Wilson's Disease

Biochemical and symptomatic signs often help doctors diagnose diseases. But sometimes the signs are not specific enough, and more sensitive technology is needed to carry out an accurate analysis.

An asymptomatic (showing no signs) 30-year-old man, who was diagnosed with chronic hepatitis B during a medical check, is cited here as an example.

To treat his condition, he was given lamivudine, an antiviral agent that blocks the hepatitis virus from multiplying. But his condition did not improve despite 18 months of lamivudine. Another drug, adefovir, was therefore added to the therapy. After 12 months of receiving the combined drugs, the concentration of hepatitis B virus decreased, but not the ALT (a serum in the liver) which also needed to be reduced.

Further tests were carried out, and these showed the man was suffering from Wilson's Disease (WD), a hereditary gene disorder in which copper builds up in the body, mainly in the liver and brain. If not treated, the copper continues to build up, causing serious illness and eventually death.

In this case, the asymptomatic man eventually received treatment for WD which removed the excess copper and prevented it from building up again.