



## **Gilbert's Syndrome**

Gilbert's Syndrome is a relatively common and benign congenital (probably hereditary) liver disorder, found more frequently in males. It is characterized by a mild, fluctuating increase in serum bilirubin, a yellow pigment excreted by the liver into bile.

It is estimated that from 3 to 7% of the adult population has Gilbert's Syndrome.

Bilirubin is produced from haemoglobin (the red pigment of red blood cells) in the bone marrow, the spleen and elsewhere and is carried to the liver in the blood. It undergoes chemical changes in the liver and then is excreted into bile and passes out of the body after further chemical changes in the intestines. Small amounts of bilirubin are normally present in the blood. However, when there is excessive breakdown of red blood cells or interference with bile excretion, the amount is increased and may produce jaundice.

The onset of Gilbert's Syndrome usually occurs in the teens or early adulthood (20's and 30's); there are rarely significant symptoms, but occasionally mild jaundice may appear, and the white of the eye becomes yellow. It may show up as an incidental laboratory finding, and the serum bilirubin increases with fasting or an intercurrent illness such as influenza.

Except for the elevated serum bilirubin level, conventional liver function tests are normal and so is cholangiography (x-ray of the bile ducts).

Many patients are initially misdiagnosed or transformed into "hepatic neurotics" with a variety of non-specific symptoms. The major goal of the clinician is to distinguish this benign disorder from more serious causes of liver dysfunction. The diagnosis of Gilbert's Syndrome is established primarily by documenting the persistence of an increased serum bilirubin when other liver function tests are repeatedly normal. A liver biopsy may occasionally be necessary to rule out other abnormalities. Other diagnostic procedures that may be useful include:

1. The effect of reduced caloric intake on plasma bilirubin concentration
2. Intravenous administration of nicotinic acid which appears to increase bilirubin formation in the spleen, or
3. Administration of radioactive bilirubin to estimate the percentage of the dose remaining in plasma after four hours

Gilbert's Syndrome does not require treatment and will not interfere with a normal lifestyle.