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Gastroprotective activity of Sri Lankan black tea (*Camellia sinensis* L.) in rats

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This study examined the gastroprotective potential of black tea brew (BTB) of *Camellia sinensis* (Theaceae) using Sri Lankan high grown Dust grade No: 1 tea in rat alcohol induced gastric lesion model. Four oral doses of BTB equivalent to 1.5, 3, 9, or 24 cups were used in the evaluation of the gastroprotective activity. The results showed a strong dose dependent and significant ($P < 0.05$) gastroprotective activity (in terms of number, length and area of haemorrhagic lesions). The high dose of BTB (equivalent to 9 cups and the only dose tested) also offered gastroprotection in rat indomethacin and serotonin induced gastric lesions models. Intraperitoneal treatment of BTB and oral treatment of BTB following decaffeination suppressed its gastroprotective potential. However, indomethacin pretreatment did not reduce the gastroprotive potential of BTB in the ethanol induced gastric lesion model. BTB also increased the gastric mucus content (by alcian blue test), thickness of the gastric mucus layer (by histopathology), pH of the gastric contents, and possibly gastric mucosal blood flow and reduced the gastric output of the stomach. BTB also had antihistamine (by wheal test) and antioxidant activity (by DPPH method) and impaired the gastric transit (by charcoal plug test). It is concluded that BTB of *C. sinensis* possesses strong, oral gastroprotective action, which is mediated via multiple mechanisms.

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