

Acute liver failure

Q. How is the high direct bilirubin level in Wilson Disease explained here?

- The reason is two folds,
 1. Active haemolysis due to free copper
 2. Conjugating capacity of hepatocytes are limited in liver failure, this reflects in the form of high unconjugated bilirubin fraction

Q. Can there be false negatives for 24 hours urinary copper in Wilson's Disease?

- False negative urine copper levels may occur due to faulty sample collection. Moreover at a cut off of 100 mcg/day, some cases may be missed. By taking a cut off of 40, the sensitivity of the test is enhanced without compromising much on the specificity.

Q. How about Copper level of dry liver extract in Wilson's Disease?

- Hepatic copper evaluation is required where all 3 parameters of ceruloplasmin, 24 hour urine copper and KF rings are not conclusive . In a child with liver failure, obtaining biopsy is not feasible by percutaneous route. Transjugular liver biopsy may be required but has limitations of obtaining adequate tissue sample with attendant risks and costs of the procedure. A value of 250 microgram of copper/ gram of liver tissue is diagnostic