AMELIORATIVE EFFECT OF *AVENA SATIVA* (OAT) IN DINITROBENZENE SULPHONIC ACID INDUCED INFLAMMATORY BOWEL DISEASE IN RATS

Bhagyabhumi P. Shah[a*], Vismay N. Patel[b] and Samir K. Shah[c]

(Received 29 January 2022) (Accepted 15 June 2023)

ABSTRACT

Inflammatory bowel disease (IBD) is a chronic relapsing gastrointestinal tract disease. There is an upsurge of IBD cases worldwide and there is no gold standard therapy and the drugs used to treat IBD are having many major side effects. Thus, there is a need for a better treatment option. This study aimed to evaluate the prophylactic role of *Avena sativa* (oat) in 2, 4-dinitro benzene sulphonic acid (DNBS) (120 mg kg^{-1}) induced IBD in rats. Animals were randomly allocated to five groups- negative control, model control receiving only DNBS, group receiving *A. sativa* extract (500 mg kg^{-1} and 1 g kg^{-1} p.o.) and the last group receiving sulphasalazine (100 mg kg^{-1}, p.o.). Colitis-induced rats treated with *A. sativa* and sulphasalazine restored their body weight, stool consistency, and bleeding in stool and significantly improved several biochemical parameters such as colonic glutathione content, lactate dehydrogenase, myeloperoxidase and lipid peroxides levels as compared to the model control group. Findings suggest that *A. sativa* possesses antioxidant and anti-inflammatory activity and can be useful in treating IBD.