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Ceruloplasmin blood test

The ceruloplasmin test measures the level of the copper-containing protein ceruloplasmin in the blood.

How the Test is Performed

A blood sample is needed.

How to Prepare for the Test

No special preparation is needed.

How the Test will Feel

When the needle is inserted to draw blood, some people feel moderate pain. Others feel only a prick or stinging. Afterward, there may be some throbbing or a slight bruise. This soon goes away.

Why the Test is Performed

Ceruloplasmin is made in the liver. Ceruloplasmin stores and transports copper in the blood to parts of the body that need it.

Your health care provider may order this test if you have signs or symptoms of a copper metabolism or copper storage disorder.

Normal Results

The normal range for adults is 20 to 40 mg/dL.

Normal value ranges may vary slightly among different labs. Some labs use different measurements or may test different samples. Talk to your provider about the meaning of your specific test results.

What Abnormal Results Mean

A lower-than-normal ceruloplasmin level may be due to:

- Long-term (chronic) liver disease
- Problem absorbing nutrients from food (intestinal malabsorption)
- Malnutrition

- Disorder in which cells in the body can absorb copper, but are unable to release it (Menkes syndrome)
- Group of disorders that damage the kidneys (nephrotic syndrome)
- Inherited disorder in which there is too much copper in the body's tissues (Wilson disease)

A higher-than-normal ceruloplasmin level may be due to:

- Acute and chronic infections
- Cancer (breast or lymphoma)
- Heart disease, including heart attack
- Overactive thyroid
- Pregnancy
- Rheumatoid arthritis
- Use of birth control pills

Risks

There is little risk in having your blood taken. Veins and arteries vary in size from one person to another, and from one side of the body to the other. Obtaining a blood sample from some people may be more difficult than from others.

Other risks associated with having blood drawn are slight, but may include:

- Excessive bleeding
- Fainting or feeling lightheaded
- Multiple punctures to locate veins
- Hematoma (blood accumulating under the skin)
- Infection (a slight risk any time the skin is broken)

Alternative Names

CP - serum; Copper - ceruloplasmin

References

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