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Localization of oxidative DNA damage after Au injection and effects of Au on Cp in renal kidney

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Abstract:

The present study was carried out to investigate the effect of gold (Au) injection on copper (Cu) and two types of ceruloplasmin (Cp), total Cp (ID1) and active Cp (ID2), metallothionein (MT) in the serum, kidney and liver, and 8-hydroxydeoxyguanosine (8-OHdG) in the rat kidney. The Cu contents in sera and kidneys of Au-injected rats were 1.7 and 5.5 times higher than those in sera and kidneys of control rats, respectively. Significant increases of ID1 and ID2 were found in the sera of the control rats and Au-injected rats. The immunoreactivity of 8-OHdG was located in the cortex of the Au-injected rat. These findings suggested that the oxidative DNA damage in the kidneys of rats injected with Au is associated with Cu except Cu-MT.

Key words: <u>Gold (Au)</u>, <u>Copper (Cu)</u>, <u>Ceruloplasmin (Cp)</u>, <u>8-hydroxydeoxyguanosine (8-OHdG)</u>, <u>Metallotionein (MT)</u>



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