffed into the fireplace during the summer to stave off evil spirits. In Somerset mistletoe from a hawthorn bush was brewed into a cure for measles.

What is the purpose of the strange emotion of embarrassment?

Assigning a precise meaning to the term “embarrassment” is difficult. It is a part of social anxiety, partly attributable to undue attention to oneself and worry over social disapproval. Any performance that results in the sense of having failed, in one’s own self-assessment, is a source of embarrassment. Individuals always try to present themselves in a favourable light, avoiding the sense of inferiority.

Embarrassment is uncomfortable to the sufferer and sometimes to the onlookers. It

involves feelings of fear, awkwardness or uncertainty and, unlike shame, only occurs in the presence of other people. Its purpose is to appease others through a non-verbal apology. It may be revealed through, for example, an increase in the rate of blinking, or through an uncontrollable reddening of the cheeks and sometimes ears or neck or both.

Blushing, as Darwin remarked, is restricted to the upper part of the torso. He took it as a sign that the person in question was not to be

trusted, and regarded it as involuntary and not under control. Any attempt to cover it up only draws more attention to the sufferer and merely increases the reaction. Women blush more than men when subjected to anxiety or embarrassment.

Since embarrassment tends to indicate honourable intentions and not guilt in any situation, it is a good guide in social interactions. People who show embarrassment under stress are not as a rule crooks but honest folk.