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**PROTECTIVE ACTIVITIES OF NEW COPPER (II) COMPLEX DERIVED FROM
4-(2-5-BROMOBENZYLIDENEAMINO)ETHYL) PIPERAZIN-1-IUMPHENOL AGAINST
ETHANOL INDUCED GASTRIC ULCERATIONS IN RATS**

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ABSTRACT

The compound dichloride Copper(II)-4-(2-5-bromobenzylideneaminoethyl) piperazin-1-iumphenolate (CuLBS) was synthesized, characterized and screened for protective activity against ethanol induced gastric mucosal injury in rats. Gross microscopic lesions, biochemical and immunological parameters and Histochemical staining of glycogen storage were taken into consideration. Oral administration of CuLBS (30 and 60 mg/kg) for two weeks dose dependently flattened gastric mucosa, significantly increased gastric mucus and total acidity, compared with the control group ($P < 0.01$). Serum levels of liver enzymes aspartate (AST) and alanine transaminases (ALT), pro-inflammatory (IL-6 and TNF- α) and anti-inflammatory (IL-10) in the rats exposed to ethanol induced ulceration had been altered. Administration of CuLBS showed considerable ($P < 0.05$) protection against ulceration by modulating the acute alterations of cytokines AST, ALT and stomach glycogen. Interestingly, CuLBS raise the level of nitric oxide synthase. However, CuLBS alone (60 mg/kg) did not exhibit any ulcerogenic effect as assessed using Adami's scoring scale. These findings suggest that the gastro protective of the compound CuLBS should be further studied to confirm its protective activity.

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