Evidence of antioxidant effect of aqueous extract from *Passiflora edulis* leaves in *Wistar* rats

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Inflammatory bowel diseases (IBD), as ulcerative colitis, are characterized by local chronic inflammation and extraintestinal manifestations. Oxidative stress may have important role in the IBD pathophysiology. This study aimed evaluated the effect of aqueous extract from *Passiflora edulis* leaves (PAE) 0.01 g/ml (IC 50 by DPPH test) in oxidative stress and antioxidant defense of rats with colitis induced by 2,4,6-trinitrobenzene sulfonic acid. It was determined the levels of Malondialdehyde (MDA) in liver and serum, Glutathione (GSH) in kidneys, brain and liver, besides Glutathione peroxidase (GSH-Px) and reductase (GSH-R) in liver. Twenty-four Wistar rats were divided in two groups AIN-93M (AIN) and AIN-93M+PAE (PAE) and subdivided in Positive Sham (+), Negative Sham (-) and Colitis (n =4/ group). Animals were killed after 7 days of induction. ANOVA and Tukey’s test were used for statistical analyses (p<0.05). MDA content didn’t differ between animals PAE and respective subgroup that ingested only AIN-93M, but in the serum, MDA content was lower in Sham (+) and Colitis PAE than Sham (-) AIN (1.32 ± 0.06, 1.43 ± 0.41 , 2.44 ± 0.51 µM MDA/ mL serum respectively). Related to antioxidant defense, GSH levels didn’t differ in the brain, but in kidneys was higher in PAE groups. GSH in liver was higher in Sham (+) PAE than AIN groups (p<0.05). Results revealed increased GR activity and decreased GPx in PAE groups. Our findings suggest that aqueous extract from *P. edulis* leaves could prevent oxidative stress in inflammation caused by colitis or in normal conditions.

**Key-words:** Oxidative stress, aqueous extract from *Passiflora edulis* leaves, colitis.