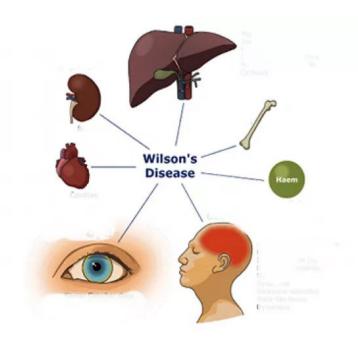
# Treatment of Wilson Disease

By:

Dr. Zainab Ghalib Al-Jassim MSc. Pharmacology & Toxicology



#### **Treatment**

- The main treatment include medications called chelating agents, which bind copper and then prompt the organs to release the copper into your bloodstream. The copper is then filtered by your kidneys and released into your urine.
- Treatment then focuses on preventing copper from building up again.
- For severe liver damage, a liver transplant might be necessary.
- The treatment is lifelong.



#### **Medications include:**

# -Penicillamine (Cuprimine, Depen):

A chelating agent, penicillamine treatment relies on its binding to accumulated copper and elimination through urine. penicillamine can cause serious side effects, including skin and kidney problems, bone marrow suppression, and worsening of neurological symptoms. Penicillamine should be used cautiously if you have a penicillin allergy.

It also keeps vitamin B-6 (pyridoxine) from working, so you'll need to take a supplement in small doses.



#### -Trientine (Syprine):

Trientine works much like penicillamine but tends to cause fewer side effects. Still, neurological symptoms can worsen when taking trientine.

## -Zinc acetate (Galzin):

This medication prevents body from absorbing copper from the food eaten. It is typically used as maintenance therapy to prevent copper from building up again after treatment with penicillamine or trientine.

Zinc acetate might be used as primary therapy if you can't take penicillamine or trientine. Zinc acetate can cause stomach upset.

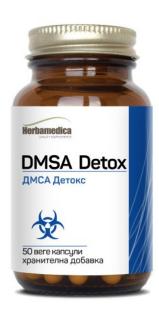




# -Sodium dimercaptosuccinate, Dimercaptosuccinic acid (DMSA):

DMSA is a medication used to treat lead, mercury, and arsenic poisoning. It facilitates urinary excretion of lead, copper, and zinc.

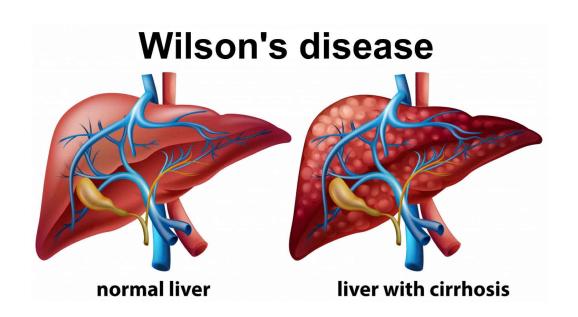
In wilson disease studies show increasing in its efficacy when combined DMSA with Zinc therapy.



# Surgery

If the liver damage is severe, it might need a liver transplant. During a liver transplant, a surgeon removes the diseased liver and replaces it with a healthy liver from a donor.

Most transplanted livers come from donors who have died. But in some cases a liver can come from a living donor, such as a family member. In that case, the surgeon removes your diseased liver and replaces it with a portion of the donor's liver.



### Lifestyle and home remedies

In case of Wilson's disease, the doctor will likely recommend to limit the amount of copper in the diet. The tap water's copper levels tested if the patient have copper pipes in his home. And be sure to avoid multivitamins that contain copper.

#### Foods that contain high amounts of copper include:

- Liver
- Shellfish
- Mushrooms
- Nuts
- Chocolate



