

Wilson's Disease

- **CT:**

- **Copper deposition does not affect density**
- **Atrophy**
- **Variable hypodensity in the lenticular nuclei and thalami**
- **No enhancement**

Wilson's Disease

- Atrophy

- MRI T1:

- Generally hypointense in BG
- Hyperintense in GP related to hepatic failure or paramagnetic effects of copper
- No enhancement

- MRI T2:

- Variable signal in putamen, GP, caudate, thalamus
- Low signal related to iron content

Wilson's Disease

- **MRI DWI:**

- **Immediately: Restricted diffusion with cell swelling and inflammation**
- **Subsequently: Low DWI, High ADC with increased diffusivity in necrotic cells and demyelination**

- **MRS:**

- **Decrease NAA/Creatine for neuronal loss in GP**

Wilson's Disease

Hepatolenticular Degeneration

- Excess copper deposition in brain, particularly in the BG
- Impaired biliary copper excretion
- Brain lesions caused by Copper accumulation, chronic ischemia, vasculopathy, or demyelination
- Autosomal recessive

Wilson's Disease: Symptoms

- Neurologic: tremor, ataxia, dyskinesia, dysarthria, dystonia, Parkinsonian symptoms
- Psychiatric: irritability, personality change, depression/mania, psychosis
- Hepatitis
- Kayser-Fleischer rings



